

William P. Acker

Executive Director, NY-BEST
230 Washington Avenue Ext., Suite 101, Albany NY 12203
(518) 694-8474
www.ny-best.org



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Submitted via email: code.development@dos.ny.gov

TO: Kevin Duerr-Clark, Assistant Director for Code Development
Division of Building Standards & Codes
New York State Department of State, Division of Administration and Enforcement
99 Washington Ave.
Albany, NY 12231-0001

RE: NY-BEST Comments on Draft Rule Amending the Uniform Code of New York State

Dear Mr. Duerr-Clark,

The New York Battery and Energy Storage Technology Consortium (NY-BEST) is a not-for-profit industry trade association with a mission to grow the energy storage industry in New York. We act as a voice of the energy storage industry for more than 180 member organizations on matters related to advanced batteries and energy storage technologies. Our membership includes global corporations, start-ups, project developers, leading research institutions and universities, and numerous companies involved in the electricity and transportation sectors.¹

NY-BEST commends the Department of State for its excellent work updating the New York State Uniform Code to reflect the 2024 International Code Council (ICC) Codes and to integrate the recommendations of the New York State Interagency Fire Safety Working Group with regard to Battery Energy Storage Systems (BESS). NY-BEST is broadly supportive of the proposed amendments to the Fire Code, but we believe changes are required to the Hazard Support personnel requirement to ensure efficient and effective emergency response, as detailed further below.

¹ NY-BEST comments represent the interests of the organization as a whole and not the views of any single member. Our members have diverse interests and the organization's views are intended to be reflective of the energy storage industry collectively.

Statement of Support on Fire Code Amendments

NY-BEST is supportive of the following components of the proposed Fire Code amendment for BESS greater than 600kWh:

- **Systems monitoring (1207.3.4):** We support the requirement for continuous monitoring as described in this section. We further recommend that the Code specify that systems should have a minimum of one measurement point per enclosure, that the Battery Management System (BMS) also measure the temperature and State of Charge for each BESS container.
- **Signage (1207.4.8):** We support the requirement to extend safety signage to include hazard warnings, a map of the site, BESS enclosures, and distances to maintain in the event of an emergency. However, we further recommend that the signage indicate the most recent date that the sign was updated or verified to be accurate.
- **Security of installations (1207.4.9):** We support the requirement to monitor BESS with a video surveillance system and provide a minimum lookback period of 72 hours. The Code could further specify that the video surveillance should cover the area of enclosure and the entry point to the installation.
- **Fire suppression systems (1207.5.5):** We support the language permitting BESS to utilize alternative fire suppression systems in a manner that is based on the large-scale fire testing results and in accordance with local approvals.
- **Explosion control (1207.6.3):** We support the expansion of explosion control requirements to include any space where venting batteries can create trapped flammable gases, including BESS cabinets in addition to rooms, areas, and walk-in units.
- **Peer review (1207.12):** We support this requirement, and NYSERDA's stated intention to centralize and manage efforts to establish a list of qualified peer reviewers to avoid bottlenecks in project reviews and ensure oversight and consistency of the peer review process. However, 1207.12.1, which states that the costs shall be paid by the owner, is too prescriptive, as the State or other entities may provide funds for this service; we recommend reducing the specificity here to allow for more flexibility in the future.
- **First responder pre-incident plan (1207.13):** We support the requirement for BESS owners to develop and maintain a pre-incident plan for the facility, in consultation with the local fire department. We also support the requirement to offer an annual site visit and review of the pre-incident plan to the local Fire Department. However, we recommend that the Code clarify that the pre-incident plan should not be required until the final permitting stage, reflecting the final BESS OEM and siting plans. While a draft plan can be provided during preliminary review, the plan is subject to change until the site plans are finalized, which typically happens later in the development process.

Recommendation to improve Hazard Support personnel requirement

Included in the proposed amendment is a requirement for Hazard Support personnel to be provided by the owner or developer of an energy storage system, and, in the event of an emergency, for these personnel to be ready to arrive on-site within 4 hours. The proposed amendment reads:

1207.1.8.1 Hazard Support personnel. *The system owner, agent or lessee shall dispatch within 15 minutes one or more hazard support personnel to the premise, and arrive within 4 hours, as required and approved, at their expense. These personnel shall remain on duty continuously after the fire department leaves the premise until the damaged energy storage equipment is removed from the premises, or earlier if the fire code official indicates the public safety hazard has been abated. (Material based on NFPA 855 2023 Ed.)*

This language is intended to address the fact that local fire departments often lack the necessary staffing and expertise to handle lithium-ion battery fires. While NY-BEST agrees with the intention of this language, we are strongly concerned that the requirement as written is not efficient or practical, and will have severe unintended consequences on achieving New York State's climate and energy targets. Specifically, our concerns include:

- a. Having companies contract these services on a project-by-project basis is an inefficient use of funds, particularly compared to having a centralized response infrastructure that functions more holistically. Project-by-project contracting will result in duplication of services and staff in the same geographic area, driving up total costs. Given that most energy storage systems will receive NYSERDA incentives, this would be an inefficient use of ratepayer funds.
- b. Likelihood of a fire is extremely low. Given strict safety regulations, most batteries will not experience fires--but would still need to execute a 15-25 year contract with a private fire response company for these services. This means the contracted services may not be called upon for many years, if at all, resulting in possibility of miscommunication, improper response, or even the response company no longer being in business.
- c. Assuming private fire response personnel can integrate seamlessly with local emergency responders is misguided. Tensions or miscommunications may arise between local first responders and outside private sector responders who are less familiar with local conditions. Indeed, this was seen to be the case in Warwick in response to the battery fire incident in August 2023. Private sector responders lack local relationships and trust, and are therefore not set up for success.
- d. Ineffective code enforcement. Current code requires that developers provide documentation of a contract with "personnel who are qualified to service, maintain and decommission the energy storage system and respond to incidents involving the energy storage system" (see FCNYS 2020 Section 1206.9.1 #11). However, it is unclear whether local Authorities Having Jurisdiction have adequately enforced this requirement to date. Public sector personnel to fill this role would mitigate the effect of lax code enforcement at the local level.
- e. Expertise of Hazard Support personnel should not be limited to Stationary Energy Storage System applications. Stationary energy storage systems are not the only type of modern technology that can potentially present safety hazards if improperly installed or operated. It is inefficient to require energy storage installations to separately provide Hazard Support personnel, rather than ensuring more holistic experts are locally available who can also address risks from other technologies, such as electric vehicles and e-bikes.
- f. Compliance may not be feasible for all areas. Particularly in rural areas, it may be difficult to guarantee a private company can arrive within 4 hours. Companies that specialize in this

type of work have indicated that, given the diversity of BESS locations within the State, it is not currently feasible to cover the wide geographical area within the 4hr time frame.

Instead of requiring Hazard Support personnel to be provided by the private sector, as currently written in the proposed Fire Code, **permanent Hazard Support staff lines should be funded and embedded within existing State or County emergency response infrastructure.** NY-BEST supports this idea for several reasons:

- a. Greater feasibility and efficiency: Having Hazard Support personnel based within each county, or otherwise clearly geographically distributed across the State, will greatly increase the chances that they can be on-site within 4 hours in the event of an emergency. Further, this strategic distribution of Hazard Support personnel will be a much more efficient use of resources than stationary energy storage developers contracting these services separately on an ad-hoc basis.
- b. Institutionalization of knowledge: A locally-based Hazard Support expert could serve as a resource to local AHJs in understanding and ensuring Code compliance, and to local first responders who may not be as familiar with protocol in the event of an emergency due, for example, to high reliance on volunteers and high rates of turnover. In the event of an emergency, this expert could also facilitate communication between first responders and the on-call industry SME (available remotely within 15min) as well as with industry representatives once they arrive on site.
- c. Trust: Most of the State's fire departments are volunteer-based, and lack required funding or expertise to respond to battery fires. A locally-embedded permanent staff line would empower communities by bringing this expertise to the local level. Further, communities and local first responders are much more likely to trust a locally-based, publicly-funded hazard support expert than one from an outside private-sector company hired by a developer.
- d. Broader use-case: A locally-based Hazard Support expert would be able to support local jurisdictions in addressing risks and ensuring safe proliferation of other technologies as well, including electric vehicles, e-bikes, mobile batteries, battery-integrated smart appliances, and other new critical climate technologies. As noted in the Interagency Fire Safety Working Group Report, "the utility of battery experts integrated into existing emergency response infrastructure could be far more comprehensive than relatively infrequent fires associated with grid-scale energy storage systems."

Implementation of Hazard Support staff lines at State or County level

Industry would be eager to support the successful implementation of this proposal, including by:

- a. Supporting funding for Hazard Support personnel embedded in government emergency response infrastructure. While NY-BEST proposes including funding for the Hazard Support personnel in the January 2025 Executive budget, we are happy to work with policymakers to identify appropriate pathways for industry to help defray public costs, such as through increased local permitting fees. In addition, if the Office of Renewable Energy Siting and

Electric Transmission (ORES) purview is expanded to include energy storage, this could include an industry fee as part of a Lithium-ion system's ORES application.

- b. Providing immediate access to expert assistance in response to an incident. NY-BEST agrees that expert hazard support can and should be provided remotely within 15 minutes of a triggering event. This Subject Matter Expert should be coordinated by the developer and/or manufacturer, at their expense, as specified in the Emergency Response Plan.
- c. Providing training for first responders. NY-BEST agrees with the proposed Fire Code language that industry be required to offer annual local first responder training for every BESS installation. We recommend developers be permitted to coordinate their efforts and combine trainings for fire departments in adjacent municipalities to make most effective use of time and resources. While industry cannot compel local fire responders to participate in training, if our local Hazard Support personnel proposal is adopted, these personnel should be required to attend annually.
- d. Providing fire watch teams. NY-BEST supports a requirement for industry representatives to serve as "fire watch" to relieve local first responders after an incident has been contained, monitoring the project during the window of a potential re-ignition hazard and throughout successful decommissioning. It may be costly and impractical to embed this fire watch service into public sector Hazard Support or emergency response infrastructure. Thus, NY-BEST believes it is reasonable for the language in the code to include fire watch support from industry representatives to complement the Hazard Support personnel and other State, county, and local emergency response efforts.

Next Steps on Hazard Support Personnel

NY-BEST defers to the expertise of the teams at the Governor's Office, the Department of State, and the Division of Homeland Security and Emergency Services (DHSES) Office of Fire Control and Prevention (OFPC) to determine the best way to deploy and integrate the Hazard Support personnel within existing government infrastructure. In some places in the State, county-level staff lines may make the most sense. In areas that are more densely populated and counties are geographically smaller, personnel could be designated to cover multiple counties. Some jurisdictions, such as those currently home to industrial institutions or those with highly active Fire Marshalls, may already have more sophisticated emergency response personnel. Opportunities to leverage existing infrastructure and expertise should be taken into account when planning new Hazard Support lines.

NY-BEST proposes setting up a series of meetings this Fall to bring together policymakers, regulators, and industry representatives to determine the best path forward for inclusion of this proposal in the January 2025 Executive Budget. To ensure the proposed Hazard Support clause is not included in the Fire Code as currently written, which is likely to lead to unintended consequences on energy storage deployment in New York, it is essential to establish and fund an alternative pathway for government Hazard Support personnel before the adoption of the new Uniform Code in mid-2025.

Statement of Support on Building Code Amendments

Regarding the proposed amendments to Parts 1219 to 1229 and 1240 of Title 19 of the New York Codes, Rules and Regulations (NYCRR), NY-BEST strongly supports the State's initiative to reduce energy usage, greenhouse gases, and co-pollutant emissions from buildings in New York State. NY-BEST especially supports the minimum requirements for on-site renewable energy generation systems as well as the inclusion of energy storage systems as an option to comply with tighter sustainability standards. NY-BEST also broadly supports the changes recommended in the comments submitted by ACE NY in their September 24, 2024 letter.

Conclusion

NY-BEST appreciates the work by the Department of State to update the Uniform Code of New York State to lead on national best practices when it comes to BESS safety and sustainability standards. However, NY-BEST urges the State to eliminate the Hazard Support personnel requirement in the Fire Code, in tandem with a broader budgetary process to integrate such personnel into State and/or county emergency response infrastructure, as described above.

We stand ready to assist with any questions you may have on these comments. Thank you for the opportunity to share our input and feedback.

Sincerely,



Dr. William Acker
Executive Director, NY-BEST