

HOUSE No. 4503

The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES, April 4, 2024.

The committee on Telecommunications, Utilities and Energy, to whom was referred the petition (accompanied by bill, Senate, No. 2132) of Anne M. Gobi and Angelo J. Puppolo, Jr. for legislation to further clean the Commonwealth's air, the petition (accompanied by bill, Senate, No. 2168) of Marc R. Pacheco for legislation relative to energy storage procurement for 2030 and 2035, the petition (accompanied by bill, House, No. 3144) of Natalie M. Blais and others for legislation to promote solar energy canopies on large parking lots, the petition (accompanied by bill, House, No. 3159) of Dylan A. Fernandes, Patrick Joseph Kearney and Simon Cataldo relative to electric utility climate resilience and microgrids, the petition (accompanied by bill, House, No. 3161) of Dylan A. Fernandes and others relative to offshore wind, the petition (accompanied by bill, House, No. 3166) of Sean Garballey relative to increasing opportunities for clean peak energy storage of qualified energy storage systems, the petition (accompanied by bill, House, No. 3170) of Danielle W. Gregoire and Michelle M. DuBois that the Department of Energy Resources ensure equity, accessibility, and promote participation by renters and low-income retail electric customers in the solar incentive program, the petition (accompanied by bill, House, No. 3205) of Steven Owens relative to solar energy development, the petition (accompanied by bill, House, No. 3214) of Jeffrey N. Roy relative to fusion energy, the petition (accompanied by bill, House, No. 3216) of Jeffrey N. Roy relative to clean energy generation, the petition (accompanied by bill, House, No. 3220) of Jeffrey N. Roy relative to advanced metering infrastructure, the petition (accompanied by bill, House, No. 3683) of Mark J. Cusack relative to solar energy storage permit applications and inspections, the petition (accompanied by bill, House, No. 3992) of Jeffrey N. Roy for legislation to expand customer access to a modern grid and the petition (accompanied by House, No. 4222) of Jeffrey N. Roy relative to electric grid enhancement technologies, reports recommending that the accompanying bill (House, No. 4503) ought to pass.

For the committee,

JEFFREY N. ROY.

HOUSE No. 4503

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Third General Court
(2023-2024)**

An Act relative to clean energy generation.

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

1 SECTION 1. Chapter 21A of the General Laws is hereby amended by inserting after
2 section 28 the following section:-

3 Section 29. (a) The office, in coordination with the department of energy resources, shall
4 establish a program to encourage the construction and operation of solar power generating
5 canopies over large parking lots. The program shall be designed to contribute to the state's
6 greenhouse gas emission reduction requirements and increase overall renewable energy
7 generation, as well as provide shade and weather protection to both the vehicles under the
8 canopies and people moving from their cars into the buildings served by the parking lot.

9 (b) The program shall include:

10 (i) incentives to encourage the construction and operation of solar power generating
11 canopies and co-located energy storage facilities, which may include construction requirements,
12 incentive payments, tax reductions or deferrals, expedited interconnection requirements, zoning
13 or other regulatory preferences, which may include increasing the amount of the incentive

14 through the state's current or future solar incentive program for solar panels mounted on parking
15 lot canopies; or other financial or regulatory incentives;

16 (ii) a definition of qualifying parking lots, which may be phased in over time;

17 (iii) minimum electric generation capacity requirements; and

18 (iv) such other criteria and conditions necessary for an efficient and effective solar power
19 generating canopies over large commercial parking lots program that significantly increases the
20 use of solar-generated power in the commonwealth.

21 (c) In designing the program, the department shall:

22 (i) consult with an advisory working group to make recommendations concerning the
23 design and operation of the program. The members of the advisory working group shall be
24 appointed by the secretary and shall include a representative of the division of energy resources,
25 who shall chair the working group, and a representative of the commercial real estate industry; a
26 representative of organized labor, a representative of the solar energy industry, a representative
27 of an environmental group concerned with energy, a representative of the construction industry,
28 a representative of an electric utility or organization representing electric utilities, a
29 representative of local government, a person with expertise in energy siting, and a person with
30 expertise in solar energy and energy efficiency; ;

31 (ii) review the design and operation of parking lot solar energy incentive programs
32 proposed or in operation in other jurisdictions, including in the state of Washington, Hawaii,
33 California, and France; and

34 (iii) hold not fewer than 3 public hearings in different regions of the commonwealth to
35 receive public testimony and input on the program.

36 (d) The department shall promulgate regulations as necessary to implement the program.

37 (e) If statutory changes are necessary to implement the program, the department shall
38 make specific recommendations to the general court for required changes in statutes.

39 SECTION 2. Chapter 23J of the General Laws is hereby amended by adding the
40 following section:-

41 Section 16. The center shall issue guidance to businesses, nonprofit organizations, a
42 municipality or group of municipalities with an approved municipal load aggregation plan
43 pursuant to section 134 of chapter 164 or other government entities directly or through an
44 aggregation pursuant to section 137 of said chapter 164, on how to enter into long-term contracts
45 to purchase offshore wind energy. The guidance shall be posted on the center’s website not later
46 than December 31, 2024.

47 SECTION 3. Chapter 23J of the General Laws is hereby amended by adding the
48 following section:

49 “Section 17. Based on the Boston Area and South Coast and North Shore offshore wind
50 ports and infrastructure assessments completed by the center in 2017 and 2022 respectively, the
51 center shall create a strategic coastal report that outlines when and how the state should
52 repurpose each port to support the state’s offshore wind industry. The report should include a
53 strategic vision for a comprehensive port infrastructure offshore wind network in Massachusetts.

54 The center shall submit its report to the department of public utilities, the joint committee
55 on telecommunications, utilities and energy, the senate and house committees on global warming
56 and climate change and the clerks of the senate and house of representatives no later than July
57 31, 2024.”

58 SECTION 4. Chapter 25 of the General Laws is hereby amended by inserting after
59 Section 23 the following section:

60 Section 24. (a) The department of public utilities shall require electric distribution and
61 transmission companies to prepare and file a climate vulnerability and resilience plan by
62 December 31, 2024, and at least once every five years thereafter based on best available data.
63 The department shall levy a penalty not to exceed \$2000 per day for failure to file such a plan.
64 Fines levied by the department shall be returned to ratepayers through distribution rates. Climate
65 vulnerability and resilience plans shall include, at a minimum:

66 a. an evaluation of the climate science and projected sea level rise, extreme temperature,
67 precipitation, humidity and storms, and other climate-related risks for the service territory ;

68 b. an evaluation and risk assessment of potential impacts of climate change on existing
69 operation, planning, and physical assets

70 c. identification, prioritization, and cost-benefit analysis of adaptation options to increase
71 asset and system-wide resilience over time,

72 d. community engagement plan with targeted engagement for environmental justice
73 populations in the service territory; and

74 e. an implementation timeline for making changes in line with the findings of the study
75 such as modifying design and construction standards, modifying operations and planning
76 processes, and relocating or upgrading existing infrastructure to ensure reliability and resilience
77 of the grid.

78 (b) In adjudicating ratemaking proceedings pursuant to sections 76. 93, and 94 of
79 chapter 164, the department of public utilities shall conclude in writing and take into
80 consideration whether the applicant’s costs proposed or incurred for capital investment projects
81 consider and minimize climate risks for the useful life of the proposed investment or thirty years,
82 whichever is greater, and whether proposed cost and actions are consistent with the applicant’s
83 climate vulnerability and resilience plan.

84 (c) The department of public utilities shall promulgate such rules and regulations as
85 are necessary to promptly and effectively enforce the provisions of this section.”

86 SECTION 5. Section 3 of Chapter 25A of the General Laws is hereby amended by
87 adding the following definitions:

88 “long-duration energy storage,” as defined in Section 60 of Chapter 179 of the Acts of
89 2022, an energy storage system, as defined in section 1 of chapter 164 of the General Laws, an
90 energy storage system capable of dispatching electricity at its full rated capacity for greater than
91 ten hours.

92 “Mid-duration energy storage system”, as defined in Section 60 of Chapter 179 of the
93 Acts of 2022, an energy storage system, as defined in section 1 of chapter 164 of the General
94 Laws, that is capable of dispatching energy at its full rated capacity for a period greater than 4
95 hours and up to 10 hours.

96 “multi-day energy storage,” as defined in Section 60 of Chapter 179 of the Acts of 2022,
97 an energy storage system, as defined in section 1 of chapter 164 of the General Laws, an energy
98 storage system capable of dispatching electricity at its full rated capacity for greater than twenty-
99 four hours.

100 SECTION 6. Section 3 of Chapter 25A of the General Laws, as appearing in the 2020
101 Official Edition, is hereby amended by striking the definition of “Qualified RPS resource” and
102 inserting in place thereof the following:-

103 “Qualified RPS resource”, a renewable energy generating source, as defined in
104 subsection (c) or in subsection (d) of section 11F that has: (i) installed a qualified energy storage
105 system at its facility; or (ii) commenced operation on or after January 1, 2019, provided however,
106 that a qualified RPS resource that commenced operation prior to January 1, 2019 shall be treated
107 as having commenced operation on or after January 1, 2019 if it is coupled with an on-site
108 energy storage system capable of storing four hours of the qualified RPS resource’s installed
109 capacity, or is coupled contractually with an off-site energy storage system capable of storing
110 four hours of the qualified RPS resource’s installed capacity.

111 SECTION 6A. Section 11F of chapter 25A of the General Laws, as so appearing in the
112 2020 Official Edition, is hereby amended by striking out the words “or (9) geothermal energy” in
113 line 44 and inserting in place thereof the following:- (9) geothermal energy; or (10) fusion
114 energy

115 SECTION 6B. Said section 11F of chapter 25A, as so appearing, is hereby amended by
116 striking out the words “or (9) geothermal energy” in line 86 and inserting in place thereof the
117 following:- (9) geothermal energy; or (10) fusion energy

118 SECTION 7. Section 11F1/2 of Chapter 25A as appearing in the 2022 Official version, is
119 hereby amended, in line 11, by striking the words “naturally occurring”.

120 SECTION 8. Section 11F 1/2 of Chapter 25A of the general laws, as so appearing in the
121 2022 official edition, is hereby amended by adding the following to the end of Section 11F 1/2
122 (e):

123 The department shall provide that for facilities generating useful thermal energy by using
124 eligible biomass technologies that also install an electrostatic precipitator or other emissions
125 control device, an alternative energy credit shall be earned for 1,706,000 British thermal units of
126 net useful thermal energy so as to improve air quality.

127 SECTION 9. Chapter 25A of the General Laws is hereby amended by adding the
128 following section:-Section 21.

129 (a) The department of energy resources shall issue procurements totaling 4,500
130 megawatts of energy storage systems, of which 3,000 megawatts shall be mid-duration energy
131 storage; 750 megawatts shall be long-duration energy storage; and 750 megawatts shall be multi-
132 day energy storage. The procurement schedule for mid-duration energy storage shall be as
133 follows: approximately 1,000 megawatts no later than December 31, 2024; approximately 1,000
134 megawatts no later than December 31, 2025; and approximately 1,000 megawatts no later than
135 December 31, 2026.

136 (b) DOER shall seek industry and stakeholder input and comments on the structure and
137 details of the initial procurement no later than June 30, 2024.

138 SECTION 10. Chapter 164 of the General Laws, as so appearing in the 2022 Official
139 Edition, is hereby amended by inserting before the definition of “Aggregator” the following
140 definition:

141 “Advanced Metering Infrastructure,” means a meter and network communications
142 technology that measures, records, and transmits electricity usage by the end user at a minimum
143 of hourly intervals and is capable of providing data to the end user and authorized third parties in
144 real time or near real time.

145 SECTION 11. Chapter 40 of the General Laws, as appearing in the 2022 Official
146 Edition,

147 is hereby amended by inserting at the end thereof the following sections:-

148 Section 70. Approval for Solar and Energy Storage Permit Applications

149 (a) The Permit Granting Authority shall allow for electronic submission of the permit
150 application and associated documentation for the installation of a solar PV system, solar thermal
151 system, building-integrated PV system, energy storage device, or a solar system combined with
152 an energy storage device. All required permitting documentation and forms shall be published on
153 the Permit Granting Authority’s publicly accessible internet website. The Permit Granting
154 Authority shall authorize an electronic signature for the permit application and other
155 documentation in lieu of a wet signature by an applicant. Electronic submission, including online
156 payment of associated permitting fees, shall be offered through either an online portal available
157 on the website of the Permit Granting Authority or via electronic mail to a dedicated account that
158 shall be capable of receiving permit applications.

159 (b) Upon submission of required permit application documents, the application shall be
160 deemed complete if, after five business days have elapsed, the Permit Granting Authority has not
161 issued a written correction notice detailing all deficiencies in the application and identifying
162 additional information explicitly necessary for the Permit Granting Authority to complete a
163 review.

164 (c) An application shall be deemed approved and the applicant may begin installation if
165 ten business days after the application was deemed complete has elapsed and the following are
166 true:

167 (i) the Permit Granting Authority has not administratively approved the application.

168 (ii) the Permit Granting Authority has not denied the permit.

169 (d) A Permit Granting Authority may use an automated permitting platform that verifies
170 code compliance and issues permits in real time to satisfy the requirements of subdivisions (a),
171 (b), and (c). An applicant may begin installation after the issuance of a permit from such an
172 automated permitting platform.

173 Section 71. Solar and Energy Storage Inspections

174 (a) Applicant shall notify the Permit Granting Authority upon completion of system
175 installation. Permit Granting Authorities shall require no more than one inspection for a solar PV
176 system, building-integrated PV system, solar thermal system, energy storage device, or the solar
177 system combined with an energy storage device in order for the system or device to receive a
178 certificate of completion. The Permit Granting Authority shall issue a certificate of completion

179 no later than 10 business days following the receipt of notice from the applicant that the system,
180 device, or combined system and device, is installed.

181 (b) An electric distribution company shall not require additional inspections by the
182 electric distribution company or any other entity as a precondition to granting the customer
183 permission to operate.

184 SECTION 12. Section 1 of chapter 164 of the General Laws, as so appearing in the 2020
185 Official Edition, is hereby amended by inserting the following after the definition of “FERC”:-

186 “Fusion energy”, energy generated when nuclei from light atoms, such as hydrogen,
187 combine to form a single heavier one, such as helium.

188 SECTION 13. Said section 1 of chapter 164, is hereby further amended by inserting after
189 the word “hydroelectric” in line 286 the following words:- ; fusion energy

190 SECTION 14. Section 1F of chapter 164 of the General Laws, as appearing in the 2022
191 Official Edition, is hereby amended by striking subsection (4) and replacing it with the following
192 subsection:-

193 (4)(i) The department shall require that distribution companies provide discounted rates
194 for low-income customers comparable to the low-income discount rate in effect prior to March 1,
195 1998; and for eligible moderate-income customers. Said discounts shall be in addition to any
196 reduction in rates that becomes effective pursuant to said subsection (b) of said section 1B on
197 March 1, 1998, and to any subsequent rate reductions provided by a distribution company after
198 said date pursuant to said subsection. The cost of such discounts shall be included in the rates
199 charged to all other customers of a distribution company upon approval by the department. Each

200 distribution company shall guarantee payment to the generation supplier for all power sold to
201 low-income and eligible moderate-income customers at said discounted rates. Eligibility for the
202 discount rates established herein shall be established upon verification of a low-income
203 customer's receipt of any means tested public benefit, or verification of eligibility for the low-
204 income home energy assistance program, or its successor program, for which eligibility does not
205 exceed 200 per cent of the federal poverty level based on a household's gross income; and by
206 criteria determined by the department for verification of an eligible moderate-income customer.
207 Said public benefits may include, but are not limited to, assistance which provides cash, housing,
208 food, or medical care, including, but not limited to, transitional assistance for needy families,
209 supplemental security income, emergency assistance to elders, disabled, and children, food
210 stamps, public housing, federally-subsidized or state-subsidized housing, the low-income home
211 energy assistance program, veterans' benefits, and similar benefits. The department of energy
212 resources shall make available to distribution companies the eligibility guidelines for said public
213 benefit programs. Each distribution company shall conduct substantial outreach efforts to make
214 said low-income or moderate-income discount available to eligible customers and shall report to
215 said department of energy resources, at least annually, as to its outreach activities and results.
216 Outreach may include establishing an automated program of matching customer accounts with
217 (a) lists of recipients of said means tested public benefit programs and based on the results of
218 said matching program, to presumptively offer a low-income discount rate to eligible customers
219 so identified, and (b) criteria established by the department for verification of a moderate-income
220 customer to presumptively offer a moderate-income discount rate to eligible customers so
221 identified; provided, however, that the distribution company, within 60 days of said presumptive
222 enrollment, informs any such low-income customer or eligible moderate-income customer of

223 said presumptive enrollment and all rights and obligations of a customer under said program,
224 including the right to withdraw from said program without penalty.

225 In a program year in which maximum eligibility for the low-income home energy
226 assistance program, or its successor program, exceeds 200 per cent of the federal poverty level, a
227 household that is income eligible for the low-income home energy assistance program shall be
228 eligible for the low-income discount rates required by this subparagraph.

229 (ii) A residential customer eligible for low-income or moderate-income discount rates
230 shall receive the service on demand. Each distribution company shall periodically notify all
231 customers of the availability and method of obtaining low-income or moderate-income discount
232 rates. An existing residential customer eligible for a low-income or moderate-income discount on
233 the date of the start of retail access who orders service for the first time from a distribution
234 company shall be offered basic service by that distribution company.

235 The department shall promulgate rules and regulations requiring utility companies
236 organized pursuant to this chapter to produce information, in the form of a mailing, webpage, or
237 other approved method of distribution, to their consumers, to inform them of available rebates,
238 discounts, credits, and other cost-saving mechanisms that can help them lower their monthly
239 utility bills, and send out such information semi-annually, unless otherwise provided by this
240 chapter.

241 (iii) Repealed.

242 (iv) There shall be no charge to any residential customer for initiating or terminating low-
243 income or moderate-income discount rates, default service, or standard offer service when said
244 initiation or termination request is made after a regular meter reading has occurred and the

245 customer is in receipt of the results of said reading. A distribution company may impose a
246 reasonable charge, as set by the department through regulation, for initiating or terminating low-
247 income or moderate-income discount rates, default service, or standard offer service when a
248 customer does not make such an initiation or termination request upon the receipt of said results
249 and prior to the receipt of the next regularly scheduled meter reading. For purposes of this
250 subsection, there shall be a regular meter reading conducted of every residential account no less
251 often than once every two months. Notwithstanding the foregoing, there shall be no charge when
252 the initiation or termination is involuntary on the part of the customer.

253 SECTION 15. Chapter 164 of the General Laws is hereby amended with the addition of a
254 new Section following Section 1K:

255 Section 1L. Distributed energy services; Microgrid operations

256 For the purposes of climate resiliency and mitigation, reliability, and encouragement of
257 installation of distributed electricity generation and storage capacity, no right to exclusive service
258 or franchise established within Section 1B or elsewhere in this chapter shall prevent a
259 municipality, or agencies of the Commonwealth or private electric customers in coordination
260 with a municipality, within an electric or gas company's service territory, from:

261 (a) establishing an energy microgrid or district energy system;

262 (b) sharing electric generation or storage resources among facilities that are
263 contiguous and owned by the same utility customer, irrespective of the number of electric meters
264 installed at such facilities; or

265 (c) using public rights of way to conduct electrical conduit or other energy resources
266 point to point where the municipality deems there is benefit from sharing energy resources.

267 Notwithstanding the foregoing, electrical microgrids shall not sell energy to retail
268 customers, shall not distribute energy across property owned by others than the municipality, and
269 shall limit any new electrical connection between utility-metered facilities to cases when such
270 facilities have been disconnected from utility supply of electrical energy.

271 SECTION 16. Subsection (a) of section 85B of chapter 164 of the General Laws is
272 hereby amended by striking out paragraphs (7) and (8) and inserting in place thereof the
273 following:

274 (7) identification of additional supplies and equipment needed during an emergency
275 and the means of obtaining additional supplies and equipment;

276 (8) designation of a call center in the commonwealth for service assistance for the
277 duration of an emergency or until full service is restored, whichever occurs first. The call center
278 shall be staffed continuously for the duration of the emergency and to ensure sufficient staffing
279 levels to handle all customer calls; and

280 (9) a description of how the company is implementing its climate vulnerability and
281 resilience plan in its response to emergency events and in its efforts to minimize the effects of
282 extreme weather on the company's infrastructure and operations, including disruptions to
283 service.

284 SECTION 17. Chapter 164 of the General Laws is hereby amended by inserting after
285 section 92C the following 3 sections:

286 Section 92D. Customer access to a modern distribution grid is a right and the public
287 utility obligation to serve customers requires distribution companies to facilitate such access at
288 reasonable costs and on reasonable terms. The capability and accessibility of the
289 Commonwealth’s electrical system must be facilitated by investments in the electric grid that are
290 aligned with the Commonwealth’s ambitious climate, renewable energy, and economic
291 development goals. The implementation and periodic update of grid modernization efforts and
292 formal interconnection standards to ensure fair, reasonable, and transparent customer grid access
293 is essential to the achievement of the Commonwealth’s goals. As distribution companies pursue
294 grid modernization efforts, related technical, operational, policy and regulatory opportunities and
295 challenges must continuously be examined and addressed to ensure non-discriminatory customer
296 access and to achieve the full potential of a modern grid. Establishing frameworks for continuous
297 and collaborative efforts will assist utilities, regulators, distributed energy resource developers
298 and other stakeholders to timely and effectively address these issues. The department shall
299 establish standards to ensure reasonable and timely access to the distribution grid for all
300 customers and to ensure that distribution companies undertake investments and process
301 improvements to facilitate the transformation of the Commonwealth’s distribution grid to align
302 with the Commonwealth’s ambitious climate, energy, equity and economic development goals.

303 Section 92E. (a) No customer shall be denied the right to interconnect a distributed
304 generation facility, energy storage system or a combined distributed generation facility and
305 energy storage system to the extent such interconnection does not compromise the safety and
306 reliability of the distribution system. The department shall promulgate rules: (i) specifying a limit
307 of the time that may elapse from the date of initial interconnection application to the receipt of an
308 interconnection services agreement for various sizes and types of distributed generation facilities

309 and energy storage systems; (ii) specifying a limit of the time that may elapse from the
310 distribution company's commencement of design of required interconnection-related upgrades
311 and authorization to interconnect for various sizes and types of distributed generation facilities
312 and energy storage systems; and (iii) requiring distribution companies to enable the
313 interconnection of distributed generation facilities and energy storage systems in accordance
314 with the schedule promulgated by the department.

315 (b) Rules adopted by the department under this section shall include: (i) provisions to
316 track the performance of distribution companies under these rules; (ii) mechanisms to ensure
317 compliance by distribution companies with the schedule and rules required by this section
318 including revisions to existing timeline enforcement mechanisms; (iii) mechanisms to enable
319 customers to seek department review and enforcement of the schedule and rules required by this
320 section; and (iv) provisions for expeditiously resolving disputes between customers and
321 distribution companies.

322 (c) The department shall establish a cost allocation framework to implement the electric-
323 sector modernization plans established by section 92B commencing with the 2030-2034 electric-
324 sector modernization plans. Such electric-sector modernization plans shall identify (i) an amount,
325 in megawatts of alternating current, of incremental grid hosting capacity that will be available to
326 interconnect distributed generation and energy storage systems upon implementation of the
327 plans; and (ii) a proportional share of the benefits of the electric-sector modernization plans that
328 is attributable to distributed generation and energy storage systems. The department shall
329 establish a sub-regional uniform fee to be assessed to interconnecting customers of system sizes
330 by applying the proportional share of benefits attributable to distributed generation and energy
331 storage to the total number of megawatts of capacity enabled by the plans. This shall result in a

332 dollar amount per kilowatt AC to be assessed to interconnecting customers based on project
333 export capacity for their use of the grid capacity enabled by the plans. Such fee shall be uniform
334 within a distribution company's service territory sub-region regardless of the customer's point of
335 interconnection. The electrical boundaries of a distribution company's service territory sub-
336 regions shall be proposed by the distribution company and defined within the respective
337 distribution company's electric-sector modernization plan. Interconnecting customers, with
338 proposed facilities above 60 kW may be assessed additional interconnection costs for upgrades
339 identified in the interconnection studies.

340 For projects with an export capacity between 60 kW and 500 kW the following
341 standardized interconnection cost allocation shall apply to customers for distributed generation
342 facilities and energy storage systems: (i) no customer shall be charged more than a fixed \$/kW
343 AC of export capacity within a distribution company's service territory sub-region to
344 interconnect distributed generation facilities and energy storage systems; and (ii) any costs
345 incurred by the distribution company for interconnecting a distributed generation facility or
346 energy storage system that exceed the applicable fixed \$/kW AC of export capacity shall be
347 included in the distribution company's revenue requirement and recovered through fully
348 reconciling rates approved by the DPU. The DPU shall require each distribution company to
349 propose a fixed sub-regional \$/kW fee within each electric sector modernization plan for
350 approval..

351 For projects with an export capacity that does not exceed 60kW, the following
352 standardized interconnection cost allocation shall apply to customers for distributed generation
353 facilities and energy storage systems: (i) no customer shall be charged more than a fixed \$/kW
354 AC of export capacity to interconnect distributed generation facilities and energy storage

355 systems; and (ii) such fee shall be inclusive of interconnection costs for upgrades not included in
356 the approved electric-sector modernization plans including, but not limited to, shared service
357 distribution system upgrades; and (iii) any costs incurred by the distribution company for
358 interconnecting a distributed generation facility or energy storage system that exceed the
359 applicable fixed \$/kW AC of export capacity shall be included in the distribution company's
360 revenue requirement and recovered through fully reconciling rates approved by the DPU. The
361 DPU shall require each distribution company to propose a fixed sub-regional \$/kW fee within
362 each electric sector modernization plan for approval. The utilities may include costs of upgrades
363 identified in the interconnection studies in their proposed fixed sub-regional \$/kW fee.

364 (e) The department shall establish a permanent office of a distributed generation and
365 clean energy ombudsperson to advocate for improvements to distribution company
366 interconnection processes and practices and to receive and facilitate the resolution of disputes
367 between distributed generation customers and the distribution companies. The department shall
368 immediately appoint an ombudsperson to lead such office. The office of the ombudsperson shall
369 be staffed with two or more individuals, one of whom shall be an expert in the interconnection
370 tariff and department precedent and one of whom shall be an expert in technical solutions and
371 standards for interconnecting distributed generation customers. The ombudsperson may
372 recommend that the department impose civil penalties upon a finding that a distribution company
373 has intentionally or negligently violated one or more requirements of the interconnection tariff,
374 that the company has exhibited a pattern or history of violating such tariff, or that the company
375 has failed to provide an acceptable level of customer service for a distributed generation
376 customer or customers. In considering penalties under this section, the ombudsperson and the
377 department shall consider the severity of the violation, the financial impact upon the distribution

378 customer or customers, the distribution company's history of violations and customer service,
379 and other factors that may be relevant to determining the level of penalty that may be
380 appropriate. The department may direct that all or a portion of a penalty take the form of
381 restitution to be paid to an affected distribution customer. Penalties imposed by the department
382 shall be effective upon the date they are imposed.

383 Section 92F. (a) There is hereby established within the department a permanent and open
384 interconnection working group for the purpose of considering improvements to interconnection
385 tariffs and interconnection technical standards and processes. The working group shall be
386 facilitated by the office of the ombudsperson and shall meet no less frequently than 4 times per
387 year.

388 (b) The working group shall study and make recommendations on topics including, but
389 not limited to: (i) cost and best available technology for interconnecting and metering distributed
390 generation, energy storage systems, and other distributed energy resources; (ii) process
391 improvements to improve timeliness and efficiency of distributed generation and storage
392 interconnection; (iii) processes for identifying and achieving distribution system upgrade cost
393 avoidance through the use of advanced inverter functions and other non-wires solutions under
394 the distribution company's operational control, along with earning sharing mechanisms or
395 incentives for capital investment deferrals; (iv) processes and customer service improvements for
396 interconnecting customers adopting distributed generation and energy storage; (v) revisions to
397 distribution company interconnection and metering standards that impact distributed energy
398 resources and/or exporting and non-exporting energy storage systems; (vi) implementation of
399 programs, guidelines, and schedules for grid-enabling technologies and platforms such as
400 distributed energy resource management systems; and (vii) without limitation, such other

401 technical, policy, and tariff issues related to and affecting interconnection performance and
402 customer service for distributed generation and energy storage customers in the commonwealth,
403 as determined by the working group. The chairs may jointly create subcommittees of the
404 working group to focus on specific issues of importance, and may invite technical or policy
405 experts to assist the working group in its work.

406 (c) The office of the ombudsperson shall develop and submit a report detailing consensus
407 recommendations of the working group and, if applicable, additional recommendations for which
408 consensus was not reached to the department and the clerks of the house of representatives and
409 senate with recommendations for improvements to interconnection oversight and reporting,
410 interconnection tariffs and such other topics designated to the working group in subsection (b),
411 within 180 days of its first meeting, and every 180 days thereafter. Such report shall include
412 consensus recommendations of the working group and, if applicable, additional
413 recommendations for which consensus was not reached. The department shall within 180 days of
414 the report filing issue an order addressing the recommendations of the working group. The order
415 shall specify those recommendations adopted and explain in detail the reasons for rejecting any
416 recommendations not adopted.

417 SECTION 18. Chapter 164 of the General Laws, as so appearing, is hereby amended by
418 inserting after section 116B the following section:

419 SECTION 116C: Advanced Metering Infrastructure

420 (a) Distribution companies deploying advanced metering infrastructure in their
421 territories shall establish a joint, centralized data repository to allow customers and third parties,
422 including competitive suppliers, access to advanced metering data, including billing, interval

423 usage, and load data, in near-real time for all customer classes cost-effective manner approved by
424 the department.

425 (b) A non-utility competitive supplier of energy, pursuant to section 1D of chapter 164
426 or other third party is entitled to access to detailed advanced metering infrastructure customer
427 data, subject to appropriate customer approval and protections. A customer's intent to enroll on a
428 non-utility competitive supplier of energy or third party's product is considered approval for the
429 purposes of this section.

430 (c) Electric customers may opt out of inclusion in the implementation of advanced
431 metering infrastructure with notice to the distribution company. Upon receiving such notice, the
432 distribution company shall remove the customer from the implementation plan, notify the
433 department of the customer's decision to not be a part of such implementation plan in a manner
434 determined by the department, and charge such a customer any reasonable and necessary fees for
435 delivering non-advanced metering service.

436 (d) A non-utility competitive supplier of energy, pursuant to section 1D of chapter 164,
437 may provide consolidated billing services to electric customers utilizing advanced metering
438 infrastructure. For a competitive supplier of energy who implements supplier consolidated billing
439 services for their customers, said competitive supplier of energy shall be subject to the same
440 customer protection rules and requirements as distribution companies for suspension,
441 disconnection, and reconnection of electric services.

442 (e) Distribution companies shall implement accelerated switching permitting a
443 residential or small commercial electric customer to change electric suppliers within three
444 business days. Customers moving within a distribution company's territory shall be permitted to

445 transfer their competitive supplier of energy directly to their new service location without being
446 required to switch to an interim rate provided by the distribution company or other supplier.
447 Customers establishing electric service shall be permitted to take service from their competitive
448 energy supplier on day one of service. Customers shall not be required to take basic service from
449 a distribution company prior to selecting and switching to a competitive supplier.

450 (f) Within 180 days of enactment of this legislation, all distribution companies
451 operating within the state shall submit a plan for implementation of advanced metering data
452 access protocols to the department for approval. The department shall approve or reject such a
453 plan within 90-days of receipt. The department shall provide rules and protocols for ensuring the
454 timely rehearing of a rejected plan and means to make such plans acceptable to the department.
455 All electric companies are expected to have approved plans at the department within 1 year of
456 enactment unless good cause shown. Approved plans should implement advanced metering data
457 access to all customer classes and authorized third parties, including competitive suppliers,
458 within 5 years of approval, unless the department determines that such a timeline would create
459 undue costs to consumers, compromise reliability of electric service, or compromise safe
460 operation of the electric grid. Distribution companies shall make regular updates to the
461 department on the progress towards implementing advanced metering infrastructure in their
462 territory, no less than quarterly.

463 (g) Distribution companies shall be entitled to recovery of prudent and necessary
464 expenses for the implementation of advanced metering data repositories. The department may
465 also implement penalties for failure of distribution companies to meet implementation goals.

466 (h) The department shall, in consultation with the distribution companies, conduct a
467 process to investigate establishing and refining standards that expand the use of distributed grid
468 edge software on AMI meters already approved by the department, which supports efficiency,
469 load flexibility, and distribution system intelligence to improve system utilization, reduce costs,
470 and/or improve reliability to customers. Standards shall include but not be limited to methods for
471 increasing capacity for managing loads and resources in the grid by electric utilities and third
472 parties. The utilities shall design at least one metric for improved monitoring and controlling the
473 grid using high-resolution data in utility meters that will allow them to earn an incentive for
474 positive performance.

475 SECTION 19. Section 141 of chapter 164 of the General Laws, as so appearing, is hereby
476 amended by striking out the second sentence and inserting in place thereof the following
477 sentence:- “Where the scale of on-site generation would have an impact on affordability for low-
478 income or eligible moderate-income customers, a fully compensating adjustment shall be made
479 to the low-income or moderate-income rate discount.”

480 SECTION 20. Section 164 of the General Laws, as appearing in the 2022 Official
481 Edition, is hereby amended by inserting the following section.-

482 Section 149. (a) For the purposes of this section, the following words shall have the
483 following meanings unless the context clearly requires otherwise:

484 “Advanced power flow control”, any hardware and software technologies used to push or
485 pull electric power in a manner that balances overloaded lines and underutilized corridors within
486 the distribution system.

487 “Advanced reconductors”, any hardware technology that can conduct electricity across
488 distribution lines and demonstrate enhanced performance over traditional conductor products.

489 “Dynamic line rating”, any hardware and/or software technologies used to appropriately
490 update the calculated thermal limits of existing distribution lines based on real-time and
491 forecasted weather conditions.

492 “Grid enhancing technology”, any hardware or software technology that enables
493 enhanced or more efficient performance from the electric distribution system, including, but not
494 limited to dynamic line rating, advanced power flow control technology, topology optimization,
495 and energy storage when used as a distribution resource.

496 “Topology optimization”, any hardware or software technology that identifies
497 reconfigurations of the distribution grid and can enable the routing of power flows around
498 congested or overloaded distribution elements.

499 (b) For base rate proceedings and other proceedings in which a distribution company
500 proposes capital improvements or additions to the distribution system, the distribution company
501 shall conduct a cost-effectiveness and timetable analysis of multiple strategies including but not
502 limited to the deployment of grid enhancing technology, advanced reconductors, or energy
503 storage used as a distribution resource. Where grid enhancing technology, advanced
504 reconductors, or energy storage used as a distribution resource whether in combination with or
505 instead of capital investments, offer a more cost-effective strategy to achieving distribution goals
506 including, but not limited to distributed energy resource interconnection, the department may
507 approve the deployment of grid enhancing technology, advanced reconductors, or energy storage
508 used as a distribution resource as part of the overall solutions strategy.

509 (c) As part of a base rate filing or other filing in which it proposes capital improvements
510 or additions to the distribution system, the distribution company may propose a performance
511 incentive mechanism that provides a financial incentive for the cost-effective deployment of grid
512 enhancing technologies, advanced reconductoring, or energy storage used as a distribution
513 resource.

514 (d) The department may promulgate regulations to implement the provisions of the
515 subsections (b) and (c).

516 (e) Every fifth year, each distribution company shall make a compliance filing with the
517 department and provide a separate report to both ISO-NE and the joint committee on
518 telecommunications, utilities, and energy on or before September 1st on the deployment of grid
519 enhancing technology, advanced reconductors, or energy storage used as a distribution resource
520 in a format determined by the department.

521 SECTION 21. Chapter 164 is hereby amended by adding the following section:

522 Section 149.

523 Section 1.

524 (a)The department of energy resources shall ensure equity, accessibility, and promote
525 participation by renters and low-income retail electric customers in the solar incentive program
526 established in section 11 of chapter 75 of the acts of 2016, and in any successor solar incentive
527 program, by implementing a low-income customer verification process in which low income
528 customers shall be persons whose income is at or below 80 percent of the area median income or
529 200 percent of the federal poverty level or is a small business, who are, for the purposes of this

530 section defined as business entities, including their affiliates that are (i) independently owned and
531 operated; and (ii) are defined as a “small business” under applicable federal law, as established in
532 the United States Code and promulgated from time to time by the United States Small Business
533 Administration.

534 (b)A low-income multi-unit building that meets the definition under M.G.L. c. 40B, § 20
535 or otherwise receives tax credits under the U.S. Department of Housing and Urban Development
536 Low-Income Housing Tax Credit program shall qualify as one Low Income Customer.

537 (c)In the implementation of the program, the department shall:

538 (i)Require income data verification to determine eligibility for low-income customers.
539 Proof of eligibility required for low-income customers shall include one or more than one of the
540 following: proof of participation in a low income discount program including Medicaid;
541 Supplemental Security Income; Temporary Assistance for Needy Families; Women, Infants, and
542 Children Nutrition Program; Low Income Home Energy Assistance Program; Supplemental
543 Nutrition Assistance Program or food stamps; Head Start; National School Lunch Program;
544 Emergency Aid to the Elderly, Disabled, and Children; School Breakfast Program; Public
545 Housing; Transitional Aide to Families with Dependent Children; Veterans’ Service Benefits
546 established in Chapter 115 of the Massachusetts General Laws; Veterans Dependency and
547 Indemnity Compensation Surviving Parent or Spouse; Veterans Non-Service Disability Pension;
548 Fuel Assistance; or proof that the residential Low-income Customer lives in or is a business
549 entity located in a Census block group where the median household income is at or below 200
550 percent of the U.S. Federal Poverty Guidelines or 80 percent of the area median gross income
551 published by the United States Census Bureau, whichever is greater; by living in or owning a

552 low-income multi-unit building, including those that are master-metered; or proof of income of
553 the account holder including pay stubs or form W-2; or any verification method authorized by
554 the U.S. Department of Treasury for qualified low-income economic benefit projects Investment
555 Tax Credit (ITC) adder under United States Public Law 117-169 Section 13103(2)(C);

556 (ii) prohibit credit checks as a means of establishing eligibility for residential customers to
557 become a subscriber;

558 (iii) prohibit the use of early termination and exit fees for residential customers;

559 (iv) require distribution companies generating an alternative form of on-bill credits as
560 approved by the department of public utilities from distributed solar generation facilities to
561 accept and implement no less frequently than once per month any changes to the identities of
562 designated recipients and amount of credits to be attributed to such recipients, as provided by the
563 owner of the solar distributed generation facility; and

564 (v) exempt low-income multi-unit building owners from bill credit maximums and
565 subscriber count minimums for the host project.

566 SECTION 22. Section 102 of Chapter 8 of the Acts of 2021 is hereby repealed.

567 SECTION 23. Section 83B of chapter 169 of the acts of 2008, as most recently amended
568 by section 60 of chapter 179 of the acts of 2022, is hereby further amended by striking out, in
569 line 1, the words “83C and 83D” and inserting in place thereof the following words:- 83C, 83D,
570 and 83E

571 SECTION 24. Section 83B of Chapter 169, as so appearing, is hereby further amended
572 by striking out the definition of “clean energy generation” and inserting in place thereof the
573 following definition:-

574 “Clean energy generation”, (i) firm service hydroelectric generation from hydroelectric
575 generation alone; (ii) new Class I RPS eligible resources that are firm up with energy storage
576 or firm service hydroelectric generation; (iii) new Class I renewable portfolio standard eligible
577 resources or (iv) nuclear power generation that is located in the ISO-NE control area and
578 commenced commercial operation before January 1, 2011.

579 SECTION 25.

580 Section 83B of chapter 169, as so appearing, is hereby further amended by striking out
581 the definition of “long-term contract” and inserting in place thereof the following definition:-

582 “Long-term contract”, a contract for a period of 15 to 30 years for offshore wind energy
583 generation pursuant to section 83C or for clean energy generation pursuant to section 83D or
584 83E; provided, however, that a contract for offshore wind energy generation pursuant to said
585 section 83C may include terms and conditions for renewable energy credits associated with the
586 offshore wind energy generation that exceed the term of generation under the contract.

587 SECTION 26. Section 83C of chapter 169 of the acts of 2008, as most recently amended
588 by section 61 of chapter 179 of the acts of 2022, is hereby amended in the last sentence of
589 subparagraph (b) thereof by inserting after the word “commitments” the following:

590 “, plans to minimize total carbon emissions generated by vessels during both the
591 construction phase and the operation and maintenance phase of the project,”

592 SECTION 27. Said chapter 169, as amended by chapter 188 of the acts of 2016, is hereby
593 further amended by inserting after section 83D the following section:-

594 Section 83E. (a) In order to provide a cost-effective mechanism for procuring beneficial,
595 reliable clean energy generation resources on a long-term basis, taking into account the factors
596 outlined in this section, , not later than August 31, 2025, every distribution company shall, in
597 coordination with the department of energy resources, jointly and competitively solicit proposals
598 for clean energy generation and, provided that reasonable proposals have been received, shall
599 enter into cost-effective long-term contracts for clean energy generation for an annual amount of
600 electricity up to approximately 9,450,000 megawatt-hours additional to the amount of clean
601 energy generation purchased from the seller in 2022 via the spot market or other contracts;
602 provided

603 further, that the department may require additional solicitations and procurements if it
604 determines they are necessary to meet emissions reductions requirements of section 4 of Chapter
605 21N. Long-term contracts executed pursuant to this section shall be subject to the approval of
606 the department of public utilities and shall be apportioned among the distribution companies
607 under this section.

608 (b) The timetable and method for solicitation of long-term contracts shall be proposed by
609 the department of energy resources in coordination with the distribution companies using a
610 competitive bidding process and shall be subject to review and approval by the department of
611 public utilities. The department of energy resources shall consult with the distribution companies
612 and the attorney general's office regarding the choice of solicitation methods. A solicitation may
613 be coordinated and issued jointly with other New England states or entities designated by those

614 states. The distribution companies, in coordination with the department of energy resources,
615 may conduct 1 or more competitive solicitations through a staggered procurement schedule
616 developed by the department of energy resources; provided, that the schedule shall ensure that
617 the distribution companies enter into cost-effective long-term contracts for the delivery of clean
618 energy generation up to approximately 9,450,000 megawatt-hours by December 31, 2030,
619 additional to the amount of clean energy generation purchased from the seller in 2022 via the
620 spot market or other contracts. Proposals received pursuant to a solicitation under this section
621 shall be subject to review by the department of energy resources and the executive office of
622 housing and economic development in consultation with the independent evaluator and the
623 electric distribution companies shall offer technical advice. If the department of energy
624 resources, in consultation with the independent evaluator, determines that reasonable proposals
625 were not received pursuant to a solicitation, the department may terminate the solicitation, and
626 may require additional solicitations to fulfill the requirements of this section.

627 (c) In developing proposed long-term contracts, the distribution companies shall
628 consider long-term contracts for clean energy certificates, for energy and for a combination of
629 both clean energy certificates and energy. A distribution company may decline to pursue a
630 contract if the contract's terms and conditions would require the contract obligation to place an
631 unreasonable burden on the distribution company's balance sheet after consultation with the
632 department of energy resources; provided, however, that the distribution company shall take all
633 reasonable actions to structure the contracts, pricing or administration of the products purchased
634 under this section to prevent or mitigate an impact on the balance sheet or income statement of
635 the distribution company or its parent company, subject to the approval of the department of
636 public utilities; and provided further, that mitigation shall not increase costs to ratepayers. If a

637 distribution company deems all contracts to be unreasonable, the distribution company shall
638 consult with the department of energy resources and, within 20 days of the date of its decision,
639 submit a filing to the department of public utilities. The filing shall include, in the form and
640 detail prescribed by the department of public utilities, documentation supporting the distribution
641 company's decision to decline the contract. Following a distribution company's filing, and
642 within 4 months of the date of filing, the department of public utilities shall approve or reject the
643 distribution company's decision and may order the distribution company to reconsider any
644 contract. The department of public utilities shall take into consideration the department of energy
645 resources' recommendations on the distribution company's decision. The department of energy
646 resources may require additional solicitations to fulfill the requirements of this section.

647 (d) The department of public utilities shall promulgate regulations consistent with this
648 section. The regulations shall: (1) allow developers or owners of clean energy generation
649 resources to submit proposals for long-term contracts; (2) require that contracts executed by the
650 distribution companies under such proposals are filed with, and approved by, the department of
651 public utilities before they become effective; (3) provide for an annual remuneration for the
652 contracting distribution company equal to 2.25 per cent of the annual payments under the
653 contract to compensate the company for accepting the financial obligation of the long-term
654 contract; provided, however, that such provision shall be acted upon by the department of public
655 utilities at the time of contract approval; (4); require associated transmission costs to be
656 incorporated into a proposal; provided, however, that, to the extent there are regional or project-
657 specific transmission costs included in a bid, the department of public utilities may, if it finds
658 such recovery to be in the public interest, authorize or require the contracting parties to seek
659 recovery of such transmission costs from other states or from benefitted entities or populations in

660 other states through federal transmission rates, consistent with policies and tariffs of the Federal
661 Energy Regulatory Commission and (5) require that the clean energy resources to be used by a
662 developer or owner under the proposal meet the following criteria: (i) provide enhanced
663 electricity reliability, system safety and energy security; (ii) contribute to reducing winter
664 electricity price spikes; (iii) are cost effective to electric ratepayers in the commonwealth over
665 the term of the contract taking into consideration potential costs and benefits to the ratepayers,
666 including potential economic and environmental benefits and opportunities to equitably allocate
667 costs to, and equitably share costs with, other states and populations within other states that may
668 benefit from clean energy generation procured by the commonwealth;; (iv) if applicable, avoid
669 line loss and mitigate transmission costs to the extent possible and ensure that transmission cost
670 overruns, if any, are not borne by ratepayers; (iv) allow long-term contracts for clean energy
671 generation resources to be paired with energy storage systems, including new and existing mid-
672 duration and long-duration energy storage systems; (v) if applicable, adequately demonstrate
673 project viability in a commercially reasonable timeframe; (vi) include benefits to environmental
674 justice populations and low-income ratepayers in the commonwealth ; and (vii) include
675 opportunities for diversity, equity and inclusion, including, at a minimum, a workforce diversity
676 plan and supplier diversity program plan.

677 (e) A proposed long-term contract shall be subject to the review and approval of the
678 department of public utilities and shall be apportioned among the distribution companies. As part
679 of its approval process, the department of public utilities shall consider recommendations by the
680 attorney general, which shall be submitted to the department within 45 days following the filing
681 of a proposed long-term contract with the department. The department of public utilities shall
682 take into consideration the department of energy resources' recommendations on the potential

683 costs and benefits to the rate payers, including opportunities to equitably allocate costs to, and
684 equitably share costs with, other states and populations within other states that may benefit from
685 clean energy generation procured by the commonwealth, and the requirements of chapter 298 of
686 the acts of 2008 and chapter 21N of the General Laws. The department of public utilities shall
687 consider the potential costs and benefits of the proposed long-term contract and shall approve a
688 proposed long-term contract if the department finds that the proposed contract is in the public
689 interest and is a cost-effective mechanism for procuring beneficial, reliable clean energy on a
690 long-term basis, taking into account the factors outlined in this section. A distribution company
691 shall be entitled to cost recovery of payments made under a long-term contract approved under
692 this section.

693 (f) The department of energy resources and the attorney general shall jointly select,
694 and the department of energy resources shall contract with, an independent evaluator to monitor
695 and report on the solicitation and bid selection process in order to assist the department of energy
696 resources in determining whether a proposal received pursuant to subsection (b) is reasonable
697 and to assist the department of public utilities in its consideration of long-term contracts or filed
698 for approval. To ensure an open, fair and transparent solicitation and bid selection process that is
699 not unduly influenced by an affiliated company, the independent evaluator shall: (1) issue a
700 report to the department of public utilities analyzing the timetable and method of solicitation and
701 the solicitation process implemented by the distribution companies and the department of energy
702 resources under subsection (b) and include recommendations, if any, for improving the process;
703 and (2) upon the opening of an investigation by the department of public utilities into a proposed
704 long-term contract for a winning bid proposal, file a report with the department of public utilities
705 summarizing and analyzing the solicitation and the bid selection process, and providing its

706 independent assessment of whether all bids were evaluated in a fair and non-discriminatory
707 manner. The independent evaluator shall have access to all information and data related to the
708 competitive solicitation and bid selection process necessary to fulfill the purposes of this
709 subsection but shall ensure all proprietary information remains confidential. The department of
710 public utilities shall consider the findings of the independent evaluator and may adopt
711 recommendations made by the independent evaluator as a condition for approval. If the
712 independent evaluator concludes in the findings that the solicitation and bid selection of a long-
713 term contract was not fair and objective and that the process was substantially prejudiced as a
714 result, the department of public utilities shall reject the contract.

715 (g) The distribution companies shall each enter into a contract with the winning
716 bidders for their apportioned share of the market products being purchased from the project. The
717 apportioned share shall be calculated and based upon the total energy demand from all
718 distribution customers in each service territory of the distribution companies.

719 (h) An electric distribution company may elect to use any energy purchased under
720 such contracts for resale to its customers, and may elect to retain clean energy certificates to
721 meet any applicable annual portfolio standard requirements, including section 11F of said
722 chapter 25A, and other clean energy compliance standards as applicable. If the energy and clean
723 energy certificates are not so used, such companies shall sell such purchased energy into the
724 wholesale market and shall sell such purchased clean energy certificates attributed to any
725 applicable portfolio standard eligible resources to minimize the costs to ratepayers under the
726 contract. The department of energy resources shall conduct periodic reviews to determine the
727 impact on the energy and clean energy certificate markets of the disposition of energy and clean
728 energy certificates under this section and may issue reports recommending legislative changes if

729 it determines that actions are being taken that will adversely affect the energy and clean energy
730 certificate markets.

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

738 (j) A long-term contract procured under this section shall utilize an appropriate
739 tracking system to ensure a unit specific accounting of the delivery of clean energy, to enable the
740 department of environmental protection, in consultation with the department of energy resources,
741 to accurately measure progress in achieving the commonwealth's goals under chapter 298 of the
742 acts of 2008 or chapter 21N of the General Laws.

743 (k) The department of energy resources and the department of public utilities may
744 jointly develop requirements for a bond or other security to ensure performance with
745 requirements under this section.

746 (l) The department of energy resources may promulgate regulations necessary to
747 implement this section.

748 (m) If this section is subjected to a legal challenge, the department of public utilities
749 may suspend the applicability of the challenged provision during the pendency of the action until
750 a final resolution, including any appeals, is obtained and shall issue an order and take other

751 actions as are necessary to ensure that the provisions not subject to the challenge are
752 implemented expeditiously to achieve the public purposes of this section.

753 SECTION 28. Section 82 of chapter 179 of the acts of 2022, is hereby amended by
754 striking out the words “December 31, 2022” and inserting in place thereof the following words:-
755 December 31, 2025

756 SECTION 29. Subsection (c) of section 85 of chapter 179 of the Acts of 2022 is hereby
757 amended by striking out the word “may”, in the first instance that it occurs, and inserting therein
758 the following word:- “shall”

759 SECTION 30. The legislature shall establish annual targets for solar based on the
760 Governor’s stated intent to develop 10 GW of solar by 2030 (1.25 GW/year, or a lower target
761 escalating as necessary), and instruct DOER to revise the SMART Program to meet these targets,
762 as follows:

763 A. Establish sub-targets for the different types of solar installations (roof-mount, ground-
764 mount, parking lot), and instruct DOER to increase the SMART Program adders in order to
765 achieve those targets (i.e. increase adders for Building, Canopy, Community Shared Solar,
766 Agricultural and Tracker—including single-axis in order that these adders accurately reflect true
767 costs to incentivize adequate additional capacity to meet annual goals and are adjusted annually
768 by DOER).

769 B. Instruct DOER to revise basic SMART rates to counter substantial component price
770 increases over the past 12 months. The rate revision should be guided by a 3rd party assessment
771 of what rates will be required to drive solar installations to established targets.

- 772 C. Instruct DOER to make rates consistent across all utility service territories.
- 773 D. Instruct DOER to increase the capacity per block, to lessen the declination between
774 blocks, and to ensure that the revised SMART Program will meet the Governor’s stated goal of
775 10 GW of solar by 2030 (and subsequent goals to be established).
- 776 E. Instruct DOER to conduct a review of the SMART program every 2 years to ensure
777 that it is on track to drive solar installations to or beyond established goals, and to address known
778 issues.
- 779 F. Instruct DOER to eliminate the Critical Natural Landscapes restriction from the
780 BioMap 2 language and exclusions to SMART program participation.
- 781 G. Eliminate the cap on the state investment tax credit for residential installations, and
782 make it refundable.
- 783 H. Allow manual reporting for new systems under 60 KW
- 784 I. Instruct the Grid Modernization Advisory Council (GMAC) to permit the utilities to
785 recover any grid modernization costs determined by the GMAC to be reasonable and prudent in
786 order to create adequate capacity to interconnect 10 GW of new Solar by 2030;
- 787 J. Establish annual storage (without pairing with solar) goals to meet the Governors 2030
788 storage target goals, including net metering for mobile and stationary storage systems;
- 789 K. Enable the DOER to fund the CEC to establish a new solar loan program as a part of
790 the Governor’s
791 proposed Green Bank;

792 L. Enable legislation to require the DOER to establish a separate solar and storage
793 program in Municipal Light Plant cities and towns (MLPs) to be funded through general
794 revenues of the Commonwealth or through a surtax on those Cities and Towns that opt into this
795 program.

796 SECTION 31. (a) Notwithstanding any general or special law to the contrary, on or
797 before January 1, 2030, all electricity supply procured by the Commonwealth for use in state
798 facilities must be at least 95% derived from an hourly 24/7 load following zero-emission
799 product.

800 (b) "Hourly 24/7 load following zero-emission product" is defined as an electric supply
801 product where real-time demand for electricity will be met with zero-emission energy every
802 hour, every day, and produced within either the federally-regulated regional electric grid where
803 the electricity is consumed or the PJM and New York control areas adjacent to where the
804 electricity is consumed.

805 SECTION 32.

806 1. Notwithstanding any general or special law to the contrary, as used in this section:

807 (a) "Department" means the Department of Public Utilities.

808 (b) "Electric company", means as defined in section 1 of Chapter 164.

809 (c) "Meter socket adapter" means an electronic device that is installed between a
810 residential electric meter and the meter socket, for the purpose of facilitating the deployment of
811 customer-owned or customer-leased technology.

812 2. An electric company shall authorize the installation and operation of a meter socket
813 adapter, whether owned by a residential customer or by a third-party, provided the meter socket
814 adapter meets the following criteria:

815 (a) the meter socket adapter is qualified to be connected to the supply side of the service
816 disconnect pursuant to the applicable provisions of the National Electric Code;

817 (b) the meter socket adapter is approved or listed by a nationally recognized testing
818 laboratory and is rated appropriately for the meter socket into which it is intended to be installed;

819 (c) the meter socket adapter is certified to meet all applicable standards, as determined
820 by a nationally recognized testing laboratory; and

821 (d) the meter socket adapter does not prevent access to the sealed meter socket
822 compartment or the pull section of the service section of the electric meter or switchboard, as
823 applicable.

824 3. A manufacturer of a meter socket adapter, a third-party, a residential customer, or an
825 electric public utility shall all be allowed to install, maintain, or service a meter socket adapter or
826 associated equipment.

827 4. An electric public utility shall modify its electric service requirements as necessary to
828 implement the provisions of this section immediately after the effective date of this section.

829 5. An electric public utility shall approve or disapprove a request for approval of a
830 specific model of meter socket adapter for installation in its service area no later than 60 days
831 after a manufacturer or third-party submits a request for approval of the specific model of meter
832 socket adapter. An electric public utility shall provide public notice of all decisions approving a

833 meter socket adapter, including by posting the information on the utility's Internet website.
834 Should an electric public utility disapprove a specific model of meter socket adapter, the electric
835 public utility shall provide an explanation to the requesting vendor enumerating the reasons the
836 application was denied.

837 6. The Department may adopt rules and regulations as necessary to implement the
838 provisions of this section.

839 SECTION 33. Notwithstanding any general or special law to the contrary, the
840 Department of Energy Resources shall conduct a review to determine the effectiveness of the
841 Commonwealth's existing solicitations and procurements required by section 83C of chapter 169
842 of the acts of 2008, as amended by chapter 188 of the acts of 2016, for the purposes of ensuring
843 compliance with statewide greenhouse gas emissions limits and sublimits under chapter 21N of
844 the General Laws. The Department's recommendations shall include a review of prior clean
845 energy solicitations, a review of best practices and models utilized by other states to procure
846 clean energy, as well as any legislative recommendations needed to amend or replace existing
847 statutory authority. The Department shall consult with the clean energy industry as part of this
848 review process. Such review and recommendations shall be submitted to the Joint Committee on
849 Telecommunications, Utilities, & Energy no later than September 1, 2024.

850 SECTION 34. Notwithstanding any general or special law or rule, regulation or order to
851 the contrary, the department of public utilities shall conduct an adjudicatory proceeding to
852 determine the efficacy of current retail rate structures in achieving statewide greenhouse gas
853 reduction and clean energy deployment goals and to explore the establishment of alternative rate
854 designs that:

855 (a) improve alignment of electric rates with marginal costs of the changing electric
856 system;

857 (b) do not unreasonably impair volumetric price signals that encourage energy
858 conservation;

859 (c) provide reasonable opportunities for consumers to invest in beneficial electrification
860 measures and achieve fuel cost savings through shifting electric usage to price-discounted time
861 periods of low system demand or lower than average greenhouse gas content;

862 (d) maintain simplicity and understandability for default service for residential
863 consumers;

864 (e) preserve and enhance the bill discounts for qualifying low-income consumers and
865 the opportunities for low-income consumers to achieve additional household expenditure savings
866 through beneficial electrification or utilization of distributed energy resources;

867 (f) provide rate options and retail billing practices that encourage consumers to adopt
868 technologies that enhance and automate response to price signals in order to achieve bill savings;
869 and

870 (g) incorporate practices that compensate or provide credits to consumers for engaging
871 in home energy management solutions that avoid the need for grid upgrades to accommodate
872 additional loads associated with beneficial electrification or utilization of an onsite distributed
873 energy resource.

874 (1) On or before December 15, 2025, the Department shall issue an order addressing the
875 matters in this section and shall provide a report to the legislature on the Department's

876 investigation into retail rate designs and practices, including recommendations for any statutory
877 changes needed to facilitate alternative retail rate designs or electric company investments in
878 advanced metering needed to efficiently and expeditiously meet the Commonwealth's
879 greenhouse gas reduction and clean energy deployment goals. The report shall also identify any
880 other solutions or barriers to widespread consumer adoption of beneficial electrification
881 measures and distributed energy resources that were discussed during the investigatory docket,
882 but that are beyond the traditional jurisdiction of the department.

883 (2) Nothing in this section shall prevent the department from initiating rate design pilots
884 during the pendency of the investigatory docket or prior the issuance of the order or the
885 submission of the report required in subsection 1.

886 (3) For purposes of this section:

887 (a) "Beneficial electrification measure" means the replacement of direct fossil fuel
888 use with electricity in a way that either reduces overall lifetime emissions or energy costs.

889 (b) "Distributed energy resource" means an energy resource located on an electric
890 company's customer that produces or stores electricity or modifies the timing or amount of a
891 customer's electrical consumption.

892 SECTION 35. Notwithstanding any general or special law or rule, regulation or order to
893 the contrary, (a) "Net Crediting" means a payment mechanism that requires an Electric
894 distribution company to, at the request of a host project or eligible Solar Tariff Generation Unit
895 (STGU) System:

896 (i) Include the monthly subscription charge of a host project or eligible STGU System on
897 the monthly Bills rendered by the Electric distribution company for electric service and supply to
898 subscribers; and

899 (ii) Remit payment for those charges to the host project or eligible STGU System,
900 irrespective of whether applicable subscribers have paid their electric bill.

901 (iii) An Electric distribution company may require a reasonable fee for a host project or
902 eligible STGU Systems that uses net crediting. The fee shall not exceed one percent of the bill
903 credit value remitted to the system unless the Department determines a higher fee is just and
904 reasonable based on substantial evidence presented by the Electric distribution company. The fee
905 for net crediting assessed to a host project or STGU system shall not exceed the fee in effect at
906 the time the host project or eligible STGU System elected for an associated STGU System to
907 participate in net crediting.

908 SECTION 36. Notwithstanding any general or special law, rule or regulation to the
909 contrary, the department of public utilities shall require the electric distribution companies to
910 implement consolidated billing on Alternative On-Bill Credit (AOBC) Low-Income Community
911 Shared Solar (LICSS) Generation Units. In implementing said consolidated billing, the electric
912 distribution companies shall apply the net value of the bill credit directly to customer's accounts
913 and remit the developer or owner portion of the payment directly to the developer or owner.

914 The net value of the bill credit the electric distribution companies would apply to
915 customer accounts may be calculated from the SMART Participant Disclosure Form.

916 SECTION 37. Notwithstanding any general or special law, rule or regulation to the
917 contrary, in 2026 and all subsequent compliance years, 225 CMR 15.07 (2) shall be equal to

918 3.7% of electrical energy sales and 225 CMR 15.08 (4) 2 shall be equal to the alternative
919 compliance rate for the RPS Class II Renewable Energy Minimum Standard set to 225 CMR
920 15.08 (3) (a) 2.

921 SECTION 38. The advisory working group for the program to encourage the construction
922 and operation of solar power generating canopies over large parking lots under section 29 of
923 chapter 21A of the General Laws and established by Section 1 of this act shall make its
924 recommendations no later than 1 year after the effective date of this act.

925 SECTION 39. The department shall implement Section 1 no later than 2 years after the
926 effective date of this act.

927 SECTION 40. The department of public utilities shall promulgate regulations to
928 implement section 14, including the establishment of a moderate-income discount eligibility rate
929 following an investigation thereof.

930 SECTION 41. The department shall promulgate regulations to implement section 21
931 within 180 days.

932 SECTION 42. Section 116(a) of chapter 116 shall be implemented no later than 12
933 months after the effective date of this act.

934 SECTION 43. The department shall promulgate rules and regulations necessary for the
935 implementation of section 18 within one year of the effective date of this act.

936 SECTION 44. The rules required by subsection (b) of section 92E of chapter 164 of the
937 General Laws shall be promulgated by the department of public utilities within 270 days of the
938 effective date of this act.

939 SECTION 45. The office of the ombudsperson required by section 92E of chapter 164 of
940 the General Laws shall be established by the department of public utilities within 180 days of the
941 effective date of this act.