

# Local Law 87 - New Energy Audit Standard

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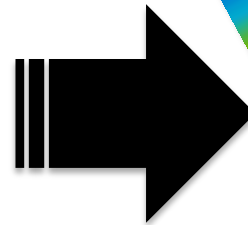
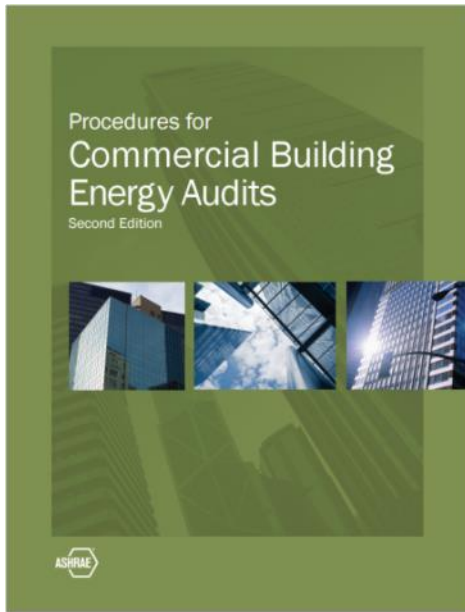
# Energy Audit Enforcement Challenges

- *The commercial building energy audit industry being largely unregulated, energy audits vary greatly in scope, rigor and quality*
- *Inconsistent practices for conducting and reporting energy audits for commercial buildings*
- *Guidelines or best industry practices are open to subjective interpretations*
- *Missing a common scope of work for use by building owners and auditors*

- 1) Project and Team Information
- 2) Building Operating Schedule
- 3) Space Function Summary Schedule
- 4) Baseline Building Key Operating Parameters (Measured/Existing)
- 5) Building Description - Conditional Assessment
- 6) Utility Billing Analysis (Base Building + Tenant)
- 7) List of Mechanical Equipment and Lighting Inventory
- 8) List of Testing Equipment Used
- 9) Master List of Findings & ECMs List
- 10) Energy Savings Calculations
- 11) Economic Analysis
- 12) Pre and Post End Use Breakdown Schedule

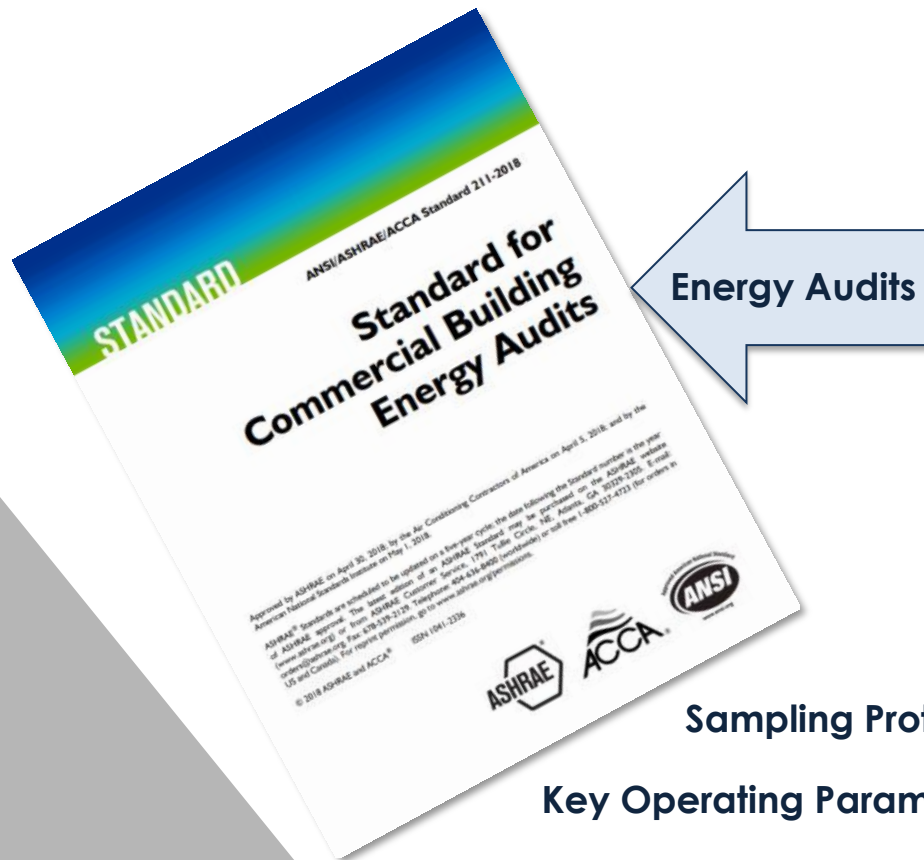
# Basis & Purpose of Rule Amendment

Replace the guidelines in the reference section with ANSI-approved standards for procedures required to perform energy auditing and retro-commissioning in a uniform manner.



# Energy Audit Reference

*An ASHRAE Level II Energy Audit must be performed on the base building systems of a covered building prior to filing an EER*



- Provides consistent practices for conducting and reporting energy audit findings for commercial buildings
- Defines procedures required to perform Energy Audit Levels 1, 2, and 3
- Provides a common scope of work for these audit levels for use by building owners and others
- Establishes minimum reporting requirements for energy audit findings

**Sampling Protocol**

**Marginal Cost**

**Scope of Systems**

**Key Operating Parameters**

**Establishing Targeted EUI**

# Contents and Procedures of Energy Audit

*The scope of the energy audit must be at a minimum equivalent to the procedures, requirements, and reporting described for a Level II energy audit.*

- The **Table of contents** of the audit report must include all of the sections provided in the Level II energy audit report outline in Informative Annex D of standard 211-2018, or subsequent edition.
- The energy audit report and certification form must be uploaded through the web-based Energy Audit template tool

## Level 2 Report Outline

1. EXECUTIVE SUMMARY
  - a. Overall assessment of benchmarking and energy performance
  - b. Aggregated savings and costs of recommended measures
  - c. Table of recommended measures with savings and costs
2. INTRODUCTION
  - a. Audit scope
  - b. Key dates
  - c. Contact information
3. FACILITY DESCRIPTION
  - a. Building information
  - b. Building envelope
  - c. Heating, ventilating, and air conditioning (HVAC)
  - d. Service hot water (SHW)/domestic hot water (DHW)
  - e. Lighting
  - f. Process and plug loads
4. HISTORICAL UTILITY DATA
  - a. Data summary
  - b. Utility rate structures
  - c. Benchmarking
  - d. Target and savings estimate
  - e. End-use breakdown
5. ENERGY SAVING OPPORTUNITIES
  - a. Low-cost/no-cost savings measures
  - b. Capital projects
  - c. Distributed/renewable energy opportunity
  - d. Energy efficiency measures (EEMs) considered but not recommended
6. EEM COST ESTIMATES
7. EEM ECONOMIC ANALYSIS
8. QUALITY ASSURANCE

## APPENDICES

- Tabulated utility data (Annex C tables)
- Utility rate schedules (Annex C tables)
- Calculation methodology
- Savings calculations
- Cost estimates
- Lighting and equipment inventory tables
- Operations and maintenance (O&M) logs
- Equipment specifications

# Online Energy Audit Tool

**Beginning this year, 2019, the Energy Audit Excel tool has been replaced by the online EA Template. The Energy audit Tool (excel workbook will no longer be accepted for submission)**

**The following documents are required to be uploaded through the web-based platform, now referred to as the Energy Audit template:**

- ***A PDF of the final Energy Efficiency Report (ASHRAE Level II audit report and Retro-Commissioning Report) that is required to be provided to the building owner***
- ***A PDF of the signed and completed EERC1 Professional Certification: Energy Auditor and owner statements***

Select the “Submit to City ,” button which will forward your submission to New York City Department of Buildings. You will then receive an email with the Building Name, Submission ID, and a Submission Date

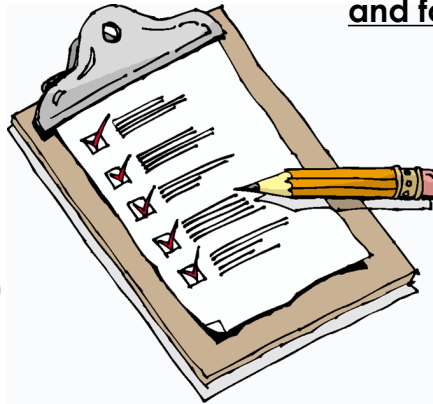
Once received, submit a PDF copy of that email and the Retro-Commissioning Data Collection Tool ( Excel Workbook) and EERC2 Professional Certification : Retro-Commissioning Agent and Owner Statement (PDF) to [LL87@buildings.nyc.gov](mailto:LL87@buildings.nyc.gov) to complete the LL87 submission

# Procedure to Submit an EER

## Make sure to submit a complete EER:

- EERC1 Form
- EERC2 Form
- Energy Audit Template Tool Report
- Retro-Cx Spreadsheet Tool
- Final Energy Audit Report
- Final Retro-Cx Report
- **DERPA Report (starting 2020)**

(DEEP Energy Retrofit Plan Analysis tool)



This rule shall take **effect 30 days after its publication:**

provided, however,

That the **amendments made by section one, two, and four through nine shall take effect on January**

**1,2020**

**For any additional References or Questions please contact us at:**

**[LL87Questions@buildings.nyc.gov](mailto:LL87Questions@buildings.nyc.gov)**

Questions are answered in the order they are received