

## NEW YORK CITY DEPARTMENT OF BUILDINGS

### Notice of Public Hearing and Opportunity to Comment on Proposed Rules

**What are we proposing?** The Department of Buildings (DOB) is proposing to amend section 103-07 of Title 1 of the Rules of the City of New York relating to energy audits and retro-commissioning and to correct a cross-reference in section 102-03 of Title 1 of the Rules of the City of New York.

**When and where is the hearing?** DOB will hold a public hearing on the proposed rule. The public hearing will take place at 10:00am on 3/12/19. The hearing will be in Spector Hall at 22 Reade Street.

**How do I comment on the proposed rules?** Anyone can comment on the proposed rules by:

- **Website.** You can submit comments to the DOB through the NYC rules website at <http://rules.cityofnewyork.us>.
- **Email.** You can email comments to [dobrules@buildings.nyc.gov](mailto:dobrules@buildings.nyc.gov).
- **Mail.** You can mail comments to the New York City Department of Buildings, Office of the General Counsel, 280 Broadway, 7<sup>th</sup> floor, New York, NY 10007.
- **Fax.** You can fax comments to the New York City Department of Buildings, Office of the General Counsel, at 212-566-3843.
- **Speaking at the hearing.** Anyone who wants to comment on the proposed rule at the public hearing must sign up to speak. You can sign up in the hearing room before the hearing begins on 3/12/19. You can speak for up to three minutes.

**Is there a deadline to submit comments?** Yes, you must submit comments by 3/12/19.

**What if I need assistance to participate in the hearing?** You must tell the Office of the General Counsel if you need a reasonable accommodation of a disability at the hearing. You must tell us if you need a sign language interpreter. You can tell us by mail or email at the addresses given above. You may also tell us by telephone at 212-393-2085. Advance notice is requested to allow sufficient time to arrange the accommodation. Please tell us by 2/26/19.

This location has the following accessibility option(s) available: Wheelchair accessibility.

**Can I review the comments made on the proposed rules?** You can review the comments made online on the proposed rules by going to the website at <http://rules.cityofnewyork.us/>. A few days after the hearing, copies of all comments submitted online, copies of all written comments and a summary of oral comments concerning the proposed rule will be available to the public at the Office of the General Counsel.

**What authorizes DOB to make this rule?** Sections 643 and 1043(a) of the City Charter and Article 308 of Chapter 3 of Title 28 of the New York City Administrative Code authorize DOB to make this proposed rule. This proposed rule was not included in DOB’s regulatory agenda for this Fiscal Year because it was not contemplated when DOB published the agenda.

**Where can I find DOB’s rules?** DOB’s rules are in Title 1 of the Rules of the City of New York.

**What laws govern the rulemaking process?** DOB must meet the requirements of Section 1043 of the City Charter when creating or changing rules. This notice is made according to the requirements of Section 1043(b) of the City Charter.

### Statement of Basis and Purpose

The Department of Buildings is amending sections 103-07 and 102-03 of Title 1 of the Rules of the City of New York.

These amendments:

- Replace the guidelines in the reference section with ANSI-approved standards for procedures required to perform energy audit and retro-commissioning in a uniform manner. These standards detail a baseline process that should be applied to existing buildings. The standards additionally identify the roles and responsibilities of all stakeholders.
- Restrict the approved agency qualifications and registration for the submission of energy efficiency reports to Registered Design Professionals.
- Standardize testing protocols with functional performance testing, reformat testing criteria per base building system type, and clarify current facility requirements and sampling requirements.
- Provide instructions for reporting of buildings on different blocks with shared base building systems and multiple covered buildings that are part of a cooperative corporation, requesting an extension of time to file report, comprehensive reviews, and challenges to violations.
- Correct a reference in section 102-03 to an Administrative Code section that has been changed.

The Department of Buildings’ authority for these rules is found in sections 643 and 1043 of the New York City Charter and Article 308 of Chapter 3 of Title 28 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. Subdivision (a) of section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is REPEALED and a new subdivision (a) is added to read as follows:

(a) Definitions. As used in this section, the following terms have the following meanings:

ACCEPTABLE ENERGY EFFICIENCY REPORT (EER). An acceptable EER is a technical energy audit and retro-commissioning report filed by an energy auditor and retro-commissioning agent that meets the requirements of the Administrative Code and this section, as determined by the department.

COMMON AREA. Common area is an area that is not considered a tenant area. Common area typically includes but is not limited to egress corridors, egress stairwells, elevators, lobbies, public restrooms, janitorial closets, shared amenities, storage, mechanical or electrical rooms containing equipment that is owned, maintained and operated by the building owner.

MAJOR EQUIPMENT, SUB-EQUIPMENT AND COMPONENTS. Major equipment is a base building system listed in Table 1:

Table 1 – Major Equipment

	<u>Group R occupancies</u>	<u>All occupancies other than Group R</u>
<u>Boilers</u>	<u>All boilers greater than or equal to 300,000 BTU/hr</u>	
<u>Chillers</u>	<u>All chillers</u>	<u>All chillers</u>
<u>Cooling Towers</u>	<u>All cooling towers</u>	<u>All cooling towers</u>
<u>Air Handling Units, A/C Units, Heating and Ventilation Units, Packaged and split A/C Units</u>	<u>Greater than or equal to 2,500 CFMs</u>	<u>Greater than or equal to 5,000 CFMs</u>
<u>HVAC motors (fans and pumps)</u>	<u>Greater than or equal to 2.5HP</u>	<u>Greater than or equal to 5 HP</u>
<u>Heat exchangers</u>	<u>Serving 10,000 square feet or more</u>	
<u>Domestic hot water heaters</u>	<u>Serving 10,000 square feet or more</u>	
<u>Water pumps</u>	<u>Greater than or equal to 10 HP</u>	<u>Greater than or equal to 10 HP</u>

Sub-equipment and components of the associated major equipment are listed in Table 2:

Table 2 – Sub-Equipment and Components of the Major Equipment

<u>Sub-equipment and Components</u>
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<u>Existing cabinets/casing</u>	<u>Valves</u>	<u>Grilles</u>
<u>Terminal units</u>	<u>Actuators</u>	<u>Filters</u>
<u>Access doors</u>	<u>Dampers</u>	<u>Outlets</u>
<u>Control panels</u>	<u>Chilled or hot water coils</u>	<u>Fans and motors</u>
<u>Controls</u>	<u>Steam or DX coils</u>	<u>VFDs</u>
<u>Interlocks</u>	<u>Belts</u>	<u>Refrigeration</u>
<u>Electrical/mechanical switches</u>	<u>VAV boxes</u>	<u>Piping</u>
<u>Ductwork</u>	<u>Steam traps</u>	<u>Operating and Modulating Pressure Controls</u>

NON-COMMON AREA. Non-common area is an area of a dwelling unit, usable square footage of a leased space, space occupied by the owner that would otherwise be leased by the tenant such as a classroom or hotel room, or an occupiable tenant space.

§ 2. Subdivision (b) of section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:

- (b) References. Energy audit: Article 308 of Chapter 3 of Title 28 of the New York City Administrative Code [“Article 308”] (Article 308); American Society of Heating, Refrigerating and Air-conditioning Engineers Inc. [“ASHRAE”] Procedures for Commercial Building Energy Audits, 2011 edition] (“ASHRAE”) Standard for Commercial Building Energy Audits – ASHRAE 211-2018 (American National Standards Institute (ANSI) approved/Air Conditioning Contractors of America (ACCA) co-sponsored).

Retro-commissioning: Article 308; National Environmental Balancing Bureau (NEBB) Standard S120-2016 – Technical Retro-Commissioning of Existing Buildings (ANSI approved).

§ 3. Subdivision (c) of section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is REPEALED and a new subdivision (c) is added to read as follows:

- (c) Energy auditor and retro-commissioning agent qualifications.

(1) The energy auditor performing or supervising the audit may not be on the staff of the building being audited. The energy auditor must be a registered design professional, and the energy auditor or an individual under the direct supervision of the energy auditor must be one of the following:

- (i) a Certified Energy Manager or Certified Energy Auditor, certified by the Association of Energy Engineers (AEE);
- (ii) a High-Performance Building Design Professional certified by ASHRAE;
- (iii) a Building Energy Assessment Professional certified by ASHRAE; or

- (iv) for audits of multifamily residential buildings only, a Multifamily Building Analyst, certified by the Building Performance Institute.
- (2) The retro-commissioning agent performing or supervising the retro-commissioning may not be on the staff of the building being retro-commissioned. The retro-commissioning agent must be a registered design professional, a certified Refrigerating System Operating Engineer, or a licensed High Pressure Boiler Operating Engineer. In addition, the retro-commissioning agent or an individual under the direct supervision of the retro-commissioning agent must be one of the following:
  - (i) a Certified Commissioning Professional certified by the Building Commissioning Association;
  - (ii) a Certified Building Commissioning Professional certified by the AEE;
  - (iii) an Existing Building Commissioning Professional as certified by the AEE;
  - (iv) a Commissioning Process Management Professional certified by ASHRAE;
  - (v) an Accredited Commissioning Process Authority Professional approved by the University of Wisconsin;
  - (vi) a Certified Commissioning Authority certified by the Associated Air Balance Council Commissioning Group;
  - (vii) a Building Commissioning Professional certified by ASHRAE;
  - (viii) a Commissioning Process Professional certified by NEBB; or
  - (ix) a Technical Retro-Commissioning Certified Professional certified by NEBB.

§ 4. Subdivisions (d) and (e) of section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York are amended to read as follows:

- (d) Energy [Audit Procedures] audit procedures. An energy audit must be performed on the base building systems of a covered building prior to filing an [energy efficiency report] EER. The scope of such energy audit must be at a minimum equivalent to the procedures, requirements, and reporting described for a Level 2 [Energy Survey and Analysis in accordance with *Procedures for Commercial Building Energy Audits*, 2011 edition,] energy audit in accordance with ANSI/ASHRAE/ACCA Standard 211-2018 – Standard for Commercial Building Energy Audits, published by [the American Society of Heating, Refrigerating and Air-conditioning Engineers, Inc. (ASHRAE)]. [The building’s operations and maintenance staff must be consulted at the start of and during the energy audit process in order to establish the current facility requirements.]
- (e) Contents of [Energy Audit Report] the energy audit report. An audit report must be prepared for the owner that is at a minimum equivalent to the report prescribed by [ASHRAE *Procedures for*

Commercial Building Energy Audits, 2011 edition] ANSI/ASHRAE/ACCA Standard 211-2018, or any subsequent, edition – Standard for Commercial Building Energy Audits, published by ASHRAE, and must include the information required by § 28-308.2 of the Administrative Code. The table of contents of the audit report must match the Level 2 energy audit report outline in Informative Annex D of standard 211-2018, or subsequent edition. Such report must be retained by the owner in accordance with subdivision (j) of this section. The energy auditor must certify that the audit satisfies the requirements of § 28-308.2 of the Administrative Code and this [rule] section. The energy audit report and certification form must be uploaded through the web-based Energy Audit template tool.

§ 5. The opening paragraph of Subdivision (f) of Section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:

- (f) Retro-commissioning procedures. The base building system components subject to retro-commissioning as per § 28-308.3 of the Administrative Code must be assessed in accordance with NEBB Standard S120-2016, or any subsequent edition – Technical Retro-Commissioning of Existing Buildings and § 28-308.3 of the Administrative Code, including the testing protocols, master list of findings and repairs and deficiencies corrected, and this section. Deficiencies found in the assessment must be corrected, prior to submission of the EER, as required by this subdivision. [Notwithstanding the particular provisions of this subdivision, where less than ninety percent of components tested in the initial sample set is found to be satisfactory, corrections may be made to all similar system components without further testing. The building’s operations and maintenance staff must be consulted at the start of and during the retro-commissioning process in order to establish the current facility requirements.]

The Current Facility Requirements (CFR) will be the following for all space uses served by a base building system, unless the agent provides acceptable rationale demonstrating otherwise. Acceptable rationale must be documented and can include needs of a space use as defined by owner interviews, tenant leasing requirements, and tenant controlled set points and setbacks. As acceptable to the department, CFR must be justified by references including ASHRAE fundamentals, heating, ventilation, and air conditioning (HVAC) systems and equipment, and applications handbooks, ANSI references, Illuminating Engineering Society (IES) lighting handbook, New York City Housing Maintenance Code (HMC), New York City Building Code (BC) and/or manufacturer’s guidelines. Acceptable rationale does not include needs as a result of deficient equipment or historic operations.

- Winter indoor space temperatures should be between 68 and 76 degrees F and summer indoor space temperatures should be between 72 and 80 degrees F during occupied periods of time.
- Operating steam system pressure (cut-out setting) should not be more than 3 psig for low pressure steam heated buildings.
- Domestic hot water is stored and delivered per the HMC for Group R occupancies and per the New York City Plumbing Code requirements for all other occupancies.

- Minimum outside air requirements are met in areas with mechanical supply ventilation per the design and/or New York City Mechanical Code effective at the time of installation of the major equipment.
- Lighting levels (foot candles) are in accordance with the BC and HMC for all egress lighting including common laundry rooms and in accordance with IES lighting handbook for all other space use types in the common areas.
- Daily, weekly, and seasonal operating hours, including occupied and non-occupied hours, of the building and base building systems.
- A description of the current space use of base building areas.
- A copy of the most recent Certificate of Occupancy and any changes in space use that impact the heating, cooling, ventilation, or domestic hot water systems.

Retro-commissioning agent must consider the following to develop, document, and define the CFR:

- Age of facility.
- Interviews with owners, facility manager, and occupants.
- Available design or as-built drawings.
- Lease terms with regard to energy usage.

§ 6. Paragraphs (1) and (2) of subdivision (f) of Section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York are REPEALED and new paragraphs (1), (2), (3), (4) and (5) are added to read as follows:

- (1) HVAC and service water equipment.
  - (i) Pre-testing verification. An inspection, documented through pre-test verification forms, of all major equipment and its sub-equipment and components located in common areas and 10% of accessible non-common areas must be conducted to check for cleanliness and proper operation. Such inspection ensures that the system is able to be tested. Where major equipment, sub-equipment, and components are found to require cleaning, repair or correction for proper operation, correct all deficiencies prior conducting functional performance testing and document the post correction condition in the retro-commissioning report under issues log.
  - (ii) Functional performance testing. Performance verification through functional performance testing for all major equipment located in the common areas must be performed during normal operations. Functional performance testing includes but

is not limited to all controls, actuation, automation and sequencing functions impacting energy consumption of the major equipment such as control sequence of operation, economizer function, staging and load distribution, automatic reset function and integrated system level testing. The functional performance test process and results must be reported on forms acceptable to the department. Proper function must be determined from field observation and may include interviews with facility staff, trend analysis, or dedicated data loggers. Where equipment requires correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report. Completed functional performance test forms must be included in the retro-commissioning report.

- (iii) Temperature and pressure setpoints and setbacks. All major equipment and its sub-equipment and components in all common areas and all major equipment and its sub-equipment and components in 10% of the non-common areas must be tested to verify that such system set points are appropriate to the CFR and setbacks operate during unoccupied periods as stated by the CFR. Where set points and setbacks require correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.
- (iv) Sensors. Sensors include the following in Table 3 below, if present and serving major equipment(s).

Table 3 – Critical and Monitoring Sensors Associated with Major Equipment

<u>AHU/FCU/H&amp;V/AC/RTU</u>	<u>BOILER</u>	<u>COOLING TOWER</u>	<u>CHILLER</u>
<u>OA temp</u>	<u>OA temp</u>	<u>OA temp</u>	<u>OA temp</u>
<u>Discharge Air Temp</u>	<u>Return temp</u>	<u>Inlet water temp</u>	<u>Evap. water temp in</u>
<u>Mixed Air Temp</u>	<u>Supply Temp</u>	<u>Outlet water temp</u>	<u>Evap. water temp out</u>
<u>Return Air Temp</u>	<u>System Pressures (Steam Boilers)</u>	<u>System Pressures</u>	<u>Cond water temp in</u>
<u>Static Pressure</u>	<u>Indoor Zone Temp</u>	<u>Dry bulb sensor</u>	<u>Cond water temp out</u>
<u>Zone Temp</u>	-	<u>Wet bulb</u>	<u>Zone temp and System Pressures</u>

- (A) All critical sensors that are part of a control sequence and have direct control of major equipment within the common area must be tested for proper calibration. Proper calibration must be supported by an industry acceptable reference or manufacturer’s guidelines. Where sensors require correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.
- (B) For monitoring sensors that are not part of a control sequence, a sample set constituting 10% of all monitoring sensors within the common area,



but in no event fewer than ten individual sensors, must be tested for proper calibration. Proper calibration must be supported by an industry acceptable reference or manufacturer’s guidelines. If more than 80% of the sample set is found to be satisfactory, then no further sampling is required for the purposes of the retro-commissioning report. If less than 80% of the sample set is found to be satisfactory, then all monitoring sensors must be tested for proper calibration. Where sensors require correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.

(v) Simultaneous heating and cooling. All major equipment air handling units must be tested to verify that simultaneous heating and cooling is not occurring, unless intended. Where unintended simultaneous cooling and heating is occurring, the condition must be corrected and post correction condition must be documented in the retro-commissioning report.

(vi) Boilers tuned for optimal efficiency. A combustion efficiency test must be conducted for each major equipment boiler (includes H-stamped domestic hot water heater). Each boiler must be tuned and cleaned to perform as per manufacturer’s guidelines for combustion efficiency (%), oxygen (%), carbon dioxide (%), ambient air temperature (degrees F), stack temperature (degrees F), carbon monoxide (ppm), and smoke number. If manufacturer’s guidelines are not available, cleaning and tuning must be conducted to meet the requirements in Table 4 below at high and low fire rates for the dominant fuel type. Retro-commissioning agent must submit warranty, equipment manual, or a letter from the manufacturer if the boiler cannot be tested or tuned to the required optimum operating parameters. Results (Actual print-outs directly obtained from the calibrated combustion analyzer) of the combustion efficiency test must be included in the retro-commissioning report.

Table 4 – Acceptable Range for Combustion Efficiency Test Results

	<u>Residential/Commercial Gas Fired</u>			<u>Oil Fired Power Burners</u>	<u>Condensing Boilers</u>	<u>Gas/Oil Low Fire</u>
	<u>Atmospheric Boilers</u>	<u>Fan Assist Boilers</u>	<u>Power Burners</u>	<u>Commercial Boilers</u>		
<u>Combustion efficiency</u>	<u>80%</u>	<u>80%</u>	<u>80%</u>	<u>83%</u>	<u>Per manufacturer requirements</u>	<u>Per manufacturer requirements</u>
<u>Oxygen (%)</u>	<u>6% to 9%</u>	<u>6% to 9%</u>	<u>3% to 6%</u>	<u>4% to 6%</u>	<u>Per manufacture requirements</u>	<u>Per manufacture requirements</u>
<u>Stack temperature</u>	<u>450* to 550* or 270* + air</u>	<u>325* to 450* or</u>	<u>270* + water/</u>	<u>325* to 425*</u>	<u>Per manufacturer</u>	<u>Per manufacturer</u>

<u>(deg. F)</u>	<u>or water temp</u>	<u>170* + air or water temp</u>	<u>steam temp</u>		<u>requirements</u>	<u>requirements</u>
<u>Carbon Monoxide (ppm) Air Free</u>	<u>&lt;50 ppm</u>	<u>&lt;50 ppm</u>	<u>&lt;100 ppm</u>	<u>&lt;100 ppm</u>	<u>Per manufacturer requirements</u>	<u>Per manufacturer requirements</u>
<u>Smoke number</u>	<u>=</u>	<u>=</u>	<u>=</u>	<u>Zero or Per manufacturer requirements</u>	<u>Per manufacturer requirements</u>	<u>Per manufacturer requirements</u>

(vii) Manual override remediation. The retro-commissioning agent must confirm that major equipment is not being manually operated. Where a manual override condition exists, it must be noted as a deficiency to be corrected, and the post-correction condition must be documented in the retro-commissioning report.

(viii) Leaks. Major equipment and its sub-equipment and components in all common areas and 10% of the accessible non-common areas must be checked for water, refrigerant, oil, or air leaks. These checks do not include duct tightness testing. All leaks identified must be repaired, and the post correction condition must be documented in the retro-commissioning report.

(2) HVAC and service water distribution.

(i) Pipe insulation. All exposed pipes three inches or greater in diameter, pipe fittings, and associated valves located in the common areas and 10% of the non-common areas, containing steam or fluid outside the operating temperature range of 60 degrees F and 105 degrees F must be thermally insulated in accordance with the New York City Energy Conservation Code and noted on the retro-commissioning report.

Exception: Existing insulation with asbestos containing materials is not required to be removed or replaced for the purposes of the retro-commissioning report. The condition must be noted on the retro-commissioning report and correction of such condition is not required.

(ii) High pressure steam traps. All steam traps at or above 15 PSI must either be tested using ultrasonic leak detection to verify proper operations or replaced. All steam traps found to be functioning improperly must be replaced, repaired or rebuilt, and the condition must be noted on the retro-commissioning report.

(iii) One-pipe steam distribution.

(A) All one-pipe steam distribution systems serving major equipment must have steam traveling from the steam header to the end of each main loop

vent(s) within five minutes. Agents must test using temperature sensors, data loggers, or thermo-couples that provide an output of timestamps and surface temperature readings. At the beginning of each test, the temperature at the end of the main must be 140 degrees or less. At the end of the test, the end of the main must be 195 degrees or more.

(B) The time at which the header reaches at least 195 degrees and the end of each main loop vent(s) reaching at least 195 degrees must not exceed five minutes. A temperature (degrees F) vs. time (minutes) curve to be plotted and all data points logged used to plot this curve must be provided in a tabular format. Data points must include time from the start of the test until the steam reaches the header and then to the end of all main loops.

(C) The retro-commissioning agent must provide a schematic drawing of the steam piping distribution in the common area. This drawing should locate the boiler, supply lines, header and main line vents.

(iv) Two-pipe steam distribution. All two pipe steam distribution systems serving major equipment must meet one of the three requirements below. If the work required is so extensive that it would require more time than available to meet the compliance deadline, the condition may be corrected within two years of submitting the retro-commissioning report to the department and must be noted in the report.

(A) All steam traps in the common areas and 50% of steam traps in the non-common areas must be tested to verify for proper function. If less than 80% of the sample set is found to be functioning properly, then all areas served by the two pipe steam distribution system must be tested to verify the steam traps are functioning properly. All steam traps found to be functioning improperly must be replaced, repaired, rebuilt, or removed and the post correction condition must be documented in the retro-commissioning report.

(B) If all steam traps in the common areas and 50% of steam traps in the non-common areas have been replaced and/or tested and verified as functioning properly, within the last five years from the date the EER is due, and supporting documentation can be provided, then no further action is required.

(C) The supply and return piping surface temperatures must have a differential of more than 30 degrees. The temperature reading must be made by a temperature sensor or data logger insulated and located on the main return piping, on the inlet of a vacuum pump or feed pump if present. This test cannot be performed on systems with master traps or double steam traps. The sensors or data loggers must provide readings during two consecutive cycles of the boiler where each cycle last at least 45 minutes.

- (v) Air-side distribution. All dampers, fans, actuators and controls associated with air-side distribution serving major equipment must be functionally tested for proper operation as per CFR. Where deficiency is identified, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report. Completed functional performance test forms must be included in the retro-commissioning report.
- (vi) Water-side distribution. All valves on coils, automatic isolation valves at pumps, actuators and controls associated with water-side distribution serving major equipment must be functionally tested for proper operation as per CFR. Where deficiency is identified, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report. Completed functional performance test forms must be included in the retro-commissioning report.
- (vii) Domestic hot water system temperature settings. All storage and delivery hot water temperatures of major equipment hot water heaters must be checked to verify that the water temperature settings are appropriate for the CFR. Where the temperature settings are found to require correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.
- (viii) Mechanical ventilation rates. A sample set constituting 10% of all mechanical outdoor air intakes, but in no event fewer than three outdoor air intakes, must be measured to verify that the flow rates are appropriate for the CFR. If more than 80% of the sample set is found to be appropriate, then no further sampling is required for the purposes of the retro-commissioning report. If less than 80% of the sample set is found to be appropriate, then all mechanical outdoor air intakes serving base building systems must be measured. Where flow rates require correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.

(3) Lighting system.

- (i) Light levels. Lighting levels (foot candles) in the common areas must comply with the CFR. The sample set should include 10% of each area of different use. Where the light levels are found to require correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.
- (ii) Sensors and controls. All common area lighting systems and exterior lighting systems must be checked to verify that the lighting sensors and controls are functioning properly. Where lighting sensors and controls are found to require correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.

(4) Envelope.

(i) Sealants and weather-stripping. An inspection must be conducted in common areas and 10% of non-common areas to confirm that accessible sealants and weather stripping are installed around doors, windows, conduits, piping, joints, and other areas of potential major air infiltration and in good condition. Where any sealant or weather stripping is found to require correction, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.

Exception: Sealants and weather stripping with asbestos containing materials shall not be required to be removed or replaced for the purposes of retro-commissioning. The condition must be noted on the retro-commissioning report and correction of such condition is not required.

(ii) Windows and doors. An inspection must be conducted in common areas to confirm that all windows and doors are in good condition and not broken resulting in air infiltration. Where any door or window is allowing for air infiltration, the condition must be corrected and the post correction condition must be documented in the retro-commissioning report.

(5) Training and documentation. On-site documentation in accordance with § 28-308.3(3) of the Administrative Code must be verified and noted on the retro-commissioning report. Training of critical operations and maintenance staff on the energy conservation techniques and preventative maintenance schedules, based on manufacturer's guidelines or recognized industry standards, for all major equipment and sub-systems must be documented in the retro-commissioning report.

§ 7. Subdivisions (g), (h) and (i) of Section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York are amended to read as follows:

(g) Contents of the retro-commissioning report. In accordance with § 28-308.3.1 of the Administrative Code, the retro-commissioning agent must prepare and certify a retro-commissioning report that satisfies the requirements of § 28-308.3 of the Administrative Code and this rule. In establishing the table of contents, the retro-commissioning agent shall refer to "K. Informative Appendix – Retro-Commissioning Report" of the NEBB Standard S120-2016, or any subsequent edition – Technical Retro-Commissioning of Existing Buildings as guidelines until a final retro-commissioning report outline is prescribed by the department. Such report must include the model number, serial number, last calibration date and manufacturer recommended calibration frequency for each reference instrument used for functional performance testing. The report must also include photos of deficiencies and repairs. All photos must include a timestamp visible on the front of the photo within the report. Calibration certificates and additional photos must be provided, if requested by the department. The retro-commissioning report must be uploaded through the web-based Energy Audit template tool when submitting to the department. Such report must be retained by the owner in accordance with subdivision (j) of this section.

- (h) Contents of [Energy Efficiency Report] the EER. An [Energy Efficiency Report] EER in accordance with § 28-308.5 of the Administrative Code must be submitted to the department in accordance with § 28-308.4 of the Administrative Code on forms prescribed by the department. The EER must include the Deep Energy Retrofit Plan Analysis tool when submitted to the department. The results of this tool must also be presented to the owner prior submitting to the department.
- (i) Multiple buildings.
- (1) Multiple buildings on a lot. Two or more buildings on a lot that constitute a covered building in accordance with § 28-308.1 of the Administrative Code are subject to an energy audit and retro-commissioning of base building systems as follows:
    - (i) Multiple buildings on a covered lot that are equipped with base building systems that are wholly separate from each other are subject to the requirements for an EER for each individual building.
    - (ii) Multiple buildings on a covered lot that share base building systems are subject to the requirements for an EER for each grouping of buildings that share base building systems.
  - (2) Multiple buildings on multiple tax lots that share systems. Two or more buildings on more than one tax lot that share base building systems are subject to the requirements for an EER for each grouping of buildings that share base building systems.
  - (3) Buildings on different blocks with shared base building systems. Two or more buildings on separate blocks that constitute a covered building in accordance with § 28-308.1 of the Administrative Code are subject to the requirements for an EER for each grouping of buildings that share base building systems. The due date for the EER will be in the calendar year with a final digit that is the same as the last digit of the block number that is highest or with respect to a city building as defined in § 28-308.1 of the Administrative Code in accordance with the schedule of the Department of Citywide Administrative Services. The owner must notify the department by December 31 of the year in which the earliest covered building is due to comply, out of all covered buildings on different blocks with shared base building system(s), through the form prescribed by the department.
  - (4) Multiple covered buildings under cooperative corporations. A cooperative corporation that owns multiple covered buildings located on different tax block numbers that is required to file an EER for more than one covered building in different calendar years, may consolidate all such EERs into one report, disaggregated by covered building, due no later than the year in which the last EER would be due, which shall be accepted by the department in satisfaction of the requirements of this section for each covered building included in such consolidated report. The owner must notify the department by December 31 of the year in which the earliest covered building is due to comply through the form prescribed by the department.

§ 8. Subdivision (l) of Section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:

- (l) Extension of time to file report.
  - (1) An owner may apply for an extension of time to file an [energy efficiency report] EER if, despite good faith efforts, the owner is unable to complete the required energy audit and retro-commissioning prior to the due date of the report, for reasons other than financial hardship of the building. The application must be on a form provided by the department and must be filed by [October 1] December 31 of the year in which the report is due.
  - (2) An owner may apply for annual extensions of time to file an [energy efficiency report] EER based on the financial hardship of the building. The application must be on a form provided by the department and must be filed by October 1 of the year in which the report is due and by [October 1] December 31 of every subsequent year for which an extension is requested.

§ 9. Subdivisions (m) and (n) of Section 103-07 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York are relettered subdivisions (n) and (o) and amended and a new subdivision (m) is added to read as follows:

- (m) EER under comprehensive review. A violation will be issued if an EER submission that is chosen for comprehensive review fails to resolve all issued objections within two years from the date of issuance of the first Notice of Objections. Such EER submission shall be subject to a penalty for failure to submit an acceptable EER in accordance with subdivision (n) of this section.
- (n) Violation and penalty. Failure to submit an acceptable EER is a Major (Class 2) violation which may result in a penalty of \$3,000 in the first year and \$5,000 for each additional year until the EER is submitted to the department. The department will not accept any outstanding EER submission if outstanding penalties are not paid in full.
- (o) Challenge to violations.
  - (1) An owner may challenge a violation issued pursuant to this section by providing:
    - (i) proof from the Department of Finance that the building in question is not a “covered building” as defined in section 28-308.1 of the Administrative Code; or
    - (ii) proof of early compliance with the filing requirements pursuant to section 28-308.7 of the Administrative Code; or
    - ~~(xi)~~ (iii) proof that the building [is less than ten years old at the start of its first assigned calendar year] is a new building (NB) with a first temporary certificate of occupancy less than ten years old at the time the building was due to comply; or

[(xii)] (iv) proof that the [base building systems underwent substantial rehabilitation within the preceding ten years] application to defer filing an EER was approved;  
or

[(xiii)] (v) proof that the owner was granted an extension of time to file the report.

- (2) Such challenge must be made in writing on a form provided by the [Department] department within thirty days from the postmark date of the violation served by the [Department] department.

§ 10. The opening paragraph of Subdivision (d) and subdivision (f) of Section 102-03 of Subchapter B of Chapter 100 of Title 1 of the Rules of the City of New York are amended to read as follows:

- (d) Report. The registered design professional must sign, seal, and submit to the department the report of the inspection required by section [28-216.12.1] 28-217.1 of the Administrative Code and subdivision b of this section. The registered design professional must also submit a filing fee as specified in 1 RCNY § 101-03, and must send a copy of the report to the owner. The report must include, but need not be limited to, the following information:
- (f) Civil penalties. In addition to any other penalties authorized by law, failure to file a report pursuant to the requirements of section [28-216.12.1] 28-217.1 and this section will result in a civil penalty of \$3,000 for each violation of such section, payable to the department.



NEW YORK CITY LAW DEPARTMENT  
DIVISION OF LEGAL COUNSEL  
100 CHURCH STREET  
NEW YORK, NY 10007  
212-356-4028

CERTIFICATION PURSUANT TO  
CHARTER §1043(d)

**RULE TITLE:** Amendment of rules regarding energy audits and retro-commissioning and to correct a cross-reference in section 102-03 of Title 1 of the Rules of the City of New York.

**REFERENCE NUMBER:** 2018 RG 131

**RULEMAKING AGENCY:** Department of Buildings

I certify that this office has reviewed the above-referenced proposed rule as required by section 1043(d) of the New York City Charter, and that the above-referenced proposed rule:

- (i) is drafted so as to accomplish the purpose of the authorizing provisions of law;
- (ii) is not in conflict with other applicable rules;
- (iii) to the extent practicable and appropriate, is narrowly drawn to achieve its stated purpose; and
- (iv) to the extent practicable and appropriate, contains a statement of basis and purpose that provides a clear explanation of the rule and the requirements imposed by the rule.

/s/ STEVEN GOULDEN  
Acting Corporation Counsel

Date: 1/8/19

NEW YORK CITY MAYOR'S OFFICE OF OPERATIONS  
253 BROADWAY, 10<sup>th</sup> FLOOR  
NEW YORK, NY 10007  
212-788-1400

CERTIFICATION / ANALYSIS  
PURSUANT TO CHARTER SECTION 1043(d)

**RULE TITLE:** Amendment of rules regarding energy audits and retro-commissioning and to correct a cross-reference in section 102-03 of Title 1 of the Rules of the City of New York.

**REFERENCE NUMBER:** DOB 117

**RULEMAKING AGENCY:** Department of Buildings

I certify that this office has analyzed the proposed rule referenced above as required by Section 1043(d) of the New York City Charter, and that the proposed rule referenced above:

- (i) Is understandable and written in plain language for the discrete regulated community or communities;
- (ii) Minimizes compliance costs for the discrete regulated community or communities consistent with achieving the stated purpose of the rule; and
- (iii) Does not provide a cure period because it does not establish a violation, modification of a violation, or modification of the penalties associated with a violation.

/s/ Mia Therese Jamili  
Mayor's Office of Operations

January 9, 2019  
Date