Office of Senate Floor Analyses
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UNFINISHED BUSINESS

Bill No: SB 283
Author: Laird (D), et al.
Amended: 9/5/25
Vote: 21

SENATE ENERGY, U. & C. COMMITTEE: 16-0, 4/21/25
AYES: Becker, Allen, Archuleta, Arreguín, Ashby, Caballero, Dahle, Gonzalez, Grayson, Grove, Limón, McNerney, Rubio, Stern, Strickland, Wahab
NO VOTE RECORDED: Ochoa Bogh

SENATE LOCAL GOVERNMENT COMMITTEE: 7-0, 4/30/25
AYES: Durazo, Choi, Arreguín, Cabaldon, Laird, Seyarto, Wiener

SENATE APPROPRIATIONS COMMITTEE: 6-0, 5/23/25
AYES: Caballero, Seyarto, Cabaldon, Grayson, Richardson, Wahab
NO VOTE RECORDED: Dahle

SENATE FLOOR: 38-0, 5/28/25
AYES: 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
NO VOTE RECORDED: Limón, Reyes

ASSEMBLY FLOOR: 61-0, 9/9/25 – Roll call vote not available.

SUBJECT: Energy storage systems

SOURCE: California Professional Firefighters
California State Association of Electrical Workers
Coalition of California Utility Employees

DIGEST: This bill establishes the Clean Energy Safety Act of 2025 and requires various provisions to address fire safety standards for energy storage systems permitted by the California Energy Commission (CEC) or by local jurisdictions.

Assembly Amendments delete specific reference to a specified fire code standard; adds requirements by when local fire authorities must inspect energy storage facilities; defines energy storage systems to be those that are capable of storing 10 megawatthours (MWh) or more of energy; and makes additional clarifying and conforming changes.

ANALYSIS:

Existing law:

1) Establishes the California Building Standards Commission (CBSC) within the Government Operations Agency, the California Building Standards Law, and sets forth its powers and duties, including approval and adoption of building standards and codification of those standards into the California Building Standards Code. (Health and Safety Code §18901 *et seq*.)

2) Requires the Office of the State Fire Marshal (OSFM), before the next triennial edition of the California Building Standards Code adopted after January 1, 2025, to propose to the CBSC updates to the fire standards relating to requirements for lithium-based battery systems. (Health and Safety Code §13110.3)

3) Requires the California Public Utilities Commission (CPUC), as part of the Public Utilities Act, to implement and enforce standards for the maintenance and operation of facilities for the generation and storage of electricity owned by an electrical corporation or located in the state to ensure their reliable operation. (Public Utilities Code §761.3)

4) Authorizes a person proposing an eligible facility, including an energy storage system that is capable of storing 200 MWh or more of energy, to file with the CEC an application for certification for the site and related facility, commonly referred to as the "AB 205 Opt-in Certification." Provides that the certification issued by the CEC is in lieu of any permit, certificate, or similar document required by a state, local, or regional agency for the use of the site and related facility. (Public Resources Code §25545 *et seq.*)

This bill:

1) Defines "energy storage system" to mean a stationary electrical energy storage system, as defined within the California Building Standards Code, that is capable of storing 10 MWh or more of energy [largely intended to capture utility-scale energy storage facilities].

2) Requires that an application submitted to the CEC after January 1, 2026, in accordance with the AB 205 Opt-In certification of facilities by the CEC, and an application submitted to a local jurisdiction, as defined, for an energy storage system, include the applicant's certification that at least 30 days before submitting the application, the applicant met and conferred with the authority that has jurisdiction over fire suppression in the area where the energy storage system is proposed.

3) Prohibits the approval of applications for battery energy storage facilities unless the local jurisdiction requires as a condition of approval that after installation is complete, but before commencing operations or use of the batteries, the energy storage system is inspected by the authority that has jurisdiction over fire suppression, and that the applicant bear the cost of the inspection, as specified.

4) Requires, as part of the next update to the California Building Standards Code considered after July 1, 2026, the OSFM to review and consider proposing provisions that restrict the location of energy storage systems to dedicated-use noncombustible buildings or outdoor installations, as provided.

5) Imposes a state-mandated local program by imposing additional duties on local officers.

6) 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.

7) Provides that with regard to certain mandates no reimbursement is required by this act because a local agency has the authority to levy fees, charges, or assessments. Provides that, with regard to any other mandates, if the Commission on State Mandates determines that this bill contains costs so mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions.

Background

Growth in battery energy storage. California is increasingly relying on new and emerging energy storage technologies to support electric service reliability and help achieve the state's ambitions greenhouse gas reduction goals. Energy storage technology offers opportunities for balancing increasing volumes of intermittent renewable energy (such as solar and wind energy), allowing for the storage of energy during times when production is high but demand is lower, and discharging during times when production from renewable resources is more limited or not available. In particular, lithium-ion stationary battery energy storage development in California is accelerating rapidly. The technology is fast-tracked in utility procurements due to its ability to support the state's clean energy and reliability goals cost-effectively. According to the CEC, in 2019, there was 250 megawatt (MW) of utility-scale lithium-ion battery systems operating and participating in the state's wholesale power markets, which has grown to nearly 12,000 MW. In 2024, California made historic progress in clean energy deployment including bringing online over 4,000 MW of new battery storage. According to the CPUC, the installed battery storage capacity is now over 20% of the state's peak demand and the state's projected need for battery storage capacity is estimated at 52,000 MW by 2045.

Thermal runaway. One of the primary risks related to lithium-ion batteries is thermal runaway, which is a phenomenon in which the lithium-ion cell enters an uncontrollable, self-heating state. Thermal runaway can result in extremely high temperatures, violent cell venting, explosion, smoke, and fire. Internal failures and external conditions can result in a thermal runaway. Lithium-ion battery fire and explosion are triggered by the thermal runaway reactions inside the cell. 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 even days as lithium-ion fires are prone to re-ignition due to the self-oxidizing nature of lithium salts in the battery.

Safety incidents at battery energy storage facilities. There have been a number of recent safety incidents at battery facilities, including four incidents at the Moss Landing Harbor location in Monterey County, involving two separately owned battery energy storage facilities, which occupies one of the largest battery energy storage systems. The first incident was in September 2021 and the most recent event occurred in January of this year. These incidents involved evacuations of nearby residents and businesses, and fires that took hours to suppress.

Recent bills have expanded safety oversight of battery energy storage facilities. SB 1383 (Hueso, Chapter 725, Statutes of 2022) expanded the CPUC operation and maintenance standards contained in General Order (GO) 167-B to oversight of energy storage systems, including systems owned by third-parties. Under GO 167-B, CPUC safety staff conduct in-person audits at CPUC-jurisdictional electric generation and storage facilities throughout the state and requires these facilities to comply with existing laws and statutes, including those related to ensuring protection of life and limb. SB 38 (Laird, Chapter 377, Statutes of 2023) further expanded on the requirements of SB 1383 to explicitly require each battery energy storage facility subject to the CPUC safety requirements to have an emergency response plan and emergency action plan that covers the premises of the battery energy storage facility. Earlier this year, the CPUC adopted changes to GO 167-B to implement the requirements of both SB 1383 and SB 38.

Building Standards Code 2024 Triennial Code Adoption Cycle. The California Building Standards Code is the building code for California, and Title 24 of the California Code of Regulations and maintained by the CBSC, pursuant to California Building Standards Law and published in a triennial cycle with supplemental information published during other years. Changes made to each edition are based on proposals made by state agencies. Proposals are presented to the CBSC and must provide thorough justification for proposed changes. Chapter 12 (commencing with Section 1201.1) of Part 9 of Title 24 of the California Code of Regulations is the section of the California Fire Code related to energy systems. Chapter 12 was added to address standby and emergency power, portable generators, photovoltaic systems, fuel cell energy systems, and energy storage systems. The fire code includes more stringent requirements for lithium-based chemistries (fire containment and suppression, explosion protection, etc.) because they present a higher fire risk than lead-acid and nickel-cadmium. The author and sponsors of the bill report that the most recently updated California Fire Code, published on July 1, 2025, and to be effective on January 1, 2026, now includes the NPFA 855, *Standard for the Installation of Stationary Energy Storage Systems*., which aims to ensure the safety and proper installation of energy storage systems, including batteries. NFPA 855 provides guidelines and requirements for design, construction, installation, and operation of energy storage systems, focusing on preventing fires and explosions, especially those using lithium-ion batteries. This standard also addresses the specific needs of different technologies used in energy storage.

AB 205 (Committee on Budget, Chapter 61, Statutes of 2022). Among its many provisions, AB 205 established the CEC's Opt-in certification program for siting

of solar, wind and energy storage facilities that meet certain criteria. This opt-in permitting process offers developers an optional pathway to submit project applications for the specified resources, intended to facilitate faster deployment of renewable technologies. Under AB 205, the CEC is the lead California Environmental Quality Act (CEQA) agency for environmental review and permitting for any facility that elects to opt into the CEC's jurisdiction. The CEC has at least eight active project applications, with one recently approved by the agency. The AB 205 process is an optional certification program whereas, generally (and the vast majority), these projects are sited and approved by local jurisdictions.

Comments

Need for this bill. The author notes: "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. It is essential that we apply these lessons to prevent future disasters so that California can continue to build a cleaner, more resilient future."

Fire safety at forefront of bill's provisions. This bill requires a project developer to consult with local fire authorities prior to the siting of any facility, and requires a facility to be inspected by fire authorities within specified times prior to any project going online, at the cost of the developer. The bill provides that if a local fire authority does not inspect the facility by the given timeline (90 days) the CEC must make findings regarding compliance with the requirements of fire safety. The bill also requires the State Fire Marshal to review and consider proposing provisions that restrict the location of energy storage systems to dedicated-use noncombustible buildings or outdoor installations. These requirements are intended to address concerns about previous installations and whether future energy storage facilities should be limited to specific buildings and locations.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: Yes

According to the Assembly Appropriations Committee, 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.

SUPPORT: (Verified 9/8/25)

California Professional Firefighters (Co-source)
California State Association of Electrical Workers (Co-source)
Coalition of California Utility Employees (Co-source)
American Clean Power- California
Ava Community Energy Authority
California Community Choice Association
California Energy Storage Alliance
California State Association of Counties
City of Goleta
Clean Power Alliance
Climate Action California
Comite Civico del Valle
County of Monterey
County of Orange
County of San Luis Obispo
County of Santa Barbara
County of Stanta Cruz
Democrats of Rossmoor
Fluence
Independent Energy Producers Association
International Union of Painters and Allied Trades, District Council 16
International Union of Painters and Allied Trades, District Council 36
League of California Cities
Orange County Fire Authority
Pacific Gas and Electric Company
Rural County Representatives of California
San Diego Community Power
San Diego Gas and Electric Company
San Diego Regional Chamber of Commerce
Santa Cruz Climate Action Network
Sierra Club California
Southern California Edison
Tri-County Chamber Alliance

OPPOSITION: (Verified 9/8/25)

None received

ARGUMENTS IN SUPPORT: The California State Association of Electrical Workers and the Coalition of California Utility Employees, two of this bill's co-sponsors state: "By setting clear, consistent safety standards for energy storage systems, SB 283 will help protect workers, first responders, and communities while facilitating the responsible expansion of energy storage infrastructure."

Prepared by: Nidia Bautista / E., U. & C. / (916) 651-4107
9/9/25 12:37:02

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