# NEW YORK CITY DEPARTMENT OF BUILDINGS NOTICE OF ADOPTION OF RULE

**NOTICE IS HEREBY GIVEN**, pursuant to the authority vested in the Commissioner of Buildings by section 643 of the New York City Charter, and in accordance with the requirements of Section 1043 of the New York City Charter, DOB is making amendments to section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York.

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Dated:	12/12/23	lel

James S. Oddo Commissioner

New York, New York

## **Statement of Basis and Purpose**

The Department of Buildings ("DOB" or "Department") is amending section 103-14 to establish penalties for noncompliance with Article 320 of Chapter 3 of Title 28 of the New York City Administrative Code requiring annual greenhouse gas (GHG) emissions limits for buildings and to establish a credit for beneficial electrification.

## **Background and Overview of Rule**

This rule implements Article 320 of Title 28 of the Administrative Code of the City of New York. First, it sets forth the framework for assessing penalties and issuing mediated resolutions under Article 320. Second, it establishes credits for owners who undertake beneficial electrification. Third, it establishes the emission factor for certain natural gas fuel cells, and makes various technical amendments.

## Article 320 Penalties

Local Law No. 97 of 2019 ("Local Law No. 97" or the "Law") was enacted in 2019 to achieve New York City's urgent goal of reducing GHG emissions from the city's largest buildings (25,000 gross square feet or more). The law establishes annual GHG emissions limits for each type of building and requires the owners of such buildings to report the building's actual GHG emissions to the Department each year for the preceding calendar year beginning on May 1, 2025. If a building exceeds applicable annual GHG emissions limits, an owner may be subject to civil penalties. To achieve compliance with the law, owners of buildings subject to the law must calculate their building emissions during the calendar year; identify when the building will exceed the emissions limit; plan any work that is necessary to achieve emissions reductions; assemble service providers to perform the work; finance the work by identifying and attaining available funding; and implement the work.

The Law directs that "good faith efforts" undertaken to comply with the law be considered when determining the appropriate penalty for non-compliance. This provision reflects the Law's recognition that compliance with the emissions limits requires significant investments of time and other resources. While nearly half of all buildings that were projected in 2019 to be out of compliance with the Law's 2024 emissions limit are now in compliance based on recent benchmarking data submitted pursuant to Local Law 84 of 2009, DOB also recognizes that buildings that remain out of compliance vary greatly in terms of the kinds of work that will be necessary to comply with the Law. Further, DOB recognizes that the years since the enactment of Local Law 97 included the pandemic and a period of necessary implementation activity by the Department.

In line with the Law's direction to consider "good faith efforts," this rule provides a definition of "good faith efforts" for the 2024-2029 compliance period. Owners who have not yet accomplished the level of work necessary to comply with the emissions limit, may submit a decarbonization plan no later than May 1, 2025, setting forth a path for compliance, provided they meet the additional eligibility criteria set forth in the rule. In addition, owners who have received approval from the Department for the work necessary to comply with the emissions limit and owners that

demonstrate that the building is undergoing work to achieve electric readiness are eligible for a mitigated penalty. The rule sets forth additional efforts and circumstances that qualify as "good faith efforts" for the purposes of a mitigated penalty. It also provides a mechanism for the Department to enter into a mediated resolution with a building owner prior to issuance of an administrative summons.

While this rule defines "good faith efforts" for the purposes of the 2024-2029 compliance period, future rulemaking will lay out a definition of "good faith efforts" for subsequent periods that will be different. In general, compliance with Local Law 97 requires multiple years of planning and implementation, which means that any good faith effort to comply with the 2030-2034 emissions limits will require owners to take steps to comply with such limit well in advance of 2030. This also applies to the many buildings that are estimated today to be in compliance with the 2024 – 2029 emissions limit, but with current energy patterns will fall out of compliance with the more stringent limits in 2030.

Accordingly, while the decarbonization plan described in this rule provides a mechanism for obtaining a mitigated penalty in the 2024-2029 compliance period, it may also serve as a roadmap outlining the necessary steps that buildings currently in compliance with the 2024-2029 emissions limits should take to work toward compliance with the 2030-2034 emissions limits. This means, for example, a building owner should be working on a decarbonization plan, seeking relevant financing and incorporating the work into its budgets, and engaging contractors and seeking permit approvals. The timing for these actions, however, must be well in advance of the 2030 deadline, with appropriate time allowed to reasonably achieve compliance with the new limits. Furthermore, a building that needs to undergo electrification readiness should already be engaged in such work with a utility company.

This rule addresses penalties for noncompliance with the Law, including the following:

- Establishes the penalty for failure to file the annual building emissions report by May 1 of each year set to the maximum amount allowed by the Law;
- Establishes the penalty for exceeding building emissions limits set to the maximum amount allowed by the Law;
- Details factors that may mitigate a building owner's penalty amount during the 2024-2029 compliance period, including an unforeseeable event and good faith efforts;
- Defines requirements for "Good Faith Efforts" for the 2024-2029 compliance period, which include:
  - Submitting the annual building emissions report and maintaining compliance with any adjustment DOB has granted,
  - o Complying with LL 84 of 2009, as amended Energy Benchmarking,
  - Complying with LL 88 of 2009, as amended Lighting Upgrades and Sub-meter Installation,
  - AND any of the following:

- Demonstrating that work necessary to achieve compliance is currently underway by having a fully approved application and a permit issued for such work;
- Demonstrating that electrification readiness work is underway by securing an approved alteration application and a letter from a utility attesting to the work:
- Demonstrating that the building was previously under the emissions limit for the previous reporting year;
- Demonstrating that the building is a critical facility like a hospital whose services would be significantly impacted if they have to pay the full penalty;
- Demonstrating that the building has applied for or been granted an Adjustment pursuant to section 28-320.7 of the Administrative Code; or
- Providing a Decarbonization Plan by May 1, 2025 that will bring the building into compliance with its 2024 limits no later than 2026 and with its 2030 limits no later than 2030, and demonstrating each year through 2030 that the work is proceeding on schedule.
- Establishes a 100% limitation on the purchase of renewable energy credits (RECs) for building owners who pursue the Decarbonization Plan path;
- Details the enforcement framework for resolution of penalties for building owners who don't comply with the law; and
- Provides a framework for mediated resolutions.

# Beneficial Electrification

Section 28-320.2 of the Administrative Code directs the Advisory Board to develop a methodology that includes a credit for beneficial electrification. This rule implements the Advisory Board's recommendation by adopting such a credit that will incentivize covered buildings to undertake electrification efforts early.

This rule addresses compliance with the Law, including the following:

- Defines beneficial electrification; and
- Provides a formula for calculating emissions from qualifying equipment for beneficial electrification.

# Additional Changes

This rule makes additional changes to enhance compliance with the Law, including the following:

- Clarifies Energy Star Portfolio Manager (ESPM) property types to include successor names of property types listed in the rule and prohibits the use of certain ESPM property types;
- Clarifies that one method must be applied for calculating building emissions;
- Requires that distributed energy resources be submetered;

- Establishes a coefficient for natural gas fuel cells in operation prior to January 19, 2023;
   and
- Updates the title of certain equations in the rule to keep such equations sequential.

The Department received and considered numerous comments during the public comment period, including testimony submitted at the public hearing, and subsequently made changes to the rule, as follows:

- Clarifies technical standards in definitions for "Energy Audit" and "Gross Floor Area";
- Clarifies the first report for covered buildings subject to section 28-320.3.9 of the Administrative Code is due May 1, 2036;
- For the Beneficial Electrification credit, removes limitation that qualifying equipment be installed no earlier than January 1, 2021, and requires owner to maintain monthly energy usage documentation;
- Requires that a decarbonization plan submitted to demonstrate good faith efforts be certified by a registered design professional, clarifies that the energy audit may be no older than four years, and clarifies that the plan must demonstrate how the building will achieve compliance with the applicable emissions limit for each compliance period; and
- Clarifies that a building owner can demonstrate good faith efforts by having work underway even if such work does not require an application with the Department, by providing a signed contract with a service provider and proof of payment.

Several comments asserted that DOB does not have the power to impose mitigated penalties because that power rests with OATH. DOB issues administrative summonses for violations and prosecutes those violations before OATH, including offering recommendations as to the amount of penalties that should be imposed. DOB recognizes that OATH as the adjudicating body has the ultimate responsibility with respect to the amount of the penalty to be imposed and may impose penalties that vary from the amounts recommended by DOB. The rule provides guidance to owners on the work needed to meet the 2024-29 emissions limits, timely meet the 2030 emissions limits, and obtain a mitigated penalty. Other commenters objected that DOB lacks the authority to enter into mediated resolutions. DOB's authority flows from provisions of the Administrative Code that give DOB broad discretion to fashion remedies for enforcement of the code, including alternatives to the issuance of process for the commencement of enforcement proceedings, such as corrective action plans.

A number of comments did not implicate rulemaking, including concerns about financing and staffing levels related to implementation.

The rule was not revised to: remove the decarbonization plan pathway for good faith efforts; further restrict the use of Renewable Energy Credits; or extend the deadlines for compliance. The decarbonization plan requires work at the building level during the first compliance period. This pathway places building owners on a path to compliance by requiring them to demonstrate long-term planning to reach carbon-neutrality by 2050, achieving on-site emissions reductions by 2026, and demonstrating progress towards 2030 compliance by 2028. DOB sees this option as an important driver of building emissions reduction mobilization.

DOB is working to monitor New York's REC market and assess the availability of any RECs that meet the requirements of the law. The Department will revisit this policy as necessary to best achieve the goals of LL97 and associated air quality improvements.

The Department's authority for these rules is found in sections 643 and 1043(a) of the New York City Charter, Article 320 of Chapter 3 of Title 28 of the New York City Administrative Code, and Article 208 of Chapter 2 of Title 28.

# New material is underlined.

[Deleted material is in brackets.]

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

Section 1. Subdivision (a) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to amend the definition of "gross floor area" and add new definitions in alphabetical order to read as follows:

Beneficial electrification: "Beneficial electrification" means the installation and use of energy efficient electric-based heating, cooling and domestic hot water systems to displace the use of fossil fuel sources (e.g., fuel oil, natural gas, district steam) and/or less efficient electric-based heating systems. Qualifying equipment shall have a minimum efficiency as determined based on the reference test procedure associated with the equipment as follows:

Equipment Type	Minimum Efficiency	Test Procedure
Service hot water heat pumps with max current 24A at 250 V	<u>NA</u>	10 CFR Part 430, Subpart B, Appendix E; or other test procedure approved by the Department.
Service hot water heat pumps with Input capacity > 12kW and ≤ 50kW	<u>NA</u>	AHRI 1300-2013; or ASHRAE 118.1-2012; or 10 CFR Part 431.106, Subpart G, Appendix E; or other test procedure approved by the Department.
<u>Unitary heat pump equipment – air source only</u>		AHRI 210/240-2023, or AHRI 340/360-2022, as applicable
Variable refrigerant flow (VRF) multi-split heat pump – air source only	> 1.5 COP @ 5°F outdoor dry bulb (maximum heating capacity)	AHRI 1230-2021
Packaged terminal heat pumps		AHRI 310/380-2017
Single package vertical heat pumps		AHRI 310/380-2017, or AHRI 390-2021, as applicable

Note: Equipment and systems not listed in the table that otherwise meet the definition of beneficial electrification shall have a coefficient of performance (COP) for the system equivalent to greater than 1.5 when the outdoor dry bulb temperature is 5°F or lower, where the COP of the system is calculated based on the energy required for all parts of the system to deliver the peak capacity.

<u>Critical facility</u>. A critical facility means a facility the operation of which is critical to human life or <u>safety</u>, <u>such as a hospital</u>, <u>dialysis clinic</u>, <u>or a facility that manufactures vaccines</u>.

Energy audit. An energy audit is a systematic process of identifying and developing modifications and improvements of the base building systems, including but not limited to alterations of such systems and the installation of new equipment, insulation, or other generally recognized energy efficiency technologies to optimize energy performance of the building and achieve energy savings.

For buildings 50,000 square feet and greater, such process shall not be less stringent than the Level 2 energy audit in accordance with ANSI/ASHRAE/ACCA Standard 211-2018 – Standard for Commercial Building Energy Audits.

For buildings below 50,000 square feet, such process shall not be less stringent than the Level 1 energy audit in accordance with ANSI/ASHRAE/ACCA Standard 211-2018 – Standard for Commercial Building Energy Audits.

**Gross floor area.** Gross floor area is the total area in square feet of all floors and spaces in a covered building, as measured between the exterior surfaces of the enclosing fixed walls. Gross floor area includes vent shafts, elevator shafts, flues, pipe shafts, vertical ducts, stairwells, light wells, basement space, <u>cellar space</u>, mechanical/electrical rooms, and interior parking. Gross floor area does not include unroofed courtyards or unroofed light wells. For atria, gross floor area only includes the area of atrium floors. For the purposes of calculating gross floor area in tenant spaces, interior demising walls should be measured to the centerline of the wall.

Qualified energy auditor. The term qualified energy auditor means a person who holds one of the following credentials in good standing:

- (i) Certified Energy Manager (CEM), certified by the Association of Energy Engineers (AEE);
- (ii) Certified Energy Auditor (CEA), certified by AEE;
- (iii) Certified Measurement and Verification Professional (CMVP), certified by AEE;
- (iv) High Performance Building Design Professional (HBDP), certified by ASHRAE;
- (v) Building Energy Assessment Professional (BEAP), certified by ASHRAE;

- (vi) Multifamily Building Analyst (MFBA), certified by the Building Performance Institute (BPI), for portions of a covered building that are classified by the US EPA's Energy Star Portfolio Manager as a multifamily property type; or
- (vii) Registered Design Professional (RDP).
- § 2. The opening paragraph of subdivision (b) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended, and a new paragraph 8 of such subdivision is added, all to read as follows:
- (b) Reporting. By May 1, 2025, a building emissions report for calendar year 2024, and by May 1 of every year thereafter, except as provided in paragraph 8 of this subdivision, a building emissions report for the previous calendar year <u>is</u> required to be submitted to the Department by the owner of a covered building <u>and</u> must be submitted in accordance with the requirements of this section.

\* \* \*

- (8) Extension for certain income-restricted housing and other covered buildings. The reporting requirement described in the opening paragraph of subdivision b of this section is modified for certain covered buildings as follows:
- (i) For a covered building that has at least 1 but fewer than 35% of dwelling units required by law or by an agreement with a governmental entity to be regulated in accordance with the emergency tenant protection act of 1974, the rent stabilization law of 1969, or the local emergency housing rent control act of 1962, as set forth in section 28-320.3.10.1 of the Administrative Code, the initial report must be submitted by May 1, 2027;
- (ii) For a covered building that is owned by a limited-profit housing company organized under article 2 of the private housing finance law, as set forth in section 28-320.3.9 of the Administrative Code, the initial report must be submitted by May 1, 2036;
- (iii) For a covered building that has at least 1 dwelling unit for which occupancy or initial occupancy is restricted based upon the income of the occupant or prospective occupant thereof as a condition of a loan, grant, tax exemption, tax abatement, or conveyance of property from any state or local governmental agency or instrumentality pursuant to the private housing finance law, the general municipal law, or section 420-c of the real property tax law, as set forth in section 28-320.3.9 of the Administrative Code, the initial report must be submitted by May 1, 2036.

- § 3. Paragraph (2) of subdivision (c) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:
  - (2) The occupancy group for each space in a covered building must be determined according to the [property type in] Energy Star Portfolio Manager (ESPM) property type as set out in this rule, or any successor ESPM name for such property type, that most accurately describes the use of such space during the year for which building emissions are reported, provided that the ESPM property types "Other" and "Mixed Use" may not be assigned to any portion of a covered building. Such determination must be made by the registered design professional preparing the building emissions report.
- § 4. The opening paragraph of subparagraph (i) of paragraph (3) of subdivision (c) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:
  - (i) Except as provided in subparagraph (ii) of this paragraph, for the purposes of reporting for calendar years 2024 2029, the following emissions factors apply to the following Energy Star Portfolio Manager [(EPSM)] (ESPM) property types:
- § 5. Subparagraph (ii) of paragraph (3) of subdivision (c) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:
  - (ii) For purposes of reporting for calendar years 2024 and 2025, an owner may utilize a building emissions intensity limit for an occupancy group set forth in section 28-320.3.1 of the Administrative Code, provided such building emissions intensity limit is greater than the emissions factor assigned pursuant to subparagraph (i) for the ESPM property type that most accurately describes the use of the building or space, as determined in accordance with paragraph (2) of this subdivision. Building emissions must be calculated in accordance with either this subparagraph or subparagraph (i) of this paragraph, and may not be calculated by using a combination of such provisions.
- § 6. The title of the equation in item 2 of clause b of subparagraph (v) of paragraph (3) of subdivision (d) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:

$$g_x = \frac{(m_{ux} \cdot g_{ux}) + (m_{cx} \cdot g_{cx})}{m_{ux} + m_{cx}}$$
 (Equation [103-14.10] 103-14.11)

§ 7. The opening paragraph of subparagraph (vi) of paragraph (3) of subdivision (d) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:

- (vi) GHG coefficients for distributed energy resources. For the purposes of this subparagraph, all distributed energy resources must be separately metered or sub-metered in a manner that produces data for the year being reported.

  Notwithstanding any other provision of this section, the GHG coefficient for the distributed energy resources described in this subparagraph may be determined as follows:
- § 8. Clause a of subparagraph (vi) of paragraph (3) of subdivision (d) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:
  - a. GHG coefficient for certain distributed energy resources. Except as provided in clause b [or c], c or d of this subparagraph, the GHG coefficient for energy generated by distributed energy resources, such as microturbines, combined heat and power generation, and fuel cells, including natural gas-powered fuel cells that commenced operation on or after January 19, 2023, shall be determined in accordance with subparagraph (i) or (ii) of this paragraph, for the energy source used to generate the energy for such distributed energy resource and the calendar year being reported. Where an owner chooses to utilize a utility electricity GHG coefficient based on TOU to account for operation of distributed energy resources, such owner must use a TOU coefficient for all utility electricity consumption for their reporting.
- § 9. Subparagraph (vi) of paragraph (3) of subdivision (d) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended by adding a new clause d to read as follows:
  - d. GHG emissions differential for certain natural gas-powered fuel cells. In reporting annual building emissions, an owner of a covered building that utilizes natural gas-powered fuel cells that commenced operation prior to January 19, 2023 may account for the differential emissions to be added to their annual building emissions, in accordance with this clause. An owner of a covered building must submit to the Department documentation of the natural gas consumed annually by the fuel cell, and the electricity generated by the natural gas-powered fuel cell annually during the calendar year for which emissions are being reported. Records for natural gas consumed and electricity generated by the fuel cell must be made available to the Department upon request.

The differential emissions shall be calculated as follows for the calendar year being reported:

#### Where:

FCEM = the annual natural gas-powered fuel cell differential

emissions in tCO2e.

FCNG = the annual natural gas consumed by the natural gas-

powered fuel cell, in kBtu.

NGC = the natural gas coefficient per this paragraph in units of

tCO<sub>2</sub>e per kBtu.

MGC = the annual average marginal grid coefficient per Table

<u>103-14.1.</u>

FCEL = the annual electricity generated by the natural gas-

powered fuel cell, in kWh.

**Table 103-14.1** 

Year	<u>MGC</u>
<u>i eai</u>	<u>(tCO₂e/kWh)</u>
2024	0.000247038
<u>2025</u>	<u>0.000237178</u>
<u>2026</u>	0.000191739
<u>2027</u>	<u>0.000167898</u>
<u>2028</u>	0.000129971
<u>2029</u>	0.000113712

§ 10. Paragraph (3) of subdivision (d) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to add a new sub-paragraph (vii) to read as follows:

(vii) GHG Coefficient for beneficial electrification. For each building emissions report required pursuant to section 28-320.3.7 of the Administrative Code, the beneficial electrification coefficient for qualifying electrical equipment and systems meeting the

<u>definition of beneficial electrification shall be as established herein. Such coefficient may</u> be modified by the department as necessary.

a. Equipment installed and operating between January 1, 2027, and December 31, 2029, shall be -0.00065 tCO₂e/kWh.

b. Equipment installed and operating prior to January 1, 2027, shall be -0.0013 tCO<sub>2</sub>e/kWh.

§ 11. The title of the equation in subparagraph (i) of paragraph (4) of subdivision (d) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:

$$X = \sum_{n} m_n \cdot g_n$$
 (Equation [103-14.11] 103-14.13)

§ 12. Paragraph (4) of subdivision (d) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to add a new subparagraph (iii) to read as follows:

(iii) GHG emissions generated under beneficial electrification. An owner may utilize the beneficial electrification coefficient in calculating GHG emissions resulting from the use of qualifying electric equipment as set forth in subparagraph (vii) of paragraph 3 of this subdivision. The annual electric energy use for beneficial electrification shall be determined based on either (a) Metered Electric Use or (b) Deemed Electric Use approach as described in this subparagraph. GHG emission savings accrued from beneficial electrification may be banked for future use for the covered building in which the qualifying equipment was installed as described herein.

a. Metered electric use. An owner may calculate electricity emissions based on the measured annual electricity use of the qualifying installed electric equipment using the coefficients for beneficial electrification as established in paragraph (3) of this subdivision. Such owner must be able to document hourly records, monthly energy consumption, and total annual electricity consumption for such equipment. Such documentation may be requested by the Department. Records should be retained for a minimum of six years. The installation must meet at least one of the following to qualify for use of a beneficial electrification coefficient for metered electric use:

i. must be separately metered by the utility; or

<u>ii.</u> must be separately metered or sub-metered by the owner in a manner that produces auditable data aligned with the reporting year; or

iii. must be capable of and configured to produce data that records the electricity supplied to the equipment over the course of the reporting year by means of hardware and software integrated with the equipment.

b. Deemed Electric Use: For installed electric equipment, qualifying as beneficial electrification, with a rated heating capacity of less than 1,200,000 btu/h, an owner may calculate electricity emissions based on the installed capacity of the equipment and using the coefficients for beneficial electrification as established in paragraph (3) of this subdivision. Only equipment that meets the requirements of the test procedures listed in the definition of beneficial electrification are eligible to calculate using deemed electric use; other equipment or systems whose test procedures are not listed in the definition of beneficial electrification shall determine beneficial electric use based on the requirements for Metered Electric Use. The deemed electric use shall be calculated based on the following:

$$AS_{de} = \left(\frac{HC}{3.412}\right) \times \left(\frac{1}{1.51} \times EFLH \times SF\right)$$
 (Equation 103-14.14)

Where:

AS<sub>de</sub> = Annual electric energy use associated with beneficial electrification for an air source heat pump (ASHP) used for space heating in units of kWh.

HC = Heating capacity of ASHP equipment rated at an outside air temperature of 5°F, in units of kBtu per hour.

<u>EFLH</u> = Equivalent full loaded hours for the occupancy type served by the ASHP pursuant to guidance issued by the Department.

$$WH_{de} = (GPD) \times (14.2 \times CF)$$
 (Equation 103-14.15)

Where:

<u>WH<sub>de</sub></u> = Annual electric energy use associated with beneficial electrification for a heat pump water heater (HPWH) used for water heating in units of kWh.

<u>GPD</u> = Daily hot water usage in gallons per day (GPD) based on heat pump water heater usage rates pursuant to guidance issued by the Department.

<u>CF</u> = Heating capacity of HPWH as per Equation 103-14.16.

CF = (C/PL) (Equation 103-14.16)

#### Where:

<u>CF</u> = <u>HPWH Capacity Factor. The ratio of installed HPWH capacity to peak service hot water load, limited to a maximum value of 1.0.</u>

<u>C</u> = The aggregate capacity of HPWH equipment in units of kBtu/h.

PL = Peak load factor multiplied by the associated occupancy metric (i.e., 1,000 square feet, number of people, number of dwelling units, number of students, etc.) from Peak Service Hot Water Load Table

#### **Peak Service Hot Water Load**

Occupancy	Peak Load fact	or Occupancy Metric
Assembly	<u>0.310</u>	per 1,000 square feet
Community College	0.084	per person
Dormitory	0.759	per resident
Elementary School	0.022	per student
Fast Food Restaurant	22.07	<u>per restaurant</u>
Full-Service Restaurant	<u>110.4</u>	<u>per restaurant</u>
Grocery	<u>0.151</u>	per 1,000 square feet
High School & Middle School	<u>0.084</u>	per person
<u>Hospital</u>	2.403	per 1,000 square feet
Hotel/Motel	<u>2.010</u>	per 1,000 square feet

Office Office	0.049	per person
<u>Multifamily</u>	<u>2.031</u>	per dwelling unit
Religious	<u>0.310</u>	per 1,000 square feet
Retail	<u>0.151</u>	per 1,000 square feet
<u>University</u>	0.022	per student
Warehouse	<u>0.041</u>	per 1,000 square feet
Other	<u>0.216</u>	per 1,000 square feet

c. Applying and reserving beneficial electrification GHG savings. Owners who have qualifying equipment that is installed and remains in operation in the covered building, may apply GHG emissions savings or accrue savings for future use in reporting emissions for such building, provided that in any reporting year between 2024 and 2036 in which such covered building's emissions are not below the emissions limit set forth in section 28-320.3 of the Administrative Code, any such savings must be applied. Beneficial electrification savings from a calendar year may be applied in whole to reporting for that calendar year or in whole to another future calendar year but may not be combined with accrued savings from other years. Such savings may be accrued as follows:

Year equipment was operated	Years eligible for application of the GHG savings
2024 and prior	Any 6 calendar years between 2024 and 2036
<u>2025</u>	Any 5 years between 2025 - 2035
<u>2026</u>	Any 4 years between 2026 - 2034
<u>2027</u>	Any 3 years between 2027 - 2034
<u>2028</u>	Any 2 years between 2028 - 2034
<u>2029</u>	Any 1 year between 2029 - 2034

- d. When submitting a building emissions report in which an owner applies the beneficial electrification coefficient to a portion of their annual energy consumption, such owner must document installation of the equipment with the letter of completion for such equipment along with the DOB job number.
- § 13. The title of the equation in subparagraph (ii) of paragraph (2) of subdivision (e) of section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to read as follows:

$$ESS = CAP \cdot TES \cdot Eff$$
 (Equation [103-14.12] 103-14.17)

- § 14. Section 103-14 of Subchapter C of Chapter 100 of Title 1 of the Rules of the City of New York is amended to add new subdivisions (g), (h), (i), and (j) to read as follows:
- (g) Penalty for failing to file a building emissions report. An owner of a covered building shall be liable for a civil penalty for failing to file a building emissions report within 60 days of the reporting deadline or by the date of any extension deadline granted by the Department pursuant to this rule.
  - (1) Calculation. Such penalty shall be an amount equal to the gross floor area of such building, multiplied by \$0.50, for each month such report is not submitted within the 12 months following May 1 of each year, including the 60 days following the deadline.
  - (2) Extension of time to file. An owner who is unable to file the building emissions report by the reporting deadline despite such owner's good faith efforts may apply for an extension in accordance with section 28-320.3.7.1 of the Administrative Code and this paragraph. An application for an extension must be filed with accompanying documentation no earlier than 30 days before and no later than 60 days after May 1 of each year. For purposes of this subdivision, an owner demonstrates good faith efforts for consideration of an extension where:
    - (i) The registered design professional hired for purposes of completing the building emissions report could not complete such report by the reporting deadline. For purposes of this paragraph, acceptable documentation in support of such extension request includes a contract between the owner and the registered design professional executed no later than February 1 of the year such report is required to be filed and an affidavit signed by the owner and the registered design professional stating that such professional was

unable to complete the report on time and that the report will be completed and filed within 120 days of the reporting deadline; or

(ii) The owner has challenged a determination by the Department of Finance regarding whether the square footage of the building qualifies such building as a covered building, provided that such owner must file the building emissions report within 120 days of the first determination by the Department of Finance that such building qualifies as a covered building following the commencement of such challenge. For purposes of this paragraph, acceptable documentation in support of such extension request includes an attestation signed by the owner indicating why the square footage of the building does not qualify such building as a covered building and all correspondence between the Department of Finance and such building owner related to such dispute.

(h) Penalty for exceeding building emissions limits. An owner of a covered building shall be liable for a civil penalty for exceeding the building emissions limits established for a calendar year pursuant to Article 320 of Chapter 3 of Title 28 of the Administrative Code and rules promulgated thereunder. Such penalty shall be an amount equal to the difference between the building emissions limit established for a calendar year and the actual emissions reported for such calendar year in the building emissions report, multiplied by \$268.

(i) Mitigating factors during the 2024-2029 compliance period. Notwithstanding any other provision of the Department's rules, an owner not in compliance with such emissions limits may be eligible for a mitigated penalty based on mitigating factors as specified in this subdivision. Any such mitigating factors must be filed with the building emissions report and must be documented in a form and manner established by the Department.

(1) Unexpected or unforeseeable event. An owner may demonstrate that an unexpected or unforeseeable event or condition outside of their control precluded compliance during a calendar year where a building was damaged as a result of a disaster, including but not limited to a hurricane, severe flooding, or fire. Such owner must provide photographs demonstrating the nature and extent of any such damage, and a description of how such damage precluded compliance in such calendar year. Demonstration of such an

unexpected or unforeseeable event or condition may result in a penalty of zero dollars for such calendar year for which such demonstration is claimed.

(2) Good faith efforts. An owner may demonstrate they made good faith efforts to comply with Article 320 of Chapter 3 of Title 28 of the Administrative Code and rules promulgated thereunder. Demonstration of good faith efforts may result in a mitigated penalty for the calendar year for which such demonstration is claimed. An owner may demonstrate good faith efforts by meeting all of the following criteria:

i. Such owner submits the annual building emissions report for the previous calendar year pursuant to Article 320 of Chapter 3 of Title 28 of the Administrative Code and rules promulgated thereunder, and is in compliance with any adjustment granted in accordance with section 28-320.7, 28-320.8, or 28-320.9 of the Administrative Code and rules promulgated thereunder; and

ii. Such owner uploads benchmarking information for the previous calendar year to the benchmarking tool in accordance with section 28-309.4 of Article 309 of Chapter 3 of Title 28 of the Administrative Code and rules promulgated thereunder as applicable, or the data required by section 28-309.4 of the Administrative Code for the prior calendar year; and

iii. Such owner submits an attestation in a form and manner determined by the Department that upgrades have been made to lighting systems as required by Article 310 of Chapter 3 of Title 28 of the Administrative Code and rules promulgated thereunder, and electrical sub-meters in tenant spaces have been installed as required by Article 311 of Chapter 3 of Title 28 of the Administrative Code and rules promulgated thereunder; and

iv. In addition to the information required by subparagraphs (i) through (iii) of this paragraph, a demonstration of good faith efforts includes one or more of the following:

(a) No later than May 1, 2025, an owner submits a copy of a decarbonization plan certified by a registered design professional to the Department that is being implemented at such covered building. Such plan must include:

- (1) An energy audit prepared by a qualified energy auditor no earlier than four years prior to the date of submission to the Department; and
- (2) An inventory of all HVAC equipment, domestic hot water equipment, electrical equipment, lighting, and conveyance equipment serving the building, including the date of installation of such equipment and, where applicable, whether such equipment serves multiple buildings; and
- (3) A description of any work that received a certificate of completion or temporary certification of occupancy on January 1, 2013 or later, that resulted in no less than a 10% emissions reduction for the building as compared to the emissions measured the year prior to the completion of such work; and
- (4) A list of alterations and changes to operations and maintenance that will result in the building achieving emissions reductions required by Article 320 of Chapter 3 of Title 28 of the Administrative Code and rules promulgated thereunder and resulting in net zero carbon emissions in 2050, including energy conservation measures to be undertaken during the current and future compliance periods, and the complete schedule for retrofit strategies necessary to reach net zero carbon emissions. Compliance strategies may not include the removal of a tenant. Each item on the list of alterations and changes must include:
  - i. A timeline for each alteration or change to operations that demonstrates when the work will be completed in order to achieve the necessary emissions reductions required for timely compliance with each compliance period;
  - ii. A capital plan for such work, including financing and incentives; and

- <u>iii.</u> The corresponding emissions reductions estimated to result from each alteration or change to operations; and
- (5) An owner who files a decarbonization plan in accordance with this clause must additionally demonstrate all of the following:
  - i. Within 24 months of the submission of such plan, demonstrate that the work necessary to bring the building into compliance with such building's emissions limit for calendar year 2024 is completed; and
  - ii. By May 1, 2028, provide evidence that a complete application has been approved by the Department for the work necessary to comply with such building's 2030 emissions limit;
- (6) An owner who files a decarbonization plan in accordance with this clause may not claim emissions deductions associated with the purchase of renewable energy credits (RECs) for the 2024-2029 compliance period.
- (b) An owner provides evidence that a complete application has been approved by the Department for the work necessary to comply with the 2024-2029 emissions limit, a timeline for completion of the project, and the corresponding emissions reductions estimated to result from the alteration, provided that where such work does not require an application to the Department, the owner may submit a copy of a signed contract with a service provider to perform such work and proof of payment in lieu of evidence that a complete application has been approved by the Department; or
- (c) An owner provides evidence that the covered building is undergoing work to achieve electric readiness by submitting:
  - (1) An approved electrical alteration application to make upgrades to the building's electric service for the purposes of future

replacement of fossil fuel-based equipment with electric equipment; and

- (2) Certification that the electric utility has received the contractor work request and/or has approved a load letter for service increase; and
- (3) An anticipated timeline for completion of the work; or
- (d) An owner previously submitted an annual building emissions report during the 2024-2029 compliance period that demonstrated such building was under the established emissions limits for the calendar year that such report was submitted; or
- (e) An owner of a critical facility provides a description with documentation, in a form and manner determined by the Department, of how payment of a penalty would impact the operations of such facility; or
- (f) An owner attests in a form and manner determined by the Department that such owner has applied for or been granted an adjustment by the Department in accordance with section 28-320.7 of the Administrative Code and rules promulgated thereunder.
- (j) Enforcement. Notwithstanding any other provision of the Department's rules, an owner not in compliance with the requirements of Article 320 of Chapter 3 of Title 28 of the Administrative Code and rules promulgated thereunder will be liable for a penalty calculated as described herein that may be recovered in a proceeding before the Office of Administrative Trials and Hearings (OATH) governed by OATH's rules of practice and procedure pursuant to Title 48 of the Rules of the City of New York.
  - (1) Notice. The Department shall issue administrative summonses pursuant to this subdivision which shall contain at minimum the following information:
    - i. A description of the nature of the violation sufficient to inform the respondent of the prohibited conduct, including a citation to the rule or section of the Administrative Code alleged to have been violated; and

- ii. The maximum penalty amount calculated by the Department; and
- iii. Instructions to the Respondent for how to pay such penalty; and
- iv. The date, time, and location of the scheduled adjudication on such penalty, or instructions to the Respondent for how to schedule an adjudication.
- (2) Resolving the administrative summons prior to adjudication. A Respondent may resolve the summons prior to adjudication by:
  - i. Paying the penalty amount calculated by the Department; or
  - <u>ii.</u> Submitting proof to the Department that the condition has been corrected prior to the scheduled adjudication.
- (3) Mediated resolution. i. The Department may offer a mediated resolution to an owner not in compliance with the annual building emissions limits, provided that the Department shall offer such resolution only where (i) such owner has filed a report pursuant to section 28-320.3.7 of the Administrative Code; (ii) such owner has demonstrated good faith efforts to meet such emissions limits, including but not limited to the criteria set forth in paragraph 2 of subdivision i of this section or other demonstrated effort to meet such limits; and (iii) such resolution would facilitate the building meeting such building's annual emissions limit.
  - ii. A mediated resolution is an agreement between the owner and the Department not to bring an enforcement proceeding and may provide for terms and conditions determined by the Department, including but not limited to a plan to achieve compliance with the building emissions limit set forth in section 28-320.3.1 of the Administrative Code. The terms of such agreement may contain such provisions as may be agreed upon by the Department and the owner. The Department shall provide guidance with respect to such plan, including examples of appropriate compliance plans.
  - iii. Such agreement shall provide that an enforcement proceeding will be commenced and civil penalties may be imposed for the violation of Article 320 of Title 28 of the Administrative Code where the owner fails to comply with the terms of such mediated resolution. Where such agreement covers more than one year, the owner may be subject to an enforcement proceeding and civil penalty pursuant

to subdivision (h) of this section for each calendar year that such owner is not in compliance with the annual building emissions limit during that time period.

iv. A mediated resolution entered into between the department and the owner of a building may be transferred to a subsequent owner of such building who consents to such transfer. Failure to comply with the terms of such mediated resolution by a subsequent owner who consents to such transfer will result in an enforcement proceeding as set forth in subparagraph (iii) of this paragraph.