From:	noreply@noreply.mass.gov
To:	SitingBoard Filing (DPU)
Subject:	EFSB Permitting Reform Comment Form
Date:	Tuesday, May 6, 2025 11:28:26 AM

Name

Matthew Sager

Email

I am a...

Member of the public

Are you commenting on a straw proposal?

Yes

If yes, which one?

Cumulative Impacts Analysis

Comment/Question

Dear State Energy Regulators:

My comments on the Site Suitability Criteria below.

Executive Summary: Answers to Questions asked to stakeholders: 1. Are the proposed evaluation criteria appropriate? NO

2. Are there criteria that should be applied to certain types of infrastructure and not others? YES, IMMUTABLE AND ADEQUATE SETBACKS FROM RESIDENTIAL PROPERTY LINES SHOULD BE ESTABLISHED AND MANDATED FOR ANY BESS

BESS Setbacks and Safety Criteria

The omission of Battery Energy Storage System (BESS)-specific criteria in the Massachusetts Site Suitability Strawman proposal is a significant safety concern. Recent catastrophic BESS failuresincluding a major fire in January 2025-demonstrate that even with adherence to NFPA 855 Standards and UL 9540A testing, too many failure modes remain unaddressed.

For example, in Boston, Flatiron Energy is proposing a 300-MW/1,200-MWh BESS on Electric Avenue in Brighton that will be approximately 25 feet from residential property lines17. This proposal has faced pushback from residents over safety concerns, particularly in light of recent BESS fires elsewhere that have required mass evacuations1.

Key risks include:

Human error during installation or integration (e.g., miswiring, improper fire suppression setup)6810

Cell/module defects-with potentially thousands of individual cells in a BESS, even a small percentage of failures can lead to catastrophic events6810

Operational vulnerabilities (e.g., overcharging, thermal management issues)6810

Inadequate real-time monitoring and delayed fault detection

External hazards (e.g., flooding, seismic events, vandalism)

While cell or module failures account for about 11% of BESS incidents, the sheer number of cells in a large facility means the risk cannot be ignored6810. In fact, 65% of failures are linked to issues with system operation, integration, or commissioning-not just cell defects6810.

These risks are exacerbated by the absence of clear, mandated minimum setbacks from residential property lines and critical infrastructure. The current 25-foot setback in the Flatiron proposal is insufficient given the potential for toxic gas plumes, radiant heat, and emergency response challenges1.

Recommended Additions:

Mandated Minimum Setbacks:

300 feet from all residential property lines

300 feet from critical infrastructure, including commuter rail lines, water mains, and electrical substations This is consistent with emerging best practices in other states, such as Michigan.

Third-Party Oversight:

Require independent verification of construction and commissioning quality

Enhanced Monitoring:

Mandate real-time thermal and gas detection with automated emergency shutdowns

Hazard Mitigation Planning:

Require air dispersion and fire modeling for any BESS within 1,000 feet of protected uses

Citations

Bisnow: Flatiron Energy proposed a 62K SF BESS in Brighton, Boston, with a 25-foot setback, facing resident safety concerns

Solar Builder Mag: Analysis of BESS failure points to battery monitoring and system integration as key risk factors; cell/module failures account for 11% of incidents

Energy Storage News: Flatiron Energy gets ISO approval for 1.2GWh indoor BESS in Boston; project details and location

Energy Storage News: BESS failure incident rate dropped 97% between 2018 and 2023, but most failures are due to integration and operational issues, not just cell defects

EPRI Storage Wiki: BESS Failure Incident Database, root cause analysis and incident classification