SENATE THIRD READING
SB 283 (Laird)
As Amended July 17, 2025
Majority vote

SUMMARY

Establishes new fire safety requirements applicable to battery energy storage systems authorized by the California Energy Commission (CEC) or a local jurisdiction.

Major Provisions

1) Requires the California Building Standards Commission (CBSC) and the Office of the State Fire Marshall to adopt, as part of the next update of the California Building Standards Code adopted after July 1, 2026, provisions that are at least as protective as the most recently published edition of the National Fire Protection Association (NFPA) 855, Standard for the Installation of Stationary Energy Storage Systems (NFPA 885).

2) Provides this bill is applicable to an energy storage system capable of storing 200 megawatts or more of energy.

3) Requires an applicant to the CEC or a local jurisdiction to construct an energy storage system to certify that it is designed to comply with NFPA 885, and that, at least 30 days before submitting the application, the applicant met and conferred with the local fire department responsible for fire suppression in the area where the energy storage system is proposed and discussed the system's design and safety issues, with documentation of the discussion submitted with the application.

4) Provides CEC or a local jurisdiction shall not certify or approve any application submitted after January 1, 2026, to either entity for the construction of an energy storage system unless both of the following apply: a) the energy storage system will be constructed, installed, commissioned, operated, maintained and decommissioned to comply with NFPA 855, and (b) after installation is complete, but before commencing operations, the energy storage system will be inspected by the local fire department responsible for fire suppression where the system is located or by a representative or designee of the State Fire Marshal.

5) Requires the applicant to bear the costs of inspection by the local fire department or by the State Fire Marshall, and requires the applicant provide the inspector a copy of documentation of the initial fire official consultation submitted with the application.

6) Provides a manufacturer or energy storage system owner may voluntarily design the energy storage system to comply with a more-recent edition of NFPA 855 before its operative date, if compliance with all applicable listing and testing requirements is demonstrated.

7) Provides that a state or local entity may approve the construction of an energy storage system if it is located in a dedicated-use, noncombustible building or is an outdoor installation.

8) Provides that this bill does not prevent a city or county from adopting and enforcing laws consistent with or more protective than this bill.

9) Includes findings that changes proposed by this bill address a matter of statewide concern rather than a municipal affair and, therefore, apply to all cities, including charter cities.

10) Imposes a state-mandated local program by imposing additional duties on local officers, but provides that no reimbursement is required by this bill because a local agency has the authority to levy fees, charges, or assessments.

COMMENTS

Recent Updates. This bill, to take effect January 1, 2026, requires the CBSC and the Office of the State Fire Marshall to adopt NFPA 885 into the California Building Standards Code. The author reports, however, that the updated California Fire Code published on July 1, 2025, to be made effective on January 1, 2026, now includes NFPA 855, with state amendments. As a result of this intervening action, the requirement to adopt NFPA 855 and related provisions from this bill may no longer be necessary.

Growth of BESS. Driven by California climate and clean energy goals, the state's mix of electricity generation sources includes increasing amounts of intermittent renewable energy, such as solar and wind energy. Because power is not generated when the sun is not shining or the wind is not blowing, the state is increasingly relying on energy storage systems to capture energy from these resources for use at later time. Many of these are battery energy storage systems (BESS), which rely on interconnected banks of batteries, generally using lithium ion technology. Deployment of BESS powered by large lithium-ion batteries is rapidly increasing in California. The CPUC reports statewide BESS capacity has surged from approximately 500 megawatts (MW) in 2019 to over 13,300 MW in 2024. California's current installed battery storage capacity is over 20% of California's peak demand. The state is projected to need 52,000 MW of BESS by 2045.

State and Local Permits. Current law provides that a BESS may be permitted through either a local government or the CEC, provided the project meets certain requirements. Most large projects require "discretionary" approvals from local governments. This process requires hearings by the local planning commission and public notice and may require additional approvals. Unlike projects that are subject only to ministerial review, projects that require discretionary approval are subject to California Environmental Quality Act (CEQA). AB 205 (Committee on Budget), Chapter 61, Statutes of 2022, granted authority to the CEC to oversee the permitting of clean and renewable energy facilities, including energy storage systems capable of storing 200 MWh or more. Known as the Opt-In Certification Program, this permitting process offers developers an optional pathway to submit project applications until June 30, 2029. Under AB 205, the CEC is the lead CEQA agency for environmental review and permitting for any facility that elects to opt into the CEC's jurisdiction. In addition, state law directs the CPUC to implement and enforce standards for the maintenance and operation of facilities for generation and storage of electricity owned by an electrical corporation or located within the corporation's territory.

Fire Dangers. Lithium-ion batteries offer advantages over other types of batteries due to their comparatively low maintenance, high energy densities, and no need for scheduled cycling to maintain their battery life. However, they come with the risk of "thermal runaway," a phenomenon in which the battery enters an uncontrollable, self-heating state that can result in extremely high temperatures, explosion, smoke, and fire. Internal failures (such as manufacturing defects, the use of lower-quality materials, or degradation over time) and external conditions

(such as overcharging, water ingress, physical damage to the system, or excessive external heat) can result in a thermal runaway. Lithium-ion batteries stored near or next to another battery or batteries can set off a chain reaction, making an already tough fire to fight even worse. When they reach thermal runaway, lithium-ion battery fires can burn for hours or days.

The CPUC has identified at least 10 safety incidents related to BESS facilities in recent years, including four distinct incidents at two separately owned BESS facilities at the Moss Landing Harbor location in Monterey County, which occupies one of the largest battery energy storage systems. Most recently, on January 16, 2025, a large fire broke out at Vistra's Moss Landing BESS facility, leading to the evacuation of around 1,200 residents. The fire was contained to one building housing LG Energy Solution lithium-ion batteries. All battery facilities at the site are currently offline, and the cause of the fire is under investigation. Debris removal, soil testing, and monitoring for environmental contamination are ongoing.

According to the Author
According to the author: "The fire at the Moss Landing battery storage was a tragedy for the local community and region when it prompted evacuations and raised serious concerns within the community about toxic smoke, heavy metals, and ash. As California expands battery storage to meet its clean energy goals, we must prioritize safety at every step and ensure that new battery storage facilities do not move ahead without being safe for first responders and the people who live and work around them. Fortunately, advancements in battery storage technology since the approval of the Moss Landing facility have provided critical insights into safer battery compositions and configurations. Senate Bill 283 provides a crucial tool and safeguard to ensure battery storage facilities are built and maintained with the highest level of safety and oversight by our local fire officials.SB 283 requires adoption of the [NFPA 855] standards, which are widely recognized as the strongest standards for safety and hazard mitigation of battery storage facilities, and requires fire authority inspection and consultation at various stages before a facility goes online. The bill also prohibits the development of battery storage facilities in combustible buildings that were not constructed for the dedicated use of housing battery storage. SB 283 ensures that future battery storage facilities adhere to the highest fire safety standards, protecting first responders, local communities, and the integrity of our renewable energy transition."

Arguments in Support
This bill is supported by a long list that includes industry group, electrical utilities, the Sierra Club and the California Association of Professional Firefighters, the latter of which writes: "Currently, BESS facilities can be permitted locally and there are no coherent guidelines for fire safety to mitigate the risks posed a fire of any scale. Additionally, there are no requirements for coordination with local fire departments or routine safety inspections, increasing the likelihood of faults or failures going unnoticed until they result in disaster. SB 283 recognizes the role that BESS facilities play in adapting our energy grid and integrating new solutions, while ensuring that these facilities are held to strict safety standards."

Arguments in Opposition
This bill has no registered opposition.

FISCAL COMMENTS

According to the Assembly Appropriations Committee: "This bill creates no state costs. CEC already incorporates NFPA standards in its process of reviewing energy storage system applications. To the extent the bill creates costs for inspections by either the Fire Marshal or for

local fire departments, this committee assumes those costs will be borne by the energy storage system applicant."

VOTES

SENATE FLOOR: 38-0-2
YES: Allen, Alvarado-Gil, Archuleta, Arreguín, Ashby, Becker, Blakespear, Cabaldon, Caballero, Cervantes, Choi, Cortese, Dahle, Durazo, Gonzalez, Grayson, Grove, Hurtado, Jones, Laird, McGuire, McNerney, Menjivar, Niello, Ochoa Bogh, Padilla, Pérez, Richardson, Rubio, Seyarto, Smallwood-Cuevas, Stern, Strickland, Umberg, Valladares, Wahab, Weber Pierson, Wiener
ABS, ABST OR NV: Limón, Reyes

ASM UTILITIES AND ENERGY: 18-0-0
YES: Petrie-Norris, Patterson, Boerner, Calderon, Chen, Davies, Mark González, Harabedian, Hart, Irwin, Kalra, Papan, Rogers, Schiavo, Schultz, Ta, Wallis, Zbur

ASM LOCAL GOVERNMENT: 10-0-0
YES: Carrillo, Ta, Hoover, Pacheco, Ramos, Ransom, Blanca Rubio, Stefani, Ward, Wilson

ASM APPROPRIATIONS: 15-0-0
YES: Wicks, Arambula, Calderon, Caloza, Dixon, Elhawary, Fong, Mark González, Hart, Pacheco, Pellerin, Jeff Gonzalez, Solache, Ta, Tangipa

UPDATED

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