

OFFICE OF ALTERNATIVE ENERGY (OAE) ANNUAL REPORT

October 1, 2024

presented by
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BACKGROUND

This annual report covers the year of 2024 has been prepared pursuant to **Local Law 233 of 2017**, which states,

“§ 28-103.33.3 Reporting. The head of the office of the alternative energy shall submit an annual report to the commissioner and to the head of any other relevant agency providing (i) a description of the most commonly received comments, questions and complaints received with respect to such office, (ii) a description of actions undertaken by such office to coordinate with other agencies and the results of such coordination, (iii) recommendations made pursuant to section 28-103.33.2 and (iv) recommendations with respect to expanding the definition of alternative energy project. By no later than three months after the end of each fiscal year, such office shall submit a report to the mayor and the speaker of the city council that includes a summary of the actions taken by any agency as a result of any comment, question, complaint or recommendation from or forwarded by such office.”

I. COMMENTS, QUESTIONS, AND COMPLAINTS COMMONLY RECEIVED

1. Questions regarding energy storage system (ESS) include:
 - a. What is the Department's filing process for ESS?
 - b. Is OTCR site-specific review required for all ESS regardless of the capacity?
 - c. What documents are required for an ESS plan examination and site-specific evaluation?
 - d. How long does it take for a construction approval?

I. COMMENTS, QUESTIONS, AND COMPLAINTS COMMONLY RECEIVED

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1. Questions regarding energy storage system (ESS) include :
 - e. Are small ESS used for 1- and 2-family homes subject to OTCR site-specific review?
 - f. Are lead-acid battery and nickel-cadmium battery systems used as uninterruptable power supplies (consider ESS, and subject to OTCR site-specific review?
 - g. What is the Department's policy for mobile ESS?
 - h. What is the Department's policy for indoor ESS installations?

I. COMMENTS, QUESTIONS, AND COMPLAINTS COMMONLY RECEIVED

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1. Questions regarding energy storage system (ESS) include :
 - i. What is the Department's policy for multistory designated utility structures for ESS?
 - j. What is the Department's policy for battery technologies?

I. COMMENTS, QUESTIONS, AND COMPLAINTS COMMONLY RECEIVED

2. Comments and complaints regarding ESS applications include:
 - a. There should be a policy in place to expedite construction approval for ESS.
 - b. The city should adopt national standards to regulate the design and construction of ESS.
 - c. FDNY approval process should be faster.
 - d. ESS facilities are not an appropriate use for residential and commercial districts.
 - e. Noise issues.
 - f. Safety concerns.

I. COMMENTS, QUESTIONS, AND COMPLAINTS COMMONLY RECEIVED

3. Comments and complaints regarding solar panel installations include:
 - a. There should be less Fire Code restrictions that prevent or significantly reduce the capacity of rooftop solar panel installations.
 - b. The Department should expedite the sign-off process of solar panel installations.
 - c. There should be policy in place to address various types of building-integrated photovoltaic systems, particularly when they became part of building's roof or façade systems.

I. COMMENTS, QUESTIONS, AND COMPLAINTS COMMONLY RECEIVED

4. Questions for renewable natural gas include:
 - a. Can it be used for the purpose of Local Law 97 compliance?
 - b. What is the greenhouse gas coefficient of renewable natural gas?
5. Can carbon capture technology be used for the purpose of Local Law 97 compliance?
6. What is the approval process for new building materials and technologies?

II. EFFORTS TO COORDINATE WITH OTHER AGENCIES AND THE RESULTS OF SUCH COORDINATION

1. OAE is developing criteria to expedite construction approval of small ESS installations for 1- and 2-family dwellings with FDNY and CUNY. The Department expects to publish a buildings bulletin based on the criteria in the coming months to allow construction approval of such installations without an OTCR site-specific review, which expects to reduce process time for construction approval significantly.

II. EFFORTS TO COORDINATE WITH OTHER AGENCIES AND THE RESULTS OF SUCH COORDINATION

2. OAE is spearheading an ESS working group with subject experts from MO, FDNY, CUNY, UL, NFPA, DNV, etc. to develop an ESS Rule for the city. The rule adopts and modifies NFPA 855, the national standard for the installation of ESS. The rule will improve the transparency and predictability of the construction approval process of ESS installations. It is expected to be published by the end of 2024.

II. EFFORTS TO COORDINATE WITH OTHER AGENCIES AND THE RESULTS OF SUCH COORDINATION

3. EDC reached out to OAE regarding the construction filing process for mobile ESS projects. OAE then worked with various divisions within the Department (e.g., borough offices, inspection units, Technical Affairs, etc.) and FDNY to establish a policy for mobile ESS construction filing procedures through a buildings bulletin. The Department expects it to be published in the coming months.

II. EFFORTS TO COORDINATE WITH OTHER AGENCIES AND THE RESULTS OF SUCH COORDINATION

4. OAE is working with FDNY and UL to develop material acceptance criteria for lead-acid battery and nickel-cadmium battery systems used as UPS. The Department expects to publish a buildings bulletin based on the criteria in the coming months to allow construction approval of such installations without an OTCR site-specific review, which expects to reduce process time for construction approval significantly.

III. RECOMMENDATIONS MADE PURSUANT TO AC 28-103.33.2

1. For the purposes of streamlining the Department's construction approval process OAE recommends centralization of alternative energy project applications into a designated plan examination unit so OAE can better facilitate the review and approval of these projects. Based on OAE's recommendations, the Department established a centralized plan examination team to review all solar panel, ESS, and green roof applications. OAE is currently supervising the team and facilitating construction approval of such applications.

III. RECOMMENDATIONS MADE PURSUANT TO AC 28-103.33.2

2. For the purposes of ensuring that policies are in place to encourage the installation and maintenance of alternative energy projects OAE recommends collaboration with the Department's Bureau of Sustainability to develop policies that incentivize such projects. As of current, OAE is actively engaging with the bureau to produce strategies to incorporate alternative energy technologies into the Department's upcoming sustainability policies.

III. RECOMMENDATIONS MADE PURSUANT TO AC 28-103.33.2

3. To address alternative energy technologies that are not codified OAE recommends to take part in the upcoming code revision cycle to ensure such technologies will be covered in the new codes. This will greatly improve transparency and predictability of the construction approval process of alternative energy projects. As of current, alternative energy technologies that are not covered under the current codes are evaluated as alternative materials pursuant to AC 28-113.2.2.

III. RECOMMENDATIONS MADE PURSUANT TO AC 28-103.33.2

4. To streamline the technical review and approval process of alternative energy projects across all city agencies OAE recommends to create a centralized one-stop portal to process alternative energy project applications for every pertinent city agencies (e.g., DOB, FDNY, DEP, DOT, etc.). As of current, OAE is coordinating with FDNY for the approval of ESS and other types alternative energy projects. OAE is also working with DEP on the noise code enforcement issues for ESS.

III. RECOMMENDATIONS MADE PURSUANT TO AC 28-103.33.2

5. To advance the city's alternative energy legislation and policy OAE recommends to create an alternative energy legislation committee that engages in high-level discussions with the City Counsels Office, Mayor's Office and heads of other agencies to develop comprehensive laws and rules that address alternative energy technologies from both technical performance and economic incentive sides so they can be successfully implemented.

III. RECOMMENDATIONS MADE PURSUANT TO AC 28-103.31.2

6. To provide high-quality technical research and data to support the advancement of alternative energy legislation and policy OAE recommends to engage the Innovation Review Board which includes representatives from relevant agencies and institutions, and share their research finding on a regular basis, so the lawmaking body can make informed decisions for the upcoming alternative energy policy. As of current, OAE is working closely with CUNY and FDNY's Technology Management and Code Development units to establish safety criteria for alternative energy projects.

III. RECOMMENDATIONS MADE PURSUANT TO AC 28-103.31.2

7. To better provide guidance to the public on alternative energy projects OAE recommend to publish all relevant information, including but not limited to construction document approval procedures and criteria for evaluation, for every alternative energy project type. As of current, OAE webpage contains information on ESS, and the office plan to expand its content to cover more alternative technologies in the coming months.

IV. RECOMMENDATIONS WITH RESPECT TO EXPANDING THE DEFINITION OF ALTERNATIVE ENERGY PROJECT

The current definition for “Alternative Energy Project” pursuant to AC 28-103.33.1 states,

“§ 28-103.33.1 Definition. As used in this section, the term “alternative energy project” means construction work on a building, as such term is defined in section 28-101.5 of the administrative code, that will result in such building having at least 50 kilowatts of alternative energy capacity installed onsite from:

- 1. A qualified energy resource, as such term is defined in section 45 of title 26 of the United States code; or*
- 2. A source that is determined to be renewable by the commissioner or the head of another agency designated by the mayor.”*

IV. RECOMMENDATIONS WITH RESPECT TO EXPANDING THE DEFINITION OF ALTERNATIVE ENERGY PROJECT

1. OAE recommends to modify the definition of "Alternative Energy Project" under AC 28-103.33.1 by 1) deleting the minimum energy capacity, and 2) deleting construction on a building limitation, so it will include projects with smaller energy capacity and projects that are not on a building (e.g., construction on an open space). See proposed modification below:

ALTERNATIVE ENERGY PROJECT. ~~Construction work on a building that will result in such building having at least 50 kilowatts of alternative energy capacity installed onsite from~~ A construction project that results in at least one of the following:

1. Generation of electricity onsite from a A-qualified energy resource, as such term is defined in section 45 of title 26 of the United States code; or
2. Generation of electricity onsite from a A-source that is determined to be renewable by the commissioner or the head of another agency designated by the mayor.

IV. RECOMMENDATIONS WITH RESPECT TO EXPANDING THE DEFINITION OF ALTERNATIVE ENERGY PROJECT

2. OAE recommends to expand the definition to include the following:

(Continue from item 2 of AC 28-103.31.1 “Alternative Energy Project” definition)

3. Installation of an energy storage management system in compliance with applicable department rules, a green roof system as defined in chapter 2 of the New York city building code, or other energy system that supports the implementation of sustainability laws, rules, and policies as determined by the commissioner or head of another agency designated by the mayor.

The logo for NYC Buildings, featuring the letters 'NYC' in a large, white, bold, sans-serif font. A small 'TM' trademark symbol is located at the top right of the letter 'C'.

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