

**HOUSE . . . . . No. 4857**

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**The Commonwealth of Massachusetts**

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The committee of conference on the disagreeing votes of the two branches with reference to the Senate amendments (striking out all after the enacting clause and inserting in place thereof the text contained in Senate document numbered 2608; and by striking out the title and inserting in place thereof the following title: “An Act to promote a clean energy future”) of the House Bill to increase renewable energy and reduce high-cost peak hours (House, No. 4756), reports recommending passage of the accompanying Bill to advance clean energy (House, No. 4857) July 30, 2018.

Thomas A. Golden, Jr.	Michael J. Barrett
Patricia A. Haddad	Marc R. Pacheco
Bradley H. Jones, Jr.	Patrick M. O’Connor

**HOUSE . . . . . No. 4857**

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**The Commonwealth of Massachusetts**

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**In the One Hundred and Ninetieth General Court  
(2017-2018)**  
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An Act to advance clean energy.

*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. Section 21 of chapter 25 of the General Laws, as appearing in the 2016  
2 Official Edition, is hereby amended by striking out, in line 11, the word “electric” and inserting  
3 in place thereof the following word:- energy.

4           SECTION 2. Said section 21 of said chapter 25, as so appearing, is hereby further  
5 amended by inserting after the words “management programs”, in line 34, the following words:-  
6 , including energy storage and other active demand management technologies, and strategic  
7 electrification, such as measures that are designed to result in cost-effective reductions in  
8 greenhouse gas emissions through the use of expanded electricity consumption while minimizing  
9 ratepayer costs.

10           SECTION 3. Said section 21 of said chapter 25, as so appearing, is hereby further  
11 amended by striking out, in line 51, the word “and”.

12           SECTION 4. Said section 21 of said chapter 25, as so appearing, is hereby further  
13 amended by inserting after the word “management”, in line 52, the following words:- ; and (J)

14 programs that result in customers switching to renewable energy sources or other clean energy  
15 technologies.

16 SECTION 5. Said section 21 of said chapter 25, as so appearing, is hereby further  
17 amended by striking out, in line 74, the word “system” and inserting in place thereof the  
18 following word:- other.

19 SECTION 6. Paragraph (3) of subsection (b) of said section 21 of said chapter 25, as so  
20 appearing, is hereby amended by striking out the third sentence and inserting in place thereof the  
21 following 3 sentences:- For the purposes of reviewing cost effectiveness, programs shall be  
22 aggregated by sector. Any sector with a benefit cost ratio greater than 1.0 indicating benefits are  
23 greater than costs shall be considered cost-effective. If a sector fails the cost-effectiveness test as  
24 part of the review process, its component programs shall either be modified so that the sector  
25 meets the test or shall be terminated.

26 SECTION 7. Section 3 of chapter 25A of the General Laws, as so appearing, is hereby  
27 amended by inserting after the definition of “Building authority” the following 2 definitions:-

28 “Clean peak certificate”, a credit received for each megawatt hour of energy or energy  
29 reserves provided during a seasonal peak period that represents a compliance mechanism.

30 “Clean peak resource”, a qualified RPS resource, a qualified energy storage system or a  
31 demand response resource that generates, dispatches or discharges electricity to the electric  
32 distribution system during seasonal peak periods, or alternatively, reduces load on said system.

33 SECTION 8. Said section 3 of said chapter 25A, as so appearing, is hereby further  
34 amended by inserting after the definition of “Commissioner” the following definition:-

35 “Demand response resource”, changes in electric usage by end-use customers in the  
36 commonwealth from their normal consumption patterns in response to: (i) changes in the price of  
37 electricity over time, including, but not limited to, time-of-use rates for residential and small  
38 commercial and industrial customers; or (ii) incentive payments designed to induce lower  
39 electricity use at times of high wholesale market prices or when system reliability is jeopardized.

40 SECTION 9. Said section 3 of said chapter 25A, as so appearing, is hereby further  
41 amended by inserting after the definition of “Petroleum products” the following definition:-

42 “Qualified energy storage system”, an energy storage system, as defined in section 1 of  
43 chapter 164, that commenced commercial operation or provided incremental new capacity at an  
44 existing energy storage system on or after January 1, 2019; provided, however, that such system  
45 operates primarily to store and discharge renewable energy as defined in said section 1 of said  
46 chapter 164.

47 SECTION 10. Said section 3 of said chapter 25A, as so appearing, is hereby further  
48 amended by inserting after the definition of “Qualified provider” the following definition:-

49 “Qualified RPS resource”, a renewable energy generating source, as defined in  
50 subsection (c) or in subsection (d) of section 11F that has: (i) installed a qualified energy storage  
51 system at its facility; or (ii) commenced commercial operation on or after January 1, 2019.

52 SECTION 11. Said section 3 of said chapter 25A, as so appearing, is hereby further  
53 amended by inserting after the definition of “Responsive offeror” the following definition:-

54 “Seasonal peak periods”, the daily time windows during any of the 4 annual seasons  
55 when the net demand of electricity is the highest; provided however, that a seasonal peak period

56 shall be not less than 1 hour and not longer than 4 hours in any season, as determined by the  
57 department.

58 SECTION 12. Section 11F of said chapter 25A, as so appearing, is hereby amended by  
59 striking out, in lines 16 and 17, the words “and (3) an additional 1 per cent of sales every year  
60 thereafter” and inserting in place thereof the following words:- (3) an additional 1 per cent of  
61 sales each year thereafter until December 31, 2019; (4) an additional 2 per cent of sales each year  
62 thereafter until December 31, 2029; and (5) an additional 1 per cent of sales every year  
63 thereafter. Any electric load served under a retail electricity supply contract executed or extended  
64 not later than December 31, 2018, shall be exempt from any incremental compliance obligation  
65 under this section that occurs as a result of an increase or a new requirement imposed on or after  
66 January 1, 2019 on the minimum percentage of kilowatt-hour sales to end-use customers that  
67 must be derived from Class I RPS eligible resources.

68 SECTION 13. Said chapter 25A is hereby further amended by adding the following  
69 section:-

70 Section 17. (a) Every retail electric supplier providing service under contracts executed or  
71 extended after December 31, 2018, shall provide a minimum percentage of kilowatt-hour sales to  
72 end-use customers in the commonwealth from clean peak resources. Not later than December  
73 31, 2018 the department shall determine the current percentage of kilowatt-hours sales to end-use  
74 customers in the commonwealth from existing clean peak resources during the seasonal peak  
75 load hours to establish a baseline minimum percentage of kilowatt-hours sales to end-use  
76 customers that shall be met with clean peak certificates beginning on January 1, 2019. Each year  
77 thereafter, every retail electricity supplier in the commonwealth shall provide a minimum

78 percentage of not less than an additional 0.25 per cent of sales by retail electricity suppliers in the  
79 commonwealth that shall be met with clean peak certificates, as determined by the department.

80 (b) A qualified RPS resource may generate both a clean peak certificate and a renewable  
81 energy certificate under section 11F for electricity generated and delivered to the electric grid  
82 during a seasonal peak period.

83 (c) The department shall promulgate regulations to implement this section, including, but  
84 not limited to: (i) the establishment of seasonal peak periods; (ii) the methodology by which  
85 clean peak certificate values shall be established, which may include a process by which electric  
86 distribution companies competitively procure clean peak certificates from clean peak resources  
87 and enter into long-term contracts, subject to the approval of the department of public utilities;  
88 (iii) the establishment of a minimum percentage of clean peak certificates that must be derived  
89 from demand response resources; (iv) an alternative compliance mechanism for retail electricity  
90 suppliers; and (v) the procedures by which each retail electricity supplier shall annually submit  
91 for the department's review a filing demonstrating its compliance with the requirements of this  
92 section.

93 (d) This section shall not apply to municipal lighting plants.

94 SECTION 14. Section 17 of said chapter 25A is hereby repealed.

95 SECTION 15. Section 139 of chapter 164 of the General Laws, as appearing in the 2016  
96 Official Edition, is hereby amended by inserting after the word "charges", in line 85, the second  
97 time it appears, the following words:- , including demand charges as part of a monthly minimum  
98 reliability contribution except as authorized under subsection (j).

99 SECTION 16. Said section 139 of said chapter 164, as so appearing, is hereby further  
100 amended by inserting after the word “system”, in line 150, the following words:- ; provided,  
101 however, that a distribution company may assess a demand charge if it is based on system peak  
102 demand during the hours of a day determined to be peak hours of system demand and if the  
103 distribution company regularly informs affected customers of the manner in which demand  
104 charges are assessed and of ways in which said customers might manage and reduce demand.

105 SECTION 17. Said section 139 of said chapter 164, as so appearing, is hereby further  
106 amended by striking out, in lines 175 to 177, inclusive, the words “; provided that, the date  
107 designated by the department shall be not later than December 31, 2018”.

108 SECTION 18. Said chapter 164 is hereby further amended by adding the following  
109 section:-

110 Section 146. (a) Electric distribution companies shall file an annual electric  
111 distribution system resiliency report with the department, which shall include heat maps that: (i)  
112 show the electric load on the electric distribution system, including electric loads during peak  
113 electricity demand time periods; (ii) highlight the most congested or constrained areas of the  
114 electric distribution system; and (iii) identify areas of the electric distribution system most  
115 vulnerable to outages due to high electricity demand, lack of local electric generating resources  
116 and extreme weather events.

117 (b) Electric distribution companies may hold a competitive solicitation for  
118 electric distribution system resiliency non-wires alternatives from third party developers. The  
119 non-wires alternatives solicitations shall: (i) provide non-wires alternatives solutions to areas of  
120 the electrical grid that require transmission or distribution updates due to aging infrastructure,

121 increased load or other resiliency issues identified in the resiliency report; (ii) benefit a stressed  
122 or congested area of the electrical grid; (iii) benefit the electrical grid in areas that are prone to  
123 severe weather damage; or (iv) reduce greenhouse gas emissions.

124 (c) When determining a winning bid to the competitive solicitation for  
125 resiliency non-wires alternatives, the electric distribution companies shall consider monetary and  
126 non-monetary factors including, but not limited to: (i) resiliency improvements; (ii) reducing  
127 greenhouse gas emissions; (iii) reducing peak demand; (iv) reducing congestion in stressed areas  
128 of the grid; and (v) benefits to low-income areas.

129 SECTION 19. Said Chapter 164 of the General Laws is hereby further amended by  
130 adding the following section:-

131 Section 147. (a) For the purposes of this section, “lost and unaccounted for gas” shall  
132 mean an amount of gas that is the difference between the total gas purchased by a gas company  
133 and the sum of: (i) total gas delivered to customers; and (ii) total gas used by a gas company in  
134 the conduct of its operations.

135 (b) The department shall issue regulations requiring all gas companies to report to the  
136 department, in a uniform manner, lost and unaccounted for gas for each year. Such standards  
137 shall include: (i) a method using operational and billing data to determine the total amount of lost  
138 and unaccounted for gas and to identify and measure each of its components; and (ii) a method  
139 using engineering characteristics and operational data to identify and measure all sources and  
140 locations where lost and unaccounted for gas occurs in the natural gas systems.

141 (c) The department may grant waivers from regulatory requirements as necessary for the  
142 development of innovative projects to reduce lost and unaccounted for gas. Such innovative

143 projects shall be intended to reduce costs to ratepayers and to reduce greenhouse gas emissions.  
144 An application for a waiver shall include the goals of the innovative project, the expected cost,  
145 the expected benefit to ratepayers and the expected reduction in greenhouse gas emissions.

146 SECTION 20. Chapter 188 of the acts of 2016 is hereby amended by striking out section  
147 15, and inserting in place thereof the following section:-

148 Section 15. (a) There shall be an energy storage target of 1000 megawatt hours to be  
149 achieved by December 31, 2025. To achieve this target, the department of energy resources may  
150 consider a variety of policies to encourage the cost-effective deployment of energy storage  
151 systems, including the refinement of existing procurement methods to properly value energy  
152 storage systems, inclusion in energy portfolio standards, the use of alternative compliance  
153 payments to develop pilot programs and the use of energy efficiency funds under section 19 of  
154 chapter 25 of the General Laws if the department determines that the energy storage system  
155 installed at a customer's premises provides sustainable peak load reductions on either the electric  
156 or gas distribution systems and is otherwise consistent with section 11G of chapter 25A of the  
157 General Laws.

158 (b) Annually, not later than February 15, beginning in 2019, each electric distribution  
159 company shall submit a report to the department of energy resources documenting the energy  
160 storage installations in their service territory.

161 (c) This section shall not apply to municipal lighting plants.

162 SECTION 21. (a) Notwithstanding any general or special law to the contrary, the  
163 department of energy resources shall investigate the necessity, benefits and costs of requiring  
164 distribution companies, as defined in section 1 of chapter 164 of the General Laws, to jointly and

165 competitively conduct additional offshore wind generation solicitations and procurements of up  
166 to approximately 1,600 megawatts of aggregate nameplate capacity, in addition to the  
167 solicitations and procurements required by section 83C of chapter 169 of the acts of 2008, as  
168 amended by chapter 188 of the acts of 2016, and may require said additional solicitations and  
169 procurements by December 31, 2035; provided, however, that for said solicitations and  
170 procurements, as outlined in this section, the department of energy resources may also require  
171 distribution companies to jointly and competitively solicit and procure proposals for offshore  
172 wind energy transmission sufficient to deliver energy generation procured pursuant to this  
173 section from designated wind energy areas for which a federal lease was issued on or after  
174 January 1, 2012 that may be developed independent of such offshore wind energy generation;  
175 provided further, that such transmission service shall be made available for use by more than 1  
176 wind energy generation project and shall not exceed the generation capacity authorized by this  
177 section; provided further, that any selection of offshore wind energy transmission shall be the  
178 most cost-effective mechanism for procuring reliable, low-cost offshore wind energy  
179 transmission service for ratepayers in the commonwealth.

180 (b) Prior to undertaking any additional solicitations and procurements beyond those  
181 required by section 83C of chapter 169 of the acts of 2008, as amended by chapter 188 of the  
182 acts of 2016, the department shall evaluate previous solicitation and procurement processes,  
183 including any reports of the independent evaluator, and shall make recommendations to the  
184 general court that include: (i) any improvements to the solicitation and procurement process; (ii)  
185 an evaluation of the necessity of additional solicitations and procurements, as outlined in  
186 subsection (a), to meet the commonwealth's energy policy goals, including the goals of chapter  
187 169 and chapter 298 of the acts of 2008; (iii) any amount of recommended solicitations and

188 procurements beyond those required by said section 83C of chapter 169 of the Acts of 2008, as  
189 amended by said chapter 188 of the acts of 2016, if applicable, provided that said  
190 recommendations do not exceed the amount in subsection (a); (iv) an evaluation of the impact of  
191 additional procurements, as outlined in subsection (a), on ratepayers, including distribution  
192 customers; and (v) any potential economic benefits; provided, further that any additional  
193 solicitations conducted pursuant to this section shall be subject to the required solicitation and  
194 procurement process of said section 83C of chapter 169 of the Acts of 2008, as amended by said  
195 chapter 188 of the Acts of 2016. The department shall file the report with the house and senate  
196 clerks and the joint committee on telecommunications, utilities and energy no later than July 31,  
197 2019.

198           SECTION 22. The department of energy resources shall study the feasibility of a mobile  
199 battery storage system to serve as a mobile emergency relief system that can respond to extreme  
200 weather events or power outages. The goal of such a system would be to serve as a mobile  
201 emergency relief system that can respond to events including, but not limited to, extreme weather  
202 events or power outages, and to shave peak demand and lower distribution costs when not in use  
203 for emergency response purposes. The department of energy resources shall submit any  
204 recommendations to the clerks of the house of representatives and senate on or before February  
205 1, 2020.

206           SECTION 23. Section 147 of chapter 164 of the General Laws shall take effect on  
207 January 1, 2020; provided, however, that the regulations required to implement said section 147  
208 of said chapter 164 shall be promulgated and in effect not later than December 31, 2019.

209           SECTION 24. Sections 15, 16 and 17 shall apply to any monthly minimum reliability  
210 contribution, including a monthly minimum reliability contribution approved by the department  
211 of public utilities to take effect on or before December 31, 2018. Any monthly minimum  
212 reliability contribution approved by the department of public utilities prior to the effective date of  
213 this section and said sections 15, 16 and 17 that does not meet the requirements of said sections  
214 shall be refiled for review and approval by the department before taking effect.

215           SECTION 25. Section 14 shall take effect on January 1, 2051.