

HOUSE No. 3667

The Commonwealth of Massachusetts

PRESENTED BY:

Thomas A. Golden, Jr.

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act relative to modern grid access and customer service.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Thomas A. Golden, Jr.</i>	<i>16th Middlesex</i>	<i>1/17/2019</i>
<i>James Arciero</i>	<i>2nd Middlesex</i>	<i>3/25/2019</i>
<i>Brian M. Ashe</i>	<i>2nd Hampden</i>	<i>3/20/2019</i>
<i>Carlos González</i>	<i>10th Hampden</i>	<i>3/20/2019</i>
<i>Patrick Joseph Kearney</i>	<i>4th Plymouth</i>	<i>3/23/2019</i>
<i>Brian W. Murray</i>	<i>10th Worcester</i>	<i>3/19/2019</i>
<i>David Allen Robertson</i>	<i>19th Middlesex</i>	<i>3/19/2019</i>
<i>Steven Ultrino</i>	<i>33rd Middlesex</i>	<i>3/19/2019</i>
<i>Aaron Vega</i>	<i>5th Hampden</i>	<i>3/20/2019</i>

HOUSE No. 3667

By Mr. Golden of Lowell, a petition (accompanied by bill, House, No. 3667) of Thomas A. Golden, Jr. and others relative to modern grid access and customer service. Telecommunications, Utilities and Energy.

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-First General Court
(2019-2020)**

An Act relative to modern grid access and customer service.

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

1 Chapter 164 of the General Laws is hereby amended by inserting after section 92A the
2 following 5 sections:

3 Section 92B. Preamble. The General Court finds that customer access to a modern grid is
4 a right and the public utility obligation to serve customers requires distribution companies to
5 facilitate such access at reasonable costs and on reasonable terms. The General Court further
6 finds that the capability and accessibility of the Commonwealth’s electrical system must be
7 facilitated by investments in the electric grid that are aligned with the Commonwealth’s
8 ambitious climate, renewable energy, and economic development goals. The implementation and
9 periodic update of grid modernization efforts and formal interconnection standards to ensure fair,
10 reasonable, and transparent customer grid access is essential to the achievement of the
11 Commonwealth’s goals. As the distribution companies pursue grid modernization efforts, related
12 technical, operational, policy and regulatory opportunities and challenges must continuously be

13 examined and addressed to ensure non-discriminatory customer access and to achieve the full
14 potential of a modern grid. Establishing frameworks for continuous and collaborative efforts will
15 assist utilities, regulators, distributed energy resource developers and other stakeholders to timely
16 and effectively address these issues.

17 The purpose of this Act is to establish standards to ensure reasonable and timely access to
18 the grid for all customers and to ensure that distribution companies undertake investments and
19 process improvements to facilitate the transformation of the Commonwealth’s electrical grid to
20 align with the Commonwealth’s ambitious climate, energy and economic development goals. In
21 addition, this Act directs the Department of Public Utilities (“Department”) to initiate an
22 ongoing, open proceeding within which a standing working group will convene on a periodic
23 basis to make recommendations for improving grid modernization and access through
24 interconnection, metering, customer service, and other rules for the Department and General
25 Court’s consideration and action.

26 Section 92C. (a) No customer shall be denied the right to interconnect a distributed
27 generation facility, energy storage system or a combined distributed generation facility and
28 energy storage system. The department shall promulgate rules: (i) specifying the average time
29 that may elapse from the date of initial interconnection application to the receipt of an
30 interconnection services agreement for various sizes and types of distributed generation facilities
31 and energy storage systems; and (ii) requiring distribution companies to enable the
32 interconnection of distributed generation facilities and energy storage systems in accordance
33 with the following schedule:

34 (1) Within 30 days of receipt of the application for facilities and systems with a
35 Maximum Generation Capacity of less than 50 kW.

36 (2) Within 180 days of receipt of the application for facilities and systems with a
37 Maximum Generation Capacity of 50 kW or greater and less than 500 kW.

38 (3) Within 1 year of the execution of the interconnection service agreement for facilities
39 and systems with a Maximum Generation Capacity of 500 kW or greater.

40 (b) The following standardized interconnection cost allocations shall apply to customers
41 for distributed generation facilities and energy storage systems: (i) no customer shall be charged
42 more than \$50/kW AC of Maximum Generation Capacity to interconnect distributed generation
43 facilities and energy storage systems; and (ii) any costs incurred by the distribution company for
44 interconnecting a distributed generation facility or energy storage system that exceed \$50/kW
45 AC of Maximum Generation Capacity shall be included in the distribution company's revenue
46 requirement and recovered through the company's rate base.

47 (c) Rules adopted by the department under this section shall include: (i) provisions to
48 track the performance of distribution companies under these rules; (ii) mechanisms to ensure
49 compliance by distribution companies with the schedule and rules required by this section; (iii)
50 mechanisms to enable customers to seek department review and enforcement of the schedule and
51 rules required by this section; and (iv) provisions for expeditiously resolving disputes between
52 customers and distribution companies.

53

54 (d) The department shall establish a mechanism to track utility compliance with
55 subsection (a) and shall establish earning incentive and penalty mechanisms by which the
56 distribution company shall: (i) recover an incentive if the company exceeds the timelines
57 established in subsection (a); and (ii) incur a penalty if the company fails to meet the timelines
58 established in subsection (a). Such mechanism shall be in addition to the mechanisms authorized
59 in subsection (c).

60 (e) The department shall establish metrics for tracking distribution company
61 interconnection performance and interconnection customer satisfaction. At minimum the
62 department shall establish metrics for: (i) interconnecting distributed generation and energy
63 storage customer satisfaction; (ii) time and cost of interconnection for various types,
64 technologies, and sizes of interconnecting distributed generation facilities and energy storage
65 systems; (iii) frequency of disputes under the interconnection tariff, including disputes resolved
66 through Alternative Dispute Resolution; (iv) rate of deployment of distributed generation
67 facilities and energy storage systems; (v) distribution system energy and capacity needs
68 forecasting and hosting capacity analysis availability, including minimum timeframes for
69 periodic updates to forecasting and hosting capacity analyses; and (vi) rate of improvement or
70 degradation of any of the metrics described above. The department shall direct the distribution
71 companies to report progress on each of these metrics, and such other metrics as determined by
72 the department, every 6 months to the department and the general court.

73 Section 92D. (a) There is hereby established within the department a permanent and open
74 working group for the purpose of considering improvements to interconnection tariffs consisting
75 of the following members: the chairman of the commonwealth utilities commission, or his or her
76 designee, who shall serve as co-chair; the commissioner of the department of energy resources,

77 or his or her designee, who shall serve as co-chair; and representatives from distribution
78 companies, the distributed generation and energy storage industries, distributed generation and
79 energy storage customer representatives, and such other stakeholders with a substantial interest
80 in the topics addressed by the working group, all of whom shall be appointed by the
81 commissioner of the department of energy resources or his or her designee. The non-chair
82 members of the working group shall be comprised of no less than 2 representatives from each of
83 the distribution companies, no less than 6 representatives from distributed generation and energy
84 storage companies or trade associations representing the distributed generation and energy
85 storage industry in the Commonwealth, and such other representatives as determined appropriate
86 by the commissioner of the department of energy resources or his or her designee. The working
87 group shall meet no less frequently than 4 times per year.

88 (b) The working group shall study and make recommendations regarding the following
89 topics: (i) cost and best available technology for interconnecting and metering distributed
90 generation and energy storage systems; (ii) means to improve grid reliability and resilience and
91 facilitate improved customer access to a modern grid through distribution system upgrades; (iii)
92 processes for identifying and achieving distribution system upgrade cost avoidance through the
93 use of advanced inverter functions and other non-wires solutions, along with earning sharing
94 mechanisms for capital investment deferrals; (iv) processes and customer service improvements
95 for interconnecting customers adopting distributed generation and energy storage; (v) options for
96 metering distributed generation and energy storage; (vi) interconnection and metering standards
97 for exporting and non-exporting energy storage systems; (vii) interconnection of new
98 technologies, including smart inverters and energy storage; and (viii) without limitation, such
99 other technical, policy, and tariff issues related to and affecting interconnection performance and

100 customer service for distributed generation and energy storage customers in the commonwealth,
101 as determined by the working group. The chairs may jointly create subcommittees of the
102 working group to focus on specific issues of importance, as appropriate.

103 (c) The department of energy resources shall develop and submit a report detailing
104 consensus recommendations of the working group and, if applicable, additional
105 recommendations for which consensus was not reached to the department and the clerks of the
106 house of representatives and senate with recommendations for improvements to grid
107 modernization oversight and reporting, interconnection tariffs and such other topics designated to
108 the working group in subsection (b), within 180 days of its first meeting, and every 180 days
109 thereafter. Such report shall include consensus recommendations of the working group and, if
110 applicable, additional recommendations for which consensus was not reached. The department
111 shall every 180 days issue an order addressing the recommendations of the working group. The
112 order shall specify those recommendations adopted and explain in detail the reasons for rejecting
113 any recommendations not adopted.

114 Section 92E. Distribution companies shall submit interconnection reports to the
115 department every 180 days. Such reports shall describe the results of all interconnection
116 applications, including applications that did not result in authorization to interconnect. Such
117 reports shall, at a minimum, include the following information:

118 (i) Average time elapsed from the date of initial interconnection application to the
119 receipt of authorization to interconnect for various sizes and types of distributed generation and
120 energy storage systems.

121 (ii) Average time elapsed from the date of initial interconnection application to the
122 distribution company's commencement of design and construction of required interconnection-
123 related upgrades for various sizes and types of distributed generation and energy storage systems.

124 (iii) Average time elapsed from the date of issuance of the interconnection agreement
125 to the receipt of authorization to interconnect for various sizes and types of distributed generation
126 and energy storage systems.

127 (iv) Average cost, per kW AC of Maximum Generation Capacity, for various sizes
128 and types of distributed energy systems that have received authorization to interconnect.

129 (v) Average cost, per kW AC of Maximum Generation Capacity, for various sizes
130 and types of distributed generation and energy storage systems for which an interconnection
131 study or study was conducted, but which were not interconnected due to the customer's
132 withdrawal of its application from the interconnection process.

133 (vi) The number and size, in kW AC, of applications received and the status of those
134 applications.

135 Section 92F. (a) As used in this section and in sections 92B to 92E, inclusive, the
136 following term shall, unless the context clearly requires otherwise, have the following meaning:-

137 "Maximum Generation Capability" the maximum injection of power at the point of
138 common coupling, in kW AC, of which a distributed generation, energy storage, or combined
139 distributed generation and energy storage facility is capable, taking into account any power or
140 current injection limiting schemes proposed for the facility that are approved by the distribution
141 company.

142 (b) Distribution companies shall utilize the Maximum Generation Capacity as the
143 common basis for sizing and reviewing applications within application technical review
144 processes.

145 SECTION 2. (a) Within 90 days of the effective date of this act, the department of public
146 utilities shall direct distribution companies, as that term is defined in section 1 of chapter 164 of
147 the General Laws, to develop plans to proactively upgrade the distribution grid to improve grid
148 reliability and resiliency and increase customer access to distributed generation and energy
149 storage, as those terms are defined in said section 1 of said chapter 164. Such plans shall be
150 submitted to the department for approval within 1 year of the effective date of this act. The
151 department shall promptly consider and approve all prudent investments, as determined by the
152 department, proposed in such plans, and shall issue a final order directing the companies to
153 implement all approved investments of such plans no later than June 1, 2020. The companies
154 shall be permitted to recover all prudently incurred costs for implementing such plans as
155 approved by the department.

156 (b) Plans developed by the distribution companies under this section shall propose
157 discrete, specific, enumerated investments to the distribution system that will facilitate grid
158 modernization, greater reliability and resiliency, and increased customer access to distributed
159 generation and energy storage. In developing such plans, the companies shall solicit input from
160 the public, appropriate state agencies, and companies engaged in the development and
161 installation of distributed generation and energy storage.

162 (c) Plans developed by the distribution companies under this section shall describe in
163 detail how such plans address each of the following elements:

164 (i) Improvements to the electric distribution system to improve system resiliency and
165 address potential weather- and disaster-related risks.

166 (ii) The availability and suitability of new technologies such as smart inverters,
167 controllable load, advanced metering and telemetry, and energy storage for meeting forecasted
168 reliability and resiliency needs.

169 (iii) Patterns and forecasts of distributed generation and energy storage adoption in the
170 company's territory, and upgrades that would facilitate increased adoption of such technologies.

171 (iv) Improvements to the distribution system that will align with customer preferences
172 for access to distributed generation and energy storage.

173 (v) Improvements to the distribution system to facilitate the commonwealth's clean
174 energy and climate goals.

175 SECTION 3. The rules required by subsection (a) of section 92C of chapter 164 of the
176 General Laws shall be promulgated by the department of public utilities within 270 days of the
177 effective date of this act.

178 SECTION 4. The standardized interconnection cost allocations set forth in subsection (b)
179 of section 92C of chapter 164 of the General Laws shall apply to customers for distributed
180 generation facilities and energy storage systems whose applications are submitted after the
181 effective date of this act.

182 SECTION 5. The mechanism to track utility compliance required by subsection (d) of
183 section 92C of chapter 164 of the General Laws shall be established by the department of public
184 utilities within 1 year of the effective date of this act.

185 SECTION 6. The department of public utilities shall commence a proceeding to establish
186 metrics for tracking distribution company interconnection performance and interconnection
187 customer satisfaction pursuant to subsection (e) of section 92C of chapter 164 of the General
188 Laws within 180 days of this act.

189 SECTION 7. Appointments to the working group established by section 92D of chapter
190 164 of the General Laws shall be made by the commissioner of the department of energy
191 resources or his or her designee within 60 days of the effective date of this act.

192 SECTION 8. Distribution companies shall submit their first interconnection report
193 pursuant to section 92E of chapter 164 of the General Laws within 180 days of the effective date
194 of this act.