

SENATE No. 2007

The Commonwealth of Massachusetts

PRESENTED BY:

Marc R. Pacheco

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 local energy investment and infrastructure modernization.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	
<i>Marc R. Pacheco</i>	<i>First Plymouth and Bristol</i>	
<i>Mike Connolly</i>	<i>26th Middlesex</i>	<i>1/30/2019</i>
<i>Anne M. Gobi</i>	<i>Worcester, Hampden, Hampshire and Middlesex</i>	<i>1/30/2019</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>	<i>1/31/2019</i>
<i>Michael O. Moore</i>	<i>Second Worcester</i>	<i>4/24/2019</i>

SENATE No. 2007

By Mr. Pacheco, a petition (accompanied by bill, Senate, No. 2007) of Marc R. Pacheco, Mike Connolly, Anne M. Gobi and James B. Eldridge for legislation relative to local energy investment and infrastructure modernization. Telecommunications, Utilities and Energy.

[SIMILAR MATTER FILED IN PREVIOUS SESSION
SEE SENATE, NO. 1875 OF 2017-2018.]

The Commonwealth of Massachusetts

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

An Act relative to local energy investment and infrastructure modernization.

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 145, as appearing in the 2016 Official Edition, the following section:

3 Section 146:

4 (a) As used in this section, the following words shall, unless the context clearly requires
5 otherwise, have the following meanings:

6 (1) “Local energy resources,” distributed renewable generation facilities, energy
7 efficiency, energy storage, electric vehicles, and demand response and load management
8 technologies.

9 (2) "Distributed renewable generation facility," a facility producing electrical energy
10 from any source that qualifies as a renewable energy generating source under section 11F of
11 chapter 25A and is interconnected to a distribution company.

12 (3) "Board," the Grid Modernization Consumer Board.

13 (b) The Department shall issue an order concluding the current Grid Modernization
14 Proceedings (D.P.U. 15-120, 15-121 and 15-122) by December 31, 2017.

15 (c) The Department shall commence a proceeding by no later than January 31, 2018 that
16 establishes procedures for each distribution company of the commonwealth to create and file
17 with the Department by October 31, 2019 its subsequent Grid Modernization Plan, as described
18 in further detail in subsection (d).

19 (1) This proceeding shall also establish specific metrics and related performance
20 incentives to evaluate the progress of the distribution companies toward establishing a grid
21 planning system to utilize and integrate local energy resources to meet customers' energy needs.
22 Said metrics may include, but are not limited to: reducing the impact of outages, optimizing
23 demand, integrating local energy resources, improving workforce and asset management, and
24 electrification that results in lower greenhouse gas emissions and energy costs savings, after
25 accounting for fuel switching;

26 (2) This proceeding shall also create protections for low-income consumers including, but
27 not limited to, remote shutoff protection and exemption from special cost recovery mechanisms.

28 (d) Every 5 years, on or before April 1, each electric distribution company shall prepare a
29 Grid Modernization Plan. Each plan shall comply with the requirements set forth by the

Department in the proceeding described in subsection (c), or as modified by the Department, and shall be prepared in coordination with the Grid Modernization Consumer Board established by subsection (g). Each plan shall:

(1) Evaluate locational benefits and costs of local energy resources currently located on the system, and identify optimal locations for local energy resources over the next 10 years. This evaluation shall be based on reductions or increases in local generation capacity and demand, avoided or increased investments in transmission and distribution infrastructure, safety benefits, reliability benefits, and any other savings the local energy resources provide to the electric grid or avoided costs to ratepayers;

(2) Provide information about the interconnection of distributed renewable generation facilities in publicly accessible hosting capacity maps that are updated on a continual basis;

(3) Propose or identify locational based incentives and other mechanisms for the deployment of cost-effective local energy resources that satisfy planning objectives;

(4) Propose cost-effective methods of effectively coordinating existing programs, incentives, and tariffs to maximize the locational benefits and minimize the incremental costs of local energy resources;

(5) Identify any additional spending by the distribution company necessary to integrate cost-effective local energy resources into distribution planning consistent with the goal of yielding net benefits to ratepayers;

(6) Identify any additional barriers to the deployment of local energy resources;

(e) Any distribution infrastructure necessary to accomplish the Grid Modernization Plan is eligible for pre-authorization by the Department, through a review of the company's proposed investments and cost estimates, as supported by the business case.

(f) Each Grid Modernization Plan prepared under subsection (d) shall be submitted for approval and comment by the Grid Modernization Consumer Board every 5 years, on or before April 1.

(1) The electric distribution companies shall provide any additional information requested by the Board that is relevant to the consideration of the Plan. The Board shall review the plan and any additional information and submit its approval or comments to the electric distribution companies not later than 3 months after the submission of the plan. The electric distribution companies may make any changes or revisions to reflect the input of the Board.

(2) The electric distribution companies shall submit their plans, together with the Board's approval or comments and a statement of any unresolved issues, to the Department every 5 years, on or before October 31. The Department shall consider the plans and shall provide an opportunity for interested parties to be heard in a public hearing.

(3) Not later than 180 days after submission of a plan, the Department shall issue a decision on the plan which ensures that the electric distribution companies have satisfied the criteria set forth by the Department and shall approve, modify and approve, or reject and require the resubmission of the plan accordingly.

(4) Each Grid Modernization Plan shall be in effect for 5 years.

(g) There shall be a Grid Modernization Consumer Board to consist of the commissioner of the department of energy resources, who shall serve as chair, and 7 members including the attorney general, or his designee, the commissioner of the department of environmental protection, or his designee, and additional members appointed by the Department: 1 shall be a representative of residential consumers, 1 shall be a representative of low-income consumers, 1 shall be a representative of the environmental community, 1 shall be a representative of the clean energy technology industry, and 1 shall be a representative of businesses, including large C& I end users. Interested parties shall apply to the Department for designation. Members shall serve for terms of 6 years and may be reappointed. There shall be 1 non-voting ex-officio member from each of the electric distribution companies.

(1) The Board shall, as part of the approval process by the Department outlined in subsection (f), seek to maximize net economic benefits through use of distributed energy resources and achieve transmission, reliability, climate and environmental goals. The Board shall review and approve Grid Modernization Plans and budgets, and work with electric distribution companies in preparing resource assessments. Approval of Grid Modernization Plans and budgets shall require a two-thirds majority vote.

(2) The Board may retain expert consultants, provided, however that such consultants shall not have any contractual relationship with an electric distribution company doing business in the commonwealth or any affiliate of such company. The Board shall annually submit to the Department a proposal regarding the level of funding required for the retention of expert consultants and reasonable administrative costs. The proposal shall be approved by the Department either as submitted or as modified by the Department. The Department shall allocate funds sufficient for these purposes from the Grid Modernization Plan budgets.

(3) The electric distribution companies shall provide quarterly reports to the Board on the implementation of their respective plans. The reports shall include a description of progress in implementing the plan, an evaluation of the metrics identified by the Department in the proceeding described in subsection (c), and such other information or data as the Board shall determine. The Board shall provide an annual report to the department and the joint committee on telecommunications, utilities and energy on the implementation of the plan which includes descriptions of the programs, investments, cost-effectiveness, and savings and benefits during the previous year.

SECTION 2: Section 69G of chapter 164, as appearing in the 2016 Official Edition, is hereby amended by inserting the following definition after “department”:

“Distributed Renewable Generation Facility”, a facility producing electrical energy from any source that qualifies as a renewable energy generating source under section 11F of chapter 25A and is interconnected to a distribution company.

Also amended by adding the following definition after “generating facility”:

“Infrastructure Resource Facility”, an electric transmission line, an electric distribution line, or an ancillary structure which is an integral part of the operation of a transmission or distribution line, that meets the following criteria: a) is estimated to cost more than \$1 million; b) is needed due to asset condition or load-growth; c) has a date of need at least 36 months in the future; d) has a need that can be addressed by load reductions of less than 20 percent of the relevant peak load in the area of the defined need; and e) such other criteria as the Board may determine. A line that is constructed, owned, and operated by a generator of electricity solely for the purpose of electrically and physically interconnecting the generator to the transmission

115 system of a transmission and distribution utility shall not be considered an Infrastructure
116 Resource Facility.

117 Also amended by adding the following definition after “liquefied natural gas”:

118 “Local Energy Resource Alternative”, the following methods used either individually or
119 combined to meet or defer in whole or in severable part the need for a proposed Infrastructure
120 Resource Facility: energy efficiency and conservation, energy storage system, electric vehicles,
121 load management technologies, demand response, distributed renewable generation facilities,
122 and other relevant technologies determined by the Board.

123 SECTION 3: Chapter 164 of the General Laws is hereby amended by inserting after
124 section 69J, as appearing in the 2016 Official Edition, the following section:

125 Section 69J 1/6:

126 (a) No applicant shall commence construction of an Infrastructure Resource Facility at a
127 site unless a Determination of Wires has been approved by the board. In addition, no state
128 agency shall issue a construction permit for any Infrastructure Resource Facility unless the
129 Determination of Wires has been approved by the board and the facility conforms with such
130 determination. Applications for Determination of Wires must be filed with the board no later
131 than four years prior to date of in-service need.

132 (b) A petition for a Determination of Wires shall include, in such form and detail as the
133 board shall from time to time prescribe, the following information: (1) a description of the
134 Infrastructure Resource Facility, site and surrounding areas; (2) an analysis of the need for the
135 facility over its planned service life, both within and outside the commonwealth, including date

of need for the facility; (3) a description of the alternatives to the facility, such as other methods of transmitting or storing energy, other site locations, other sources of electrical power or gas, a reduction of requirements through load management, or local energy resource alternatives; and (4) the results of an investigation by an independent 3rd party, which may be the Board or a contractor selected by the Board, of local energy resource alternatives that may, alone or collectively, address or defer part or all of the need identified in the application for the Infrastructure Resource Facility. The investigation must set forth the total projected costs and economic benefits to ratepayers of the Infrastructure Resource Facility, as well as of the local energy resource alternative(s), over the effective life of the proposed Infrastructure Resource Facility.

(c) Prior to issuing a Determination of Wires, the Board must consider whether it is possible for any Local Energy Resource Alternative(s), alone or in combination, to meet or defer some or all of the identified need. In its consideration, the Board shall compare the Infrastructure Resource Facility to Local Energy Resource Alternatives based on uniform, standard criteria, including benefit-cost analysis. In its Determination, the Board must make specific findings regarding: i) the portions of the identified need, if any, that cannot be addressed or deferred by Local Energy Resource Alternative(s), due to engineering or public safety reasons; ii) the portions of the identified need, if any, for which the Board determines Local Energy Resource Alternative(s), alone or in combination, may meet or defer the need more cost-effectively, as defined in subsection f, than the Infrastructure Resource Facility, and the duration of such deferral; and iii) additional portions of identified need, if any. Notice of issuance of a Determination of Wires must be provided to the town or city administrator of each municipality

in which the related Infrastructure Resource Facility or Local Energy Resource Alternative(s) is located.

(d) Upon issuance of a Determination of Wires that contains a finding that one or more Local Energy Resource Alternative(s) may satisfy or defer a portion of the identified need more cost-effectively, as defined in subsection f, than the Infrastructure Resource Facility, the applicant must engage in a transparent, open solicitation for resources that can meet or defer that portion of the need, as well as any additional portions of identified need. Any requests for proposals shall be reviewed by the Department in consultation with DOER, the Energy Efficiency Advisory Council, and the Grid Modernization Consumer Board. The applicant's selection of resources for contracting shall be carried out in consultation with DOER, and any contracts shall be reviewed and approved by the Department.

(e) If during the review of contracts by the Department, it is determined that an Infrastructure Resource Facility will meet the identified need more cost-effectively, as defined in subsection f, than the Local Energy Resource Alternative(s), such finding shall serve as prima facie evidence of the Infrastructure Resource Facility being the "lowest possible cost" for the Board's determination under Section 69J.

(f) Within three months of enactment of this section, the Department of Energy Resources shall develop, in consultation with the Energy Efficiency Advisory Council, a framework for benefit-cost analysis to be applied to evaluations of Infrastructure Resource Facilities and Local Energy Resource Alternatives, as a determinant of cost-effectiveness. The Total Resource Cost test utilized in the Energy Efficiency programs shall be appropriately modified to account for the value of reliability and other site-specific costs, benefits and risks

appropriate to consideration of Local Energy Resource Alternatives. Categories of costs and benefits may include: ratepayer benefits; reasonably foreseeable environmental and public health compliance costs; line losses; local reliability; market price suppression effects for energy and capacity; fuel price risks; avoided transmission and distribution investments; electric generation supply costs and reductions; capacity market costs and reductions; ancillary services costs and reductions; transmission costs and reductions; distribution system costs and reductions; outage costs and reductions for electric customers; renewable energy certificate costs; fuel costs; demand-reduction induced price effects; and other costs and benefits of switching to electricity-based end uses. No later than six months after enactment of this section, such framework shall be considered by the Board in creating regulations regarding the Board's process and criteria for determining cost-effectiveness and issuing a Determination of Wires.

(g) Within ten months of enactment of this section, the Department shall issue criteria outlining acceptable methods for securing contracts for Local Energy Resource Alternatives. The Department may consider whether utility performance incentives are appropriate. Any such incentives must be included in the cost effectiveness analysis set forth in subsection f.

(h) If the Board determines that one or more local energy resources alternative(s) can sufficiently address or defer the identified need at greater overall economic benefit to ratepayers across the region than the Infrastructure Resource Facility, but at a higher cost to ratepayers in the Commonwealth, the Board shall make reasonable efforts to achieve within 180 days an agreement among the states within the ISO-NE region to allocate the cost of the local energy resource alternative(s) among the ratepayers of the region using the allocation method used for regional transmission lines or a different allocation method that results in lower costs than the proposed Infrastructure Resource Facility to the ratepayers of the Commonwealth.

SECTION 4: Section 69J of chapter 164 of the General Laws, as appearing in the 2016 Official Edition, is hereby amended by striking the third paragraph and inserting in its place thereof the following paragraph:

A petition to construct a facility shall include, in such form and detail as the board shall from time to time prescribe, the following information: (1) a description of the facility, site and surrounding areas; (2) an analysis of the need for the facility, either within or outside, or both within and outside the commonwealth; (3) a description of the alternatives to the facility, such as other methods of transmitting or storing energy, other site locations, other sources of electrical power or gas, or a reduction of requirements through load management; (4) any applicable Determination of Wires; and (5) a description of the environmental impacts of the facility, including impacts on greenhouse gas emissions. The board shall be empowered to issue and revise filing guidelines after public notice and a period for comment. A minimum of data shall be required by these guidelines from the applicant for review concerning land use impact, water resource impact, air quality impact, solid waste impact, radiation impact and noise impact.

SECTION 5: Chapter 164 of the General Laws is hereby amended by inserting after section 94I, as appearing in the 2016 Official Edition, the following section:

Section 94J:

(a) In this section, unless the context clearly requires otherwise, “residential fixed charge” shall mean any recurring fixed fee charged to residential electric customers distinct from charges based on meter readings for each billing period, including, but not limited to, a fixed charge for distribution service, a distribution customer service charge, or a customer charge.

(b) In a proceeding pursuant to section 94 with respect to an investigation of the rates, prices, and charges of a distribution company, the Department may not approve a residential fixed charge higher than the investment costs and operation and maintenance expenses directly related to the sum of 1) cost of connection, not including the cost of advanced metering used to provide energy services; 2) billing; and 3) the provision of customer service.

SECTION 6: Section 1B of Chapter 164 of the General Laws is amended by inserting after subsection (f), as appearing in the 2016 Official Edition, the following section:

(g) Beginning on January 1, 2020, each distribution company shall offer to default service customers an option to choose a time of use rate designed to reflect the cost of providing electricity at different times of the day. Each distribution company shall provide each default service customer, not less than once per year, a summary of available rate options with a calculation of expected bill impacts under each. Should a customer opt into a time of use rate, the distribution company shall install all necessary equipment within 60 days of request. Any residential customer choosing for the first time a time of use rate shall be provided with no less than one year of bill protection, during which the total amount paid by the customer for electric service shall not exceed the amount that would have been payable by the customer under that customer's previous rate schedule. A customer may choose a different rate schedule after one year. If the Department approves default service rates that include time-varying pricing on a mandatory or opt-out basis, this offering structure may be discontinued, but each distribution company must offer a time-varying default service rate at all times.