

**SENATE . . . . . No. 1542**

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**The Commonwealth of Massachusetts**

PRESENTED BY:

**Steven A. Tolman**

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*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 passage of the accompanying bill:

An Act to promote the safe operation of utility vaults.

PETITION OF:

NAME:	DISTRICT/ADDRESS:
Steven A. Tolman	Second Suffolk and Middlesex
Martin J. Walsh	13th Suffolk

# The Commonwealth of Massachusetts

In the Year Two Thousand and Nine

## AN ACT TO PROMOTE THE SAFE OPERATION OF UTILITY VAULTS.

*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 166 of the General Laws is amended by inserting after section 34  
2 the following sections:-

3 Section 34A.   Definitions

4   “Company” shall mean a distribution company or electric company as defined in section 1 of  
5 chapter 164.

6   “Inspector” shall mean one or more employees of a municipality, including the inspector of  
7 buildings, building commissioner or local inspector of a city, town or district or a municipal  
8 inspector of wires appointed under section 32. An Inspector shall not be employed by or  
9 otherwise associated with an Owner or a Company.

10   “Owner” shall mean the owner of property on which a Transformer Vault is located; except that  
11   “Owner” shall not include any “Company” as defined in this section.

12   “Transformer Vault” or “Vault” shall mean a totally enclosed structure or room in which  
13 energized network transformers, network protectors and related equipment are housed.

14 Section 34B. Application

15 Sections 34A through 34F, inclusive, shall apply to all Transformer Vaults owned, leased or  
16 otherwise controlled by an Owner and which contain equipment owned, maintained, repaired or  
17 operated by a Company, but shall not apply to Company-owned Transformer Vaults

18 Section 34C. Scope

19 Sections 34A through 34F provide for the structural and related standards and requirements for  
20 Transformer Vaults. All Transformer Vaults shall comply with these sections.

21 Section 34D. Inspection

22 Every owner shall ensure that a Qualified Inspector performs a yearly inspection of all  
23 transformer vaults. The Inspector shall inspect the vault location, size, ventilation, doorways,  
24 walls, floors, ceilings, lighting, drainage and protective equipment to ensure that the Transformer  
25 Vault meets the minimum standards set forth in sections 34E. Nothing in this section shall be  
26 interpreted to require any public or private Inspector to perform an inspection except upon  
27 payment of such fees as are customary and usual.

28 Should the Inspector find that the Transformer Vault does not conform to the provisions of these  
29 sections in any material manner, the Inspector shall inform the Owner of items which do not so  
30 conform and which require maintenance or repair. The Owner shall maintain or repair such  
31 items requiring same. After completion of any required maintenance and repairs, the Inspector  
32 shall perform a re-inspection to ensure that the required maintenance and repairs have been  
33 completed. All inspection and re-inspection fees shall be paid by the Owner of the Transformer  
34 Vault to the municipality.

35 Section 34E. Standards

36 Transformer Vaults shall meet the following requirements:

37 (a) The Vault space shall be large enough to accommodate the transformer(s) and other  
38 equipment located within the Vault.

39 (b) The walls, wall partitions and roofs of Vaults shall be constructed of materials that have  
40 adequate structural strength for the conditions with a minimum fire resistance of 3 hours.

41 (c) Each doorway leading into a Vault from the building interior or out of a Vault to the  
42 building interior shall be provided with a tight-fitting door that has a minimum fire rating of 3  
43 hours. The Inspector may also require a fire-rated door for an exterior wall opening where  
44 conditions warrant. Each door shall be properly hinged and self-closing.

45 (d) Doors shall be equipped with locks, and doors shall be kept locked, access being allowed  
46 only to qualified persons. Personnel doors shall swing out and be equipped with panic bars,  
47 pressure plates, or other devices that are normally latched but that open under simple pressure.

48 Sidewalk hatches located within or above Transformer Vaults shall be made accessible by  
49 ladders composed of fire and heat resistant materials. The location of doorways shall be marked  
50 with reflective tape located on the floors and doors. All doorways shall be marked with a sign  
51 reading "DANGER – HIGH VOLTAGE WITHIN – KEEP OUT – ACCESS RESTRICTED TO  
52 QUALIFIED PERSONS ONLY."

53 (e) Transformer Vaults shall be constructed so as to maintain adequate ventilation of the Vault in  
54 the event of smoke or other unsafe condition. Ventilation openings shall be covered with durable  
55 gratings, screens, or louvers, according to the treatment required in order to avoid unsafe

56 conditions yet still provide for adequate ventilation of the Vault. All ventilation openings to the  
57 indoors shall be provided with automatic closing fire dampers that operate in response to a Vault  
58 fire. Ventilating ducts shall be constructed of fire resistant material.

59 (f) Vaults shall contain 24-hour lighting with an alternate power source.

60 (g) Vaults shall be equipped with smoke detectors, carbon dioxide detectors, grounding systems,  
61 convenience, and heat detection systems.

62 (h) Materials shall not be stored in Transformer Vaults.

### 63 Section 34F. Violations

64 If upon re-inspection the Inspector determines that the Owner has willfully or negligently failed  
65 within a reasonable time to perform any maintenance or repair required as a result of an  
66 inspection, such Owner shall be punished by a fine of not more than one thousand dollars in each  
67 instance.