



Legislation Details (With Text)

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Title: A Local Law to amend the administrative code of the city of New York, the New York city building code, and the New York city mechanical code, in relation to emergency and standby power systems and natural gas usage.

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Attachments: 1. Int. No. 1101 - 6/24/13, 2. Int. No. 1101-A, 3. Committee Report 6/27/13, 4. Hearing Testimony 6/27/13, 5. Hearing Transcript 6/27/13, 6. Committee Report 11/14/13, 7. Hearing Transcript 11/14/13, 8. Committee Report - Stated Meeting, 9. Fiscal Impact Statement, 10. Message of Necessity, 11. Hearing Transcript - Stated Meeting 11-14-13, 12. Mayor's Letter, 13. Local Law 111

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11/14/2013	*	Committee on Housing and Buildings	Hearing Held by Committee	
11/14/2013	*	Committee on Housing and Buildings	Amendment Proposed by Comm	
11/14/2013	*	Committee on Housing and Buildings	Amended by Committee	
11/14/2013	A	Committee on Housing and Buildings	Approved by Committee	Pass

11/14/2013	A	City Council	Approved by Council	Pass
11/14/2013	A	City Council	Sent to Mayor by Council	
12/2/2013	A	Mayor	Hearing Held by Mayor	
12/2/2013	A	Mayor	Signed Into Law by Mayor	
12/2/2013	A	City Council	Recved from Mayor by Council	

Int. No. 1101-A

By Council Members Vacca, Chin, James, Koo, Lander, Mendez, Recchia, Richards, Rose, Gentile, Van Bramer, Rodriguez, Greenfield, Koppell and Williams

A Local Law to amend the administrative code of the city of New York, the New York city building code, and the New York city mechanical code, in relation to emergency and standby power systems and natural gas usage.

Be it enacted by the Council as follows:

Section 1. The New York city amendments to sections 700.1, 700.4, 700.5, 700.6 and 700.12 and articles 701 and 702 of the 2008 National Electrical Code as set forth in section 27-3025 of the administrative code of the city of New York, as added by local law number 39 for the year 2011, are amended to read as follows:

[SECTION 700.1

Section 700.1-Delete FPN Nos. 2, 3, 4 and 5 and revise second sentence to read as follows:

Emergency systems are lighting, fire protection and power systems legally required and classed as emergency by any governmental agency having jurisdiction.]

SECTION 700.4

Subsection 700.4(A)-Revise to read as follows:

(A) Acceptance Test. A licensed professional shall submit to the department a testing report of the [completed] complete system upon installation. Such testing report shall be from an authorized testing entity.

Subsection 700.4(E)-Revise to read as follows:

(E) Installation Test Requirements. The installation test shall be conducted and documented in accordance with NFPA 110-2005, Section 7-13, amended as follows:

7.13.3: Delete in its entirety.

[7.13.4.1(5): Add at the end of (5): Time to initial load transfer shall not exceed 10 seconds.]

7.13.4.1(11): Revise to read as follows: The load test with building load or other loads that simulate intended load shall continue for 2 hours observing and recording load changes and the resultant effect on voltage and frequency.

7.13.10.2: Delete and replace with the following: The complete crank/rest cycle shall consist of 3-15 second crank cycles with 15 second rest periods between cranks.

7.13.13: Add a new paragraph to read as follows: Transfer switches shall be tested in accordance with 8.4.6 as modified herein.

Subsection 700.4(F)-Add a new subsection 700.4(F) to read as follows:

(F) Maintenance and Operational Testing. Maintenance and operational testing shall be performed and documented in accordance with NFPA 110-2005, Section 8, amended as follows:

[8.1.2: Delete in its entirety.]

8.2: Delete in its entirety.

[8.3.1: Delete the following text from the end: “for the type and for the time duration specified for the class.”]

8.3.4: Delete and replace with the following: A written record of the EPSS inspection, tests, exercising, operation, and repairs shall be maintained on premises and made available to the department on request. Records shall be inclusive of the transfer switches and storage batteries.

8.4.4.1: Add a new sentence to read as follows: Inspection shall consist of examination of all EPSS components for leaks, abnormal device position and of all alarm/trouble indicators.

8.4.5: Delete in its entirety.

8.4.6: Replace "monthly" with "semi-annually".

8.4.6.1: Replace "monthly" with "semi-annually".

SECTION 700.5

Subsection 700.5 (B)-Delete third paragraph of subsection 700.5(B)[, revise the first paragraph of such subsection] and add a FPN to read as follows:

[The alternate power source shall be permitted to supply emergency and optional standby system loads where the source has adequate capacity or where automatic selective load pickup and load shedding is provided as needed to ensure adequate power to (1) emergency circuits and (2) optional standby circuits, in that order of priority. The alternate power source shall be permitted for peak load shaving, provided the above conditions are met.]

FPN: Peak reduction program may require utility approval.

SECTION 700.6

Subsection 700.6 (E)-Add a new subsection 700.6(E) to read as follows:

(E) Mechanical Operation. Means shall be provided to mechanically operate the switch without hazard to

personnel.

Subsection 700.6 (F)-Add a new subsection 700.6(F) to read as follows:

(F) Temporary Connections for Portable Generators. Temporary connection of a portable generator without transfer equipment shall be permitted where qualified persons maintain and supervise service of the installation, and where the normal source of supply is physically isolated by a lockable [disconnect] disconnecting means or by disconnection of the normal supply conductors. Portable generators shall not be paralleled except by special permission.

Subsection 700.6 (G)-Add a new subsection 700.6(G) to read as follows:

(G) Permanent Connections for Portable Generators. Where a permanent [installation] connection is made for a portable generator, a disconnecting means and overcurrent protection shall be provided at the point of connection for the portable generator. Capacity shall not exceed the capacity of the permanent installation.

SECTION 700.12

Section 700.12 - Revise the fourth paragraph, add a new Exception to read as follows and delete the FPNs:

Fire, sprinkler, standpipe, smoke detection, oxygen, nitrous oxide and other alarm or extinguishing systems shall be connected to the line side of the service equipment and shall have separate overcurrent protection.

Exception: Such systems installed for local area protection only, may connect ahead of the supply to the area protected.

Subsection 700.12(A) - Revise the first paragraph and add a FPN to read as follows:

Storage batteries may be used as a source of power for emergency lighting systems and shall be of suitable rating and capacity to supply and maintain the total load for a minimum period of 1½ hours, without the voltage applied to the load falling below 87½ percent of normal. Storage batteries may be used for other emergency systems only where special permission is granted for such use.

FPN: See Article 760 for additional information on the use of batteries for fire alarm systems.

Subsection 700.12(B)(2) - Revise first sentence and add a FPN to read as follows:

Where internal combustion engines are used as the prime mover, an on-site fuel supply shall be provided sufficient for not less than 6 hours of operation at full demand load.

FPN: Some installations may require more than 6 hours of fuel supply. See Articles 517 and 708.

Subsection 700.12(B)(6) - Revise to read as follows:

(6) Outdoor Generator Sets. Where an outdoor generator set is permanently installed and is equipped with a disconnecting means and such generator set is located within sight of the building or structure supplied, an additional disconnecting means shall not be required where ungrounded conductors pass through the building or structure. Appropriate signage shall be provided at the generator set and at the first disconnecting means within the building or structure supplied.

Subsection 700.12(B)(7) - Add new subsection 700.12(B)(7) to read as follows:

(7) Temporary Generators. The equipment grounding conductor(s) of the derived system shall be bonded to the grounding electrode system.

FPN: See 250.34 for grounding of generator frame.

(a) Separately Derived System. Where a temporary portable generator is a separately derived system, it shall be grounded in accordance with 250.30.

(b) Not A Separately Derived System. Where a temporary portable generator is not a separately derived system, a grounding connection shall not be made to the grounded circuit conductor.

Subsection 700.12(C) - Revise to read as follows:

(C) Uninterruptible Power Supplies. Uninterruptible power supplies may be used to provide power for emergency systems only where special permission is granted for such use.

Subsection 700.12(D) - Revise the first sentence of subsection to read as follows:

Where acceptable to the commissioner as suitable for use as an emergency source, a second service independent of the source normally supplying the building shall be permitted.

Subsection 700.12(E) - [Delete the subsection in its entirety] Revise the first sentence to read as follows: Fuel cell systems shall be permitted to be used as a source of power for emergency systems in R-2 occupancies and shall be of suitable rating and capacity to supply and maintain the total load for not less than 6 hours of full-demand operation.

ARTICLE 701

Legally Required Standby Systems

[Delete the article in its entirety and add a FPN to read as follows:

FPN: All legally required standby systems are classified as emergency systems.]

SECTION 701.5

Subsection 701.5(A)-Revise to read as follows:

(A) Acceptance Test. A licensed professional shall submit to the department a testing report of the complete system upon installation. Such testing report shall be from an authorized testing entity.

Subsection 701.5(E)-Revise to read as follows:

(E) Installation Test Requirements. The installation test shall be conducted and documented in accordance with 700.4(E).

Subsection 701.5(F)-Add a new subsection 701.5(F) to read as follows:

(F) Maintenance and Operational Testing. Maintenance and operational testing shall be performed and documented in accordance with 700.4(F).

SECTION 701.6

Section 701.6-Add a new FPN to read as follows:

FPN: Peak reduction program may require utility approval.

SECTION 701.7

Subsection 701.7(D)-Add a new subsection 701.7(D) to read as follows:

(D) Mechanical Operation. Means shall be provided to mechanically operate the switch without hazard to personnel.

Subsection 701.7(E)-Add a new subsection 701.7(E) to read as follows:

(E) Temporary Connections for Portable Generators. Temporary connection of a portable generator without transfer equipment shall be permitted where qualified persons maintain and supervise service of the installation, and where the normal source of supply is physically isolated by a lockable disconnecting means or by a disconnection of the normal supply conductors. Portable generators shall not be paralleled except by special permission.

Subsection 701.7(F) - Add a new subsection 701.7(F) to read as follows:

(F) Permanent Connections for Portable Generators. Where a permanent connection is made for a portable generator, a disconnecting means and overcurrent protection shall be provided at the point of connection for the portable generator. Capacity shall not exceed the capacity of the permanent installation.

SECTION 701.8

Section 701.8 - Revise the first sentence to read as follows:

Audible and visual signal devices shall be provided at a continuously supervised location for the following purposes:

SECTION 701.10

Section 701.10 - Revise to read as follows:

701.10 Wiring and Conductors for Legally Required Standby Systems.

(A) Wiring. Wiring for legally required standby systems shall be permitted to occupy the same raceways, cables, boxes, and cabinets as other general wiring.

(B) Conductors.

(1) Ampacity. See 445.13.

(2) Installation of Generator Conductors. Generator conductors to the first disconnecting means shall be installed in accordance with the requirements of Article 230.

(3) Overcurrent Devices. There shall be no limit to the number of overcurrent devices connected to the generator terminal devices.

SECTION 701.11

Subsection 701.11(B)(2)-Revise to read as follows:

(2) Internal Combustion Engines as Prime Mover. Where internal combustion engines are used as the prime mover, an on-site fuel supply shall be provided sufficient for not less than 6 hours of operation at full demand load.

Exception: Legally required standby generators relying on natural gas as a fuel supply shall not be required to maintain an on-site fuel supply.

FPN: Some installations may require more than 6 hours of fuel supply. See Articles 517 and 708.

Subsection 701.11(B)(6)-Add a new subsection 701.11(B)(6) to read as follows:

(6) Temporary Generators. The equipment grounding conductors of the derived system shall be bonded to the grounding electrode system.

FPN: See 250.34 for grounding of the generator frame.

(a) Separately Derived System. Where a temporary portable generator is a separately derived system, it shall be grounded in accordance with 250.30.

(b) Not A Separately Derived System. Where a temporary portable generator is not a separately derived system, a grounding connection shall not be made to the grounded circuit conductor.

Subsection 701.11(F) - Revise the first sentence to read as follows: Fuel cell systems used as a source of power for legally required standby systems shall be of suitable rating and capacity to supply and maintain the total load for not less than 6 hours of full-demand operation.

SECTION 701.18

Section 701.18-Revise to read as follows:

701.18 Coordination. Legally required standby system(s) overcurrent devices shall be selectively coordinated in the overcurrent range with all supply side overcurrent protective devices.

ARTICLE 702

Optional Standby Systems

SECTION 702.2

Section 702.2-Revise the first sentence to read as follows:

Those systems not required by municipal, state, federal, or other codes or by any governmental agency having jurisdiction.

SECTION 702.6

Section 702.6-At the Exception, add a second sentence to read as follows:

Portable generators shall not be paralleled with permanent optional standby sources, except by special

permission.

SECTION 702.12

Section 702.12-Add a new section 702.12 to read as follows:

702.12 Portable and Temporary Generators. Portable and temporary generators shall comply with 700.6 (G) and 700.12(B)(7).

§2. Item 3.9 of section 28-109.3 of the administrative code of the city of New York, as added by local law 33 for the year 2007, is amended to read as follows:

3.9. Emergency and standby power systems.

§3. Section 402.12 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

402.12 [Emergency] Standby power. Covered mall buildings exceeding 50,000 square feet (4645 m²) shall be provided with [emergency] standby power systems that are capable of operating the emergency voice/alarm communication system.

§4. Sections 403.10 and 403.11 of the New York city building code, as added by local law number 33 for the year 2007, are amended to read as follows:

403.10 [Reserved.] Standby power. A standby power system complying with Section 2702 shall be provided for standby power loads specified in Section 403.10.2.

403.10.1 Special requirements for standby power systems. If the standby system is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour fire-resistance-rated fire barrier assemblies. System supervision with manual start and transfer features shall be provided at the fire command center.

403.10.2 Standby power loads in occupancies other than Group R-2. In buildings of any occupancy group other than Group R-2, the following are classified as standby power loads:

1. Power and lighting for fire command center required by Section 403.8;
2. Ventilation and automatic fire detection equipment for smokeproof enclosures;
3. Elevators, in accordance with Section 3003; and
4. Stair pressurization systems when provided.

403.10.3 Standby power loads in Group R-2 occupancies. Group R-2 occupancies in buildings greater than 125 feet (38 100 mm) in height shall be required to provide a standby power system to support the following loads:

1. Power and lighting for fire command center required by Section 403.8;
2. Ventilation and automatic fire detection equipment for smokeproof enclosures;
3. At least one elevator serving all floors, or one elevator per bank where different banks serve different portions of the building; and
4. Stair pressurization systems when provided.

403.11 Emergency power systems. An emergency power system complying with Section 2702 shall be provided for emergency power loads specified in Sections 403.11.1 and 403.11.2.

403.11.1 Emergency power loads in occupancies other than R-2. In buildings of any occupancy group other than Group R-2, the following are classified as emergency power loads:

1. Exit signs and means of egress illumination required by Chapter 10; [and]
2. Elevator car lighting; [and]
3. Emergency voice/alarm communications systems; [and]
4. Automatic fire detection systems; [and]
5. Fire alarm systems; and
6. [Power and lighting for the fire command center required by Section 403.8; and
- 7.] Electrically powered fire pumps[; and
8. Ventilation and automatic fire detection equipment for smokeproof enclosures; and
9. Elevators in accordance with Section 3003; and
10. Stair pressurization systems when provided].

403.11.2 Emergency power loads in Group R-2 occupancies. Group R-2 occupancies in buildings greater than 125 feet (38 100 mm) in height shall be required to provide an emergency power system to support the following loads:

1. Exit signs and means of egress illumination required by Chapter 10;
- [2. At least one elevator serving all floors, or one elevator per bank where different banks serve different portions of the building;]
- [3.] 2. Emergency voice communications systems; and
- [4.] 3. Electrically powered fire pumps, unless electrical power to the motor is taken ahead of the main from the street side of the house service switch.

[Where a generator is used as the emergency power system, diesel or gas shall be permitted as the fuel source in accordance with Section 2702.1.]

§5. Section 404.6 of the New York city building code, as amended by local law number 33 for the year 2007, is amended to read as follows:

404.6 [Emergency] Standby power. Equipment required to provide smoke control shall be connected to [an emergency] a standby power system in accordance with Section 909.11.

§6. Sections 405.9 and 405.10 of the New York city building code, as amended by local law number 33 for the year 2007, are amended to read as follows:

405.9 [Reserved.] Standby power. A standby power system complying with Section 2702 shall be provided for standby power loads specified in Section 405.9.1.

405.9.1 Standby power loads. The following loads are classified as standby power loads:

1. Smoke control system;
2. Ventilation and automatic fire detection equipment for smokeproof enclosures;
3. Fire pumps;
4. Elevators in accordance with Section 3003; and
5. Stair pressurization systems when provided.

405.10 Emergency power. An emergency power system complying with Section 2702 shall be provided for emergency power loads specified in Section 405.10.1.

405.10.1 Emergency power loads. The following loads are classified as emergency power loads:

1. Emergency voice/alarm communications systems[.];
2. Fire alarm systems[.];
3. Automatic fire detection systems[.];
4. Elevator car lighting[.]; and
5. Means of egress and exit sign illumination as required by Chapter 10.
- [6. Smoke control system.
7. Ventilation and automatic fire detection equipment for smokeproof enclosures.

8. Fire pumps.
9. Elevators in accordance with Section 3003.
10. Stair pressurization systems when provided.]

§7. Section 414.5.4 of the New York city building code, as amended by local law number 33 for the year 2007, is amended to read as follows:

414.5.4 Emergency or standby power. Where mechanical ventilation, treatment systems, temperature control, alarm, detection or other electrically operated systems are required, such systems shall be provided with an emergency or standby power system in accordance with the *New York City Electrical Code*.

Exceptions:

1. Storage areas for Class I and II oxidizers.
2. Storage areas for Class III, IV and V organic peroxides.
3. [Emergency] Standby power for mechanical ventilation, treatment systems and temperature control systems shall not be required where an approved fail-safe engineered system is installed.

§8. Sections 909.11 and 909.20.6.2 of the New York city building code, as added by local law number 33 for the year 2007, are amended to read as follows:

909.11 Power systems. The smoke control system shall be supplied with two sources of power. Primary power shall be from the normal building power systems. Secondary power shall be from [an emergency] a standby power source complying with the *New York City Electrical Code*. The [emergency] standby power source and its transfer switches shall be in a separate room from the normal power transformers and switch gear and shall be enclosed in a room constructed of not less than 1-hour fire-resistance-rated fire barriers ventilated directly to and from the exterior. Power distribution from the two sources shall be by independent routes. Transfer to full [emergency] standby power shall be automatic and within 60 seconds of failure of the primary power. The systems shall comply with the *New York City Electrical Code*.

909.20.6.2 [Emergency] Standby power. Mechanical vestibule and stair shaft ventilation systems and automatic fire detection systems shall be powered by [an emergency] a standby power system conforming to Section [403.11] 403.10 and Chapter 27.

§9. Sections 1007.4, 1007.5, and 1008.1.3.3 of the New York city building code, as added by local law number 33 for the year 2007, are amended to read as follows:

1007.4 Elevators. To be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements of Section 2.27 of ASME A17.1 and Section 1109.6. [Emergency] Standby power shall be provided in accordance with Sections 2702 and 3003. The elevator shall be accessed from either an area of rescue assistance complying with Section 1007.6 or a horizontal exit complying with Section 1021.

Exceptions:

1. Elevators are not required to be accessed from an area of rescue assistance or horizontal exit in open parking garages.
2. Elevators are not required to be accessed from an area of rescue assistance or horizontal exit in buildings and facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

1007.5 Platform lifts. Platform (wheelchair) lifts shall not serve as part of an accessible means of egress, except where allowed as part of a required accessible route in Section 1109.7. Platform lifts shall be installed in accordance with ASME A18.1. [Emergency] Standby power shall be provided in accordance with Section 2702 for platform lifts permitted to serve as part of an accessible means of egress.

1008.1.3.3 Horizontal sliding doors. In other than Group H occupancies, horizontal sliding doors permitted to be a component of a means of egress in accordance with Exception 5 to Section 1008.1.2.1 shall comply with all of the following criteria:

1. The doors shall be power operated and shall be capable of being operated manually in the event of power failure.
2. The doors shall be openable by a simple method from both sides without special knowledge or effort.
3. The force required to operate the door shall not exceed 30 pounds (133 N) to set the door in motion and 15 pounds (67 N) to close the door or open it to the minimum required width.
4. The door shall be openable with a force not to exceed 15 pounds (67 N) when a force of 250 pounds (1100 N) is applied perpendicular to the door adjacent to the operating device.
5. The door assembly shall comply with the applicable fire protection rating and, where rated, shall be self-closing or automatic-closing by smoke detection, shall be installed in accordance with NFPA 80 and shall comply with Section 715.
6. The door assembly shall have an integrated [emergency] standby power supply.
7. The door assembly power supply shall be electrically supervised.
8. The door shall open to the minimum required width within 10 seconds after activation of the operating device.

§10. Section 1707.7 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

1707.7 Mechanical and electrical components. Periodic special inspection is required during the anchorage of electrical equipment for emergency or standby power systems in structures assigned to Seismic Design Category C[,] or D. Periodic special inspection is required during the installation of piping systems intended to carry flammable, combustible or highly toxic contents and their associated mechanical units in structures

assigned to Seismic Design Category C[,] or D. Periodic special inspection is required during the installation of HVAC ductwork that will contain hazardous materials in structures assigned to Seismic Design Category C[,] or D.

§11. Section BC 2702 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

SECTION BC 2702 EMERGENCY AND STANDBY POWER SYSTEMS

2702.1 Installation. Emergency and standby power systems shall be installed in accordance with the *New York City Electrical Code*, NFPA 110 and NFPA 111[, and]. Systems relying on fuel supplies shall have an on-premises fuel supply sufficient for not less than 6-hour full-demand operation of the system. However, [for R-2 occupancies required to provide emergency power systems pursuant to the provisions of Section 403.11.2, and for voluntarily installed emergency power systems,] natural gas from the public utility street main shall be permitted as the sole fuel supply for (i) emergency power systems serving R-2 occupancies and (ii) standby power systems, provided that an outside gas cut-off valve separate from other gas services is installed in accordance with Section E.6 of Appendix E of the *New York City Fuel Gas Code*.

2702.1.1 Stationary generators. Emergency and standby power generators shall be listed in accordance with UL 2200.

2702.1.2 Capacity. The emergency and standby power [system] systems shall have [a] capacity and [rating] ratings that [supplies] supply all equipment required to be operational at the same time.

2702.2 Where required. Emergency and standby power systems shall be provided where required by this section.

2702.2.1 Group A occupancies. Emergency power shall be provided for voice/alarm communication systems in Group A occupancies in accordance with Section 907.2.1.2.

2702.2.2 Smoke control systems. [Emergency] Standby power shall be provided for smoke control systems in accordance with Section 909.11.

2702.2.3 Exit signs. Emergency power shall be provided for exit signs in accordance with Section 1011.5.3.

2702.2.4 Means of egress illumination. Emergency power shall be provided for means of egress illumination in accordance with Section 1006.3.

2702.2.5 Accessible means of egress elevators. [Emergency] Standby power shall be provided for elevators that are part of an accessible means of egress in accordance with Section 1007.4.

2702.2.6 Horizontal sliding doors. [Emergency] Standby power shall be provided for horizontal sliding doors in accordance with Section 1008.1.3.3.

2702.2.7 Semiconductor fabrication facilities. Emergency power shall be provided for semiconductor fabrication facilities in accordance with Section 415.9.10.

2702.2.8 Membrane structures. [Emergency] Standby power shall be provided for auxiliary inflation

systems in accordance with Section 3102.8.2. Emergency power shall be provided for exit signs in tents and membrane structures.

2702.2.9 Hazardous materials. Emergency or standby power shall be provided in occupancies with hazardous materials in accordance with Section 414.5.4 and the *New York City Fire Code*.

2702.2.10 Highly toxic and toxic materials. Emergency power shall be provided for occupancies with highly toxic or toxic materials in accordance with the *New York City Fire Code*.

2702.2.11 Organic peroxides. [Emergency] Standby power shall be provided for occupancies with organic peroxides in accordance with the *New York City Fire Code*.

2702.2.12 Pyrophoric materials. Emergency power shall be provided for occupancies with silane gas in accordance with the *New York City Fire Code*.

2702.2.13 Covered mall buildings. [Emergency] Standby power shall be provided for voice/alarm communication systems in covered mall buildings in accordance with Section 402.12.

2702.2.14 High-rise buildings. Emergency and standby power shall be provided in high-rise buildings in accordance with [Section] Sections 403.10 and 403.11.

2702.2.15 Underground buildings. Emergency and standby power shall be provided in underground buildings in accordance with [Section] Sections 405.9 and 405.10.

2702.2.16 Group I-3 occupancies. Emergency power shall be provided for doors in Group I-3 occupancies in accordance with Section 408.4.2.

2702.2.17 Reserved.

2702.2.18 Elevators. [Emergency] Standby power for elevators, including elevators provided to accommodate ambulance stretchers pursuant to Section 3002.4, shall be provided as set forth in Section 3003.1.

2702.2.19 Smokeproof enclosures and pressurized elevator shaft. [Emergency] Standby power shall be provided for smoke-proof enclosures as required by Section 909.20 and for pressurized elevator shafts provided in accordance with Item 5 of Section 403.9.1.1.

2702.2.20 Occupancy Groups B, E and R-1. [An emergency] Emergency and standby power [system] shall be required in those Group B, E and R-1 occupancies specified in this section:

1. Group B occupancies with occupied floor less than 75 feet (22 860 mm) above the lowest fire department vehicle access having a gross floor area over 15,000 square feet (1393.6 m²) per floor or a total gross floor area of 100,000 square feet (9290.3 m²) or more.
2. Group E occupancies with occupied floor less than 75 feet (22 860 mm) above the lowest level of fire department vehicle access having a gross floor area over 15,000 square feet (1[,]393.6 m²) per floor or a total gross floor area of 100,000 square feet (9[,] 290.3 m²) or more.
3. All Group R-1 occupancies.

2702.2.20.1 Equipment requiring emergency power system. With respect to such [occupancy] Occupancy Groups B, E and R-1, the following equipment, where such equipment is required by this code, shall be provided with an emergency power system:

1. Exit signs and means of egress illumination required by Chapter 10;
2. Elevator car lighting;
3. Emergency voice/alarm communications systems;
4. Automatic fire detection systems;
5. Fire alarm systems; and
6. Electrically powered fire pumps[;
7. Ventilating systems used for smoke venting or control;
8. Stair pressurization; and
9. At least three elevators in a building at one time with manual transfer to other elevators as required by Section 3003].

2702.2.20.2 Equipment requiring standby power system. With respect to such Occupancy Groups B, E and R-1, the following equipment, where such equipment is required by this code, shall be provided with a standby power system:

1. Ventilating systems used for smoke venting or control;
2. Stair pressurization; and
3. At least three elevators in a building at one time with manual transfer to other elevators as required by Section 3003.

2702.3 Maintenance. Emergency and standby power systems shall be maintained and tested in accordance with the *New York City Fire Code* and *New York City Electrical Code*.

2702.4 Required loads for optional standby power systems. In addition to any other loads, optional standby power systems shall be capable of providing power to the following systems upon failure of the normal power supply or the emergency or standby power system:

1. Emergency lighting;
2. Fire alarm systems; and
3. Elevators as follows:

3.1 For Group R-2 occupancies in buildings greater than 125 feet (38 100 mm) in height, at least one

elevator serving all floors, or one elevator per bank where different banks serve different portions of the building; or

3.2 For all other buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, at least one elevator that serves all floors.

§12. Sections 3003.1, 3003.1.1, 3003.1.2, 3003.1.3, and 3003.1.4 of the New York city building code, as added by local law number 33 for the year 2007, are amended to read as follows:

3003.1 [Emergency] Standby power. In buildings and structures where [emergency] standby power is required or furnished to operate an elevator, the operation shall be in accordance with Sections 3003.1.1 through 3003.1.4.

3003.1.1 Manual transfer. [Emergency] Standby power shall be manually transferable to all elevators in each bank.

3003.1.2 One elevator. Where only one elevator is installed, the elevator shall automatically transfer to [emergency] standby power within 60 seconds after failure of normal power.

3003.1.3 Two or more elevators. Where two or more elevators are controlled by a common operating system, all elevators shall automatically transfer to [emergency] standby power within 60 seconds after failure of normal power where the [emergency] standby power source is of sufficient capacity to operate all elevators at the same time. Where the [emergency] standby power source is not of sufficient capacity to operate all elevators at the same time, all elevators shall transfer to [emergency] standby power in sequence, return to the designated landing and disconnect from the [emergency] standby power source. After all elevators have been returned to the designated level, at least three elevators shall remain operable from the [emergency] standby power source.

3003.1.4 Venting. Where [emergency] standby power is connected to elevators, the machine room ventilation or air conditioning shall be connected to the [emergency] standby power source.

§13. Section 3102.8.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

3102.8.2 [Emergency] Standby power. Wherever an auxiliary inflation system is required, an approved [emergency] standby power-generating system shall be provided. However, notwithstanding Section 2702.1, the [emergency] standby power-generating system shall be equipped with a suitable means for automatically starting the generator set upon failure of the normal electrical service and for automatic transfer and operation of all of the required electrical functions at full power within 60 seconds of such service failure. [Emergency] Standby power shall be capable of operating independently for a minimum of 4 hours.

§14. Section 513.11 of the New York city mechanical code, as added by local law number 33 for the year 2007, is amended to read as follows:

513.11 Power systems. The smoke control system shall be supplied with two sources of power. Primary power shall be the normal building power systems. Secondary power shall be from an approved [emergency] standby power source complying with the *New York City Electrical Code*. The [emergency] standby power source and its transfer switches shall be in a separate room from the normal power transformers and switch gear and shall be enclosed in a room constructed of not less than 1-hour fire-resistance-rated fire barriers, ventilated directly to and from the exterior. Power distribution from the two sources shall be by independent routes. Transfer to full [emergency] standby power shall be automatic and within 60 seconds of failure of the primary power. The systems shall comply with the *New York City Electrical Code*.

§15. This local law shall take effect immediately.

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