

**HOUSE . . . . . No. 3313**

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**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>2/19/2021</i>
<i>Joanne M. Comerford</i>	<i>Hampshire, Franklin and Worcester</i>	<i>3/16/2021</i>

**HOUSE . . . . . No. 3313**

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By Mr. Golden of Lowell, a petition (accompanied by bill, House, No. 3313) of Thomas A. Golden, Jr. and Joanne M. Comerford relative to customer access to a modern electric grid. Telecommunications, Utilities and Energy.

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**The Commonwealth of Massachusetts**

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**In the One Hundred and Ninety-Second General Court  
(2021-2022)**  
\_\_\_\_\_

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           SECTION 1: Chapter 164 of the General Laws is hereby amended by inserting after  
2 section 92A the 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, except for projects  
38 studied as part of a group, cluster, or transmission study.

39 (3) Within 1 year of the execution of the interconnection service agreement for facilities  
40 and systems with a Maximum Generation Capacity of 500 kW or greater and any project studied  
41 as part of group, cluster, or transmission study.

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

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

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

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

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

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

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

101 customer service for distributed generation and energy storage customers in the commonwealth,  
102 as determined by the working group. The chairs may jointly create subcommittees of the  
103 working group to focus on specific issues of importance, and may invite technical or policy  
104 experts to assist the working group in its work.

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

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

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

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

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

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

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

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

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

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



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

147 SECTION 2. (a) Within 90 days of the effective date of this act, the department of public  
148 utilities shall direct distribution companies, as that term is defined in section 1 of chapter 164 of  
149 the General Laws, to develop plans to proactively upgrade the transmission and distribution grid  
150 to improve grid reliability and resiliency; increase customer access to distributed generation and  
151 energy storage, as those terms are defined in said section 1 of said chapter 164; and facilitate  
152 improvements to the transmission and distribution grid that are necessary to accelerate the  
153 commonwealth's progress toward transportation electrification, heating electrification, and  
154 decarbonization. Such plans shall be submitted to the department for approval within 1 year of  
155 the effective date of this act, and upon reasonable intervals thereafter. The department shall  
156 promptly consider and approve within 6 months of submittal all prudent investments proposed in  
157 such plans, and shall issue a final order directing the companies to implement all approved  
158 investments of such plans. The companies shall be permitted to recover all prudently incurred  
159 costs for implementing such plans as approved by the department.

160 (b) Plans developed by the distribution companies under this section shall propose  
161 discrete, specific, enumerated investments to the transmission and distribution system that will  
162 facilitate grid modernization, greater reliability and resiliency, increased customer access to  
163 distributed generation and energy storage, increased transportation electrification, increased  
164 building electrification, and increased decarbonization. In developing such plans, the companies  
165 shall solicit input from the public, appropriate state agencies, and companies engaged in the

166 development and installation of distributed generation, energy storage, vehicle electrification  
167 systems, and building electrification systems.

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

170 (i) Improvements to the electric transmission or distribution system to improve system  
171 resiliency and address potential weather- and disaster-related risks.

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

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

177 (iv) Improvements to the transmission or distribution system that will align with customer  
178 preferences for access to distributed generation and energy storage.

179 (v) Improvements to the transmission or distribution system that will facilitate  
180 transportation or building electrification.

181 (vi) Improvements to the distribution system to facilitate the commonwealth's clean  
182 energy and climate goals.

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

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

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

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

197 SECTION 7. Appointments to the working group established by section 92D of chapter  
198 164 of the General Laws shall be made by the commissioner of the department of energy  
199 resources or his or her designee within 60 days of the effective date of this act.

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