

SENATE No. 1775

The Commonwealth of Massachusetts

PRESENTED BY:

Brian A. Joyce

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 a microgrid pilot program.

PETITION OF:

NAME:	DISTRICT/ADDRESS:
<i>Brian A. Joyce</i>	<i>Norfolk, Bristol and Plymouth</i>
<i>Denise Provost</i>	<i>27th Middlesex</i>
<i>Frank I. Smizik</i>	<i>15th Norfolk</i>
<i>Chris Walsh</i>	<i>6th Middlesex</i>
<i>Marjorie C. Decker</i>	<i>25th Middlesex</i>
<i>Jason M. Lewis</i>	<i>Fifth Middlesex</i>
<i>Timothy R. Madden</i>	<i>Barnstable, Dukes and Nantucket</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>
<i>Carmine L. Gentile</i>	<i>13th Middlesex</i>
<i>Marc R. Pacheco</i>	<i>First Plymouth and Bristol</i>
<i>Timothy J. Toomey, Jr.</i>	<i>26th Middlesex</i>

SENATE No. 1775

By Mr. Joyce, a petition (accompanied by bill, Senate, No. 1775) of Brian A. Joyce, Denise Provost, Chris Walsh, Marjorie C. Decker and other members of the General Court for legislation relative to a microgrid pilot program. Telecommunications, Utilities and Energy.

[SIMILAR MATTER FILED IN PREVIOUS SESSION
SEE SENATE, NO. 1592 OF 2013-2014.]

The Commonwealth of Massachusetts

**In the One Hundred and Eighty-Ninth General Court
(2015-2016)**

An Act relative to a microgrid pilot program.

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 25A of the General Laws is hereby amended by inserting after
2 section 11I the following section:-

3 Section 11J. (a) As used in this section, the following words shall, unless the context
4 clearly requires otherwise, have the following meanings:-

5 "Critical facility", any hospital; police or fire station; water or sewage treatment plant;
6 any school, senior center or multi-family housing facility that could serve as an alternative
7 shelter and/or emergency communication resource, particularly for low-income residents; any
8 commercial area of a municipality or municipal center as identified by the chief elected official
9 of any municipality; or any other facility or area identified by the department as a building or

10 structure where loss of electrical service would result in disruption of a critical public safety life
11 sustaining function;

12 "Clean distributed energy generation", the generation of electricity from a unit with a
13 rating of not more than 65 megawatts on the premises of a retail end user within the transmission
14 and distribution system, which either uses a fuel source listed under the MA Renewable Portfolio
15 Standard (RPS) Class 1, or is a gas-turbine or fuel cell-based combined heat and power (CHP) or
16 trigeneration unit, where appropriate, with a total system efficiency of at least 75%;

17 "Microgrid", a group of interconnected loads and distributed energy resources within
18 clearly defined electrical boundaries that acts as a single controllable entity with respect to the
19 grid and that connects and disconnects from such grid to enable it to operate in both grid-
20 connected or island mode.

21 (b) Recognizing the vulnerability to intensifying climate disruption of the electrical
22 macrogrid and critical facilities in Massachusetts, the Department of Energy Resources
23 ("Department") shall establish a microgrid grant and loan pilot program ("program"), subject to
24 appropriation and/or funding made available through partnership with private parties, to support
25 the development of islandable clean distributed energy generation and/or storage at critical
26 facilities. The Department shall develop and issue a Request For Proposals from municipalities
27 or other public entities including regional school/water/sewerage districts and planning agencies
28 (RPAs); electric distribution companies; participating municipal lighting plants; and private
29 entities seeking to develop a microgrid using clean distributed energy generation, or to repurpose
30 existing clean distributed energy generation for use with microgrids, to support the energy

31 resilience of critical facilities. Any entity eligible to submit a proposal pursuant to this section
32 may collaborate with any other such entity in submitting such proposal.

33 (c) The Department may award grants or loans under the microgrid grant and loan pilot
34 program to municipalities, electric distribution companies, participating municipal lighting plants
35 and private entities. Such grants and loans shall be used to provide assistance to all recipients for
36 the cost of design, engineering services and interconnection infrastructure for any such
37 microgrid; and to provide recipients who are low-to-moderate income residents demonstrating
38 income levels below 100% of Area Median Income a subsidy of up to 85% of their share of the
39 cost of installing clean distributed energy generation in their eligible facility(ies), which must
40 include their place(s) of residence, with the remainder financed by the recipient(s). The
41 Department shall provide appropriate avenues within the Request For Proposal for those
42 intending to qualify for the subsidy to demonstrate income eligibility. In addition, the
43 Department may elect for a portion of the program funds to serve as a Loan Loss Reserve for
44 zero- or low-interest loans secured through partnership with a mission-oriented lender, for
45 purposes of assisting low-to-moderate income residents, demonstrating income levels below
46 100% of Area Median Income, to meet costs associated with installation of microgrids using
47 clean distributed energy generation. The Department may establish any other financing
48 mechanism to provide or leverage additional funding to support the development of clean
49 distributed energy generation and microgrids that is not limited to the cost of interconnection
50 infrastructure.

51 (e) On or before January 1, 2016, the Department shall file a report with the clerks of the
52 Senate and the House of Representatives, the Joint Committee on Telecommunications, Utilities
53 and Energy and the Senate and House Committees on Ways and Means identifying other funding

54 sources necessary to expand the microgrid grant and loan pilot program established pursuant to
55 this section and any legislative changes necessary to access such funding.

56 (f) The Department shall study the methods of providing reliable electric services to
57 critical facilities, taking into consideration the location of such critical facilities. Such study shall
58 evaluate the costs and benefits of such methods, including, but not limited to, the use of
59 microgrids, energy storage technologies, undergrounding and portable turbine generation, and
60 shall make recommendations identifying the most cost-effective and reliable of such methods.
61 Not later than January 1, 2016, the Department shall submit the findings of such study to the
62 clerks of the Senate and the House of Representatives, the Joint Committee on
63 Telecommunications, Utilities and Energy and the Senate and House Committees on Ways and
64 Means.