

SENATE No. 1542

The Commonwealth of Massachusetts

In the Year Two Thousand 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
5 1 of chapter 164.

6 “Inspector” shall mean one or more employees of a municipality, including the inspector
7 of 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;
11 except that “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
16 or otherwise controlled by an Owner and which contain equipment owned, maintained, repaired
17 or 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
20 requirements for 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
29 of these sections in any material manner, the Inspector shall inform the Owner of items which do
30 not so conform and which require maintenance or repair. The Owner shall maintain or repair
31 such items requiring same. After completion of any required maintenance and repairs, the
32 Inspector shall perform a re-inspection to ensure that the required maintenance and repairs have
33 been completed. All inspection and re-inspection fees shall be paid by the Owner of the
34 Transformer 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
40 have 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
46 allowed only to qualified persons. Personnel doors shall swing out and be equipped with panic
47 bars, pressure plates, or other devices that are normally latched but that open under simple
48 pressure.

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

54 (e) Transformer Vaults shall be constructed so as to maintain adequate ventilation of the
55 Vault in the event of smoke or other unsafe condition. Ventilation openings shall be covered

56 with durable gratings, screens, or louvers, according to the treatment required in order to avoid
57 unsafe conditions yet still provide for adequate ventilation of the Vault. All ventilation openings
58 to the indoors shall be provided with automatic closing fire dampers that operate in response to a
59 Vault fire. Ventilating ducts shall be constructed of fire resistant material.

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

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

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

64 Section 34F. Violations

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