This rule has an effective date of 7-11-19

NOTICE OF ADOPTION OF RULE

NOTICE IS HEREBY GIVEN, pursuant to the authority vested in the Commissioner of

the Department of Buildings by Section 643 of the New York City Charter and in

accordance with Section 1043 of the Charter, that the Department of Buildings hereby

adopts the amendments to Section 34-05 of Chapter 34 of Title 1 of the Official

Compilation of the Rules of the City of New York, regarding electrical work.

This rule was first published on December 15, 2017 and a public hearing thereon was

held on January 25, 2018.

Dated:

New York New York

Thomas Fariello, R.A.

First Deputy Commissioner

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Statement of Basis and Purpose of Rule

The Department of Buildings (DOB) is amending its electrical code rules to delete references to the electrical advisory board and to repeal sections that are no longer applicable. The rule will repeal sections 34-01 relating to phase-in of new standards for electrical work, 34-02 relating to review of applications for electrical permits and certificates of electrical inspection, and 34-03 relating to temporary certification to perform low voltage electrical work because they refer to a phase-in period that ended in 2003.

The rule also amends section 34-05 to eliminate the electrical advisory board in order to standardize and align the electrical plan review process with all other plan examination units in the agency. It also renumbers 34-05 as 4000-01 in order to align the rule with the Department's current rule numbering scheme.

Amendments are also being made to rule 101-12 to expand the jurisdiction of the Office of Technical Certification and Research ("OTCR") to allow it to replace the electrical advisory board in reviewing electrical equipment and materials. OTCR's jurisdiction is currently limited to equipment and materials covered by Title 28 of the New York City Administrative Code. The electrical code is in Title 27.

The Department of Buildings' authority for these rules is found in sections 643 and 1043 of the New York City Charter and section 27-3005 of the New York City Administrative Code.

New material is underlined. [Deleted material is in brackets.]

"Shall" and "must" denote mandatory requirements and may be used interchangeably in the rules of this department, unless otherwise specified or unless the context clearly indicates otherwise.

Section 1. Sections 34-01 of Title 1 of the Rules of the City of New York relating to phase-in of new standards for electrical work, 34-02 of Title 1 of the Rules of the City of New York relating to review of applications for electrical permits and certificates of electrical inspection, and 34-03 of Title 1 of the Rules of the City of New York relating to temporary certification to perform low voltage electrical work are REPEALED.

§2. Section 34-05 of Title 1 of the Rules of the City of New York is renumbered 4000-01 and amended to read as follows:

[§34-05 Electrical advisory board.

a. In accordance with section 27-3005(a)(7) of the Administrative Code, the Commissioner shall appoint a special board, to be known as the "electrical advisory board." The electrical advisory board shall provide advice regarding (i) the approval of the use of electrical appliances, devices, and materials not otherwise approved for use by the Electrical Code, (ii) the granting of approval to use wiring or appliances not otherwise allowed by the Electrical Code Technical Standards and (iii) the granting of approval for specified types of electrical installations. The members of the board shall be appointed annually and shall serve at the pleasure of the Commissioner. The number of members and their organizational affiliations shall be at the discretion of the Commissioner. The board shall have a Chair and Vice-Chair appointed annually by the Commissioner.

b.]

§4000-01 Electrical work review.

- (a) <u>Electrical review.</u> Electrical [advisory board] review [shall be]<u>is</u> required in the following circumstances:
 - (1) Electrical installations[:].
 - [(a)] Electrical [advisory board] review [shall be]is required where service equipment totals 1000 Kilo-Volt Amperes ("KVA") or greater, or where any new alteration or addition to an electric service installation causes the altered installation to total 1000 KVA or greater, as further detailed below:
 - (A) A new installation of equipment totaling 1000 KVA or higher;
 - (B) Any change in an installation with a rating of 1000 KVA or higher, up to and including the second level overcurrent protection, unless it was fully described and approved as "future" on the original approved plan.
 - (C) Any addition to an existing installation which would bring the total to 1000 KVA or higher.
 - (D) A new installation or revised installation above 600 volts, irrespective of KVA rating.
 - (E) The addition of any equipment in a room, which would affect clearances around the equipment of a 1000 KVA installation.
 - [(b) Electrical advisory board review shall be required where proposed electrical installations involve appliances and materials not covered by the Electrical Code Technical Standards.]
 - (2) Electrical equipment [or materials]. Electrical [advisory board] review [shall be]is required for [manufactured wiring systems, low voltage lighting systems, painting equipment /spray booths, and] electrical equipment not specifically addressed in the

Electrical Code Technical Standards and any other electrical equipment not bearing the label of approval of an electrical testing laboratory acceptable to the Commissioner.

[c.](b) Filing requirements [for electrical advisory board review].

- (1) [Filing requirements] <u>Electrical installations 1000 KVA or greater, or new or revised installations above 600 volts.</u> <u>Filings</u> for electrical installations 1000 KVA or greater, or new or revised installations above 600 volts <u>must comply with the following:</u>
- [(a) A cover letter, payment as specified in (d) below, and 2 sets of complete drawings shall be filed at:

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Bureau of Electrical Control (address provided in the City's website, http://www.nyc.gov)]

- ([b]i) Submission [shall]must be made in a manner prescribed by the Department, including electronically, by [a New York City Licensed Master or Special Electrician,] a New York State Licensed and Registered Professional Engineer, New York State Licensed and Registered Architect, or an individual with comparable qualifications from an outside jurisdiction.
- ([c]ii) A filing fee of \$650.00 [shall]must be paid for each submission[, no part of which shall be refundable].
- [(d) Payment shall be made by a money order or corporate/business check, a bank check or a certified check, and shall be made payable to "Department of Buildings."]
- ([e]iii) [Requirements for Plans and Drawings.] All submissions [for electrical advisory board review] for service equipment totaling 1000 KVA or more or above 600 Volts [shall]must include the following plans/drawings:
 - One line diagram
 - Plan view / service equipment room layout
 - [Physical details of switchboard & distribution panel equipment as per] <u>Submissions must be in accordance with, and include,</u> the following requirements:
 - (A) All drawings [shall]<u>must</u> be clear, legible, and use standard notations. [All drawings shall be folded to 8 1/2" x 11," except for equivalent electronic versions authorized by the Department.]

- (B) Installations that are not all new [shall]<u>must</u> clearly mark what is new and what is existing. In addition, all new work [shall]<u>must</u> be encircled by a 'bubble' or 'cloud' on the drawings.
- (C) For residential installations, the calculations justifying a de-rating of the neutral [shall]must be submitted.
- (D) The plan view [shall]<u>must</u> be drawn to scale, showing the point of service entrance into the building. If the building sets back from the property line, the underground service feeder [shall]<u>must</u> be shown, including wire and raceway sizes.
- (E) The arrangement of service equipment and its proximity to the point of service entrance [shall]must be shown, [complete with details of the equipment, and] including the manner in which service will be extended to the service equipment. If the switchboard is free standing, the clearance around the switchboard [shall]must be shown.
- (F) The location of the main switchboard and/or distribution panels in relation to the service equipment [and how they are interconnected shall]must be shown.
- (G) The location of the electric service room with respect to the surrounding areas [shall]must be shown.
- (H) The means of egress from the switchboard room and where it leads to [shall]<u>must</u> be shown. The legal exit(s) to which egress door(s) lead [shall]<u>must</u> also be shown.
- (I) When there is more than one service location within a building, drawings [shall]must contain a notation indicating that signs are posted at the entrance door of each switchboard room showing the location of all the other switchboard rooms. The location and wording of the signs [shall]must be specified.
- (J) If the existing service equipment and/or point of service entrance is to be discontinued, the drawings [shall]must so state.
- (K) If existing service equipment is to remain in conjunction with new service equipment and is to be supplied by the same service entrance, the drawing [shall]must indicate the make and size of the existing service equipment, [the size and location of the ground strap,] and the type and size of the fuses in the existing equipment.

- (L) The drawing [shall]must show grouping of service equipment at the point of service entrance.
- (M) The drawing [shall]<u>must</u> show ventilation of the room when the service equipment totals 2000 KVA or larger (this may be in the form of a note on the drawing).
- (N) The drawing [shall]<u>must</u> show the available short circuit current at the point of service entrance and at the point of change in the interrupting rating of the overcurrent protection. Where used, series ratings [shall]<u>must</u> be indicated.
- (O) A statement confirming that all fuses and/or circuit breakers have been coordinated for selective short circuit overcurrent protection [shall]must be on the drawing.
- (P) A one line diagram [shall]<u>must</u> be submitted indicating the service equipment and the distribution equipment up to the 2nd level overcurrent protection, showing all overcurrent devices with their ampere rating, make and type, interrupting current ratings and bus and wire sizes. Frame and trip sizes for circuit breakers [shall]must be indicated.
- (Q) Drawings [shall]<u>must</u> indicate that transformers are properly grounded. Service and distribution equipment proposed for future installation [shall]<u>must</u> be marked on the drawings as "future."
- (R) All voltages [shall]<u>must</u> be clearly shown on the drawings, which [shall]<u>must</u> include voltages pertaining to all of the equipment overcurrent protection up to and including the second level protection.
- [(S) Drawings shall note that cables used in a trough shall be grouped A, B, C, & N respectively. Where troughs are used for taps, the copper detail or a description of the tap shall be noted, confirming that multiset conductors are tapped correctly.
- (T) The physical size of the vertical bus in the distribution panels (second level equipment) shall be shown. The overcurrent devices, bus, barriers, and gutter space layout shall be shown. Layouts of previously approved panels (to be so noted on plans) need not be submitted.]
- ([U]S) When a generator (or other non-utility source) is part of a 1000 KVA submission and the generator itself is rated below 1000 KVA, a one line diagram [shall]must be submitted showing how the generator is

connected to the normal service. The drawings [shall]<u>must</u> include the grounding of the generator frame and neutral bonding if needed (four pole transfer device). If the generator is rated 1000 KVA or larger, a room layout [shall]<u>must</u> be submitted along with a one line diagram[, and physical drawings shall show a section view of the emergency switchboard. Also, the Advisory Board calendar number for the normal service shall be specified].

- [(V) Physical detail drawings for switchboard equipment shall show front and section views and shall be drawn by the switchboard manufacturer. Elevation detail shall show access to the bus connections, the size and location of the main bonding jumper (ground strap), the disconnect link in the neutral, all the barriers and how load cables leave the cabinet. Side section views shall clarify bus details.
- (W) Details of gutter space, lug covers and dimensions of lugs and enclosures up to the 2nd level distribution equipment shall be shown.]
- (iv) A selective coordination report prepared by a professional engineer must be filed with the Department prior to electrical inspection. Such engineer may be different from the applicant.
- (v) Where installation of equipment differs from the original approved drawings, amended drawings showing the as-built condition must be filed with the Department prior to electrical inspection.
- (2) [Filing requirements for electrical advisory board review of appliances, devices, and materials not covered by the electrical code technical standards.] Special permission. Request for special permission must be made electronically and comply with the following:
 - (i) Demonstrate practical difficulty and provide supporting documentation.
 - (ii) Proposed equally safe alternative methods must be included.
- [(a) A cover letter together with appropriate drawings, sketches, charts, and/or cut sheets shall be filed at:

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Bureau of Electrical Control

(address provided in the City's website, http://www.nyc.gov)]

- ([b]iii) A filing fee of \$350.00 [shall]must be paid for each submission made where an [electrical violation]objection was issued due to failure to obtain prior [Electrical Advisory Board review and approval, no part of which shall be refundable]special permission.
- [(c) Payment shall be made by a money order or a corporate/business check, a bank check or a certified check, and shall be made payable to "Department of Buildings."]
- (3) Office of Technical Certification and Research ("OTCR") review. [Filing requirements] Filings for [electrical advisory board] OTCR review of electrical equipment [and materials.] not otherwise approved for use by the New York City electrical code must comply with the following:
 - ([a]i) The submission, including a cover letter, notarized application and check, [shall]must be filed [at the following location only:

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(address provided in the City's website, http://www.nyc.gov)] with OTCR or electronically, as the Commissioner may require.

- ([b]ii) A filing fee of [\$200.00 shall]\$600.00 must be paid for each submission[, no part of which shall be returned].
- ([c]iii) Payment [shall]must be made [by either money order, bank check, certified check or corporate/business check. The payment instrument shall be made payable to "Department of Buildings.]" in a form and manner as provided by the Commissioner.
- ([d]iv) The submission [shall]must contain the following:
 - (A) A cover letter indicating the following:
 - [(i)]1. Type/model numbers of material/equipment being submitted for approval.
 - [(ii)]2. Items included in support of the submittal.
 - [(iii)]3. Explanatory information/comments, if applicable.
 - (B) A completed [&] and notarized application for review.
 - (C) Two (2) brochures, or catalog data sheets, and a set of unmounted photographs or photographs [transmitted electronically as authorized by the Department].

- (D) A complete test report that includes a conclusion sheet from a laboratory acceptable to the Commissioner.
- (E) Equipment samples only when requested by [the Electrical Advisory Board] OTCR.
- [d.](c) Compliance with the <u>New York City</u> Energy Conservation [Construction] Code [of New York State ("Energy Code")]. All <u>electrical</u> submissions [made to the Electrical Advisory Board shall]<u>must</u> comply with the requirements of the Energy <u>Conservation</u> Code where applicable.
- §3. Subdivisions (a) and (b) of section 101-12 of Title 1 of the Rules of the City of New York are amended to read as follows:
- (a) Scope. [There shall be an]The Office of Technical Certification and Research ("OTCR"), is responsible for approving materials pursuant to Article 113 of the New York City Construction Codes ("Construction Codes") and section 27-3005 of the New York City Administrative Code.

 Materials approved pursuant to 27-3005 are subject to the requirements set forth in the New York City Electrical Code and section 4000-01 of these rules.
- (b) References. See Sections 28-103.9, 28-103.10, 28-113.1 to 28-113.4 and 28-114.1 to 28-114.4 and Chapter 3 of title 27 of the New York City Administrative Code ("Administrative Code"), and section 4000-01 of these rules.