BILL ANALYSIS

C.S.H.B. 3824
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State Affairs
Committee Report (Substituted)

BACKGROUND AND PURPOSE

The bill author has informed the committee that Texas has the fastest-growing battery market in the country, with more than 13,000 megawatts (MW) of total battery energy storage resource discharge capacity and an additional 120,000 MWs of stand-alone battery projects in the interconnection queue. The bill author has also informed the committee that, with the increasing integration of utility-scale batteries into Texas' electricity system, there is a growing need for clear safety standards and emergency response protocols to govern battery facility operations. C.S.H.B. 3824 seeks to address this need by providing for the establishment of fire safety standards and emergency operations plans for battery energy storage facilities in Texas.

CRIMINAL JUSTICE IMPACT

It is the committee's opinion that this bill does not expressly create a criminal offense, increase the punishment for an existing criminal offense or category of offenses, or change the eligibility of a person for community supervision, parole, or mandatory supervision.

RULEMAKING AUTHORITY

It is the committee's opinion that rulemaking authority is expressly granted to the commissioner of insurance in SECTION 1 of this bill.

ANALYSIS

C.S.H.B. 3824 amends the Utilities Code to set out provisions relating to battery energy storage facility safety. The bill's provisions apply only to such a facility with a capacity of one megawatt hour or greater installed on or after January 1, 2027.

Fire Safety Standards

C.S.H.B. 3824 requires the commissioner of insurance by rule to adopt fire safety standards and testing requirements for the design, installation, operation, and safety of battery energy storage facilities based solely on the following:

- nationally recognized standards for battery energy storage equipment or facilities established by UL Solutions, such as UL 9540A testing standards; and
- minimum standards related to stationary energy storage facilities established by the National Fire Protection Association (NFPA), such as the 2023 edition of NFPA 855 or a later edition.

The bill authorizes the commissioner to periodically update such standards and requirements as necessary to reflect changes in the nationally recognized standards and the NFPA standards on which the commissioner's standards are based.

C.S.H.B. 3824 requires each battery operator or municipally owned utility that owns or operates a battery energy storage facility to ensure that the facility meets the commissioner's standards for design, installation, operation, and safety in effect at the time the operator or utility first

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submits an application for a building permit or other authorization from the relevant political subdivision to install the facility. The bill prohibits a municipality or county, unless expressly authorized by another statute, from adopting, enforcing, or maintaining an ordinance, order, or rule regulating conduct in a field of regulation that is inconsistent with those standards.

C.S.H.B. 3824 requires a battery operator that owns or operates an applicable battery energy storage facility, on request by a municipality in which the facility is located or, if the facility is in an unincorporated area, by a county in which the facility is located, to select and contract with an independent, third-party engineer licensed in Texas or other consultant with appropriate expertise, at the battery operator's expense, to take the following actions:

- evaluate the design, safety, and installation of the facility before the start of operations to ensure compliance with the bill's requirements regarding fire safety standards;
- produce a written report that includes the evaluation, identifies any noted deficiencies in compliance with the standards adopted by the commissioner, and recommends appropriate actions to correct deficiencies; and
- provide the written report to the requesting municipality or county.

The bill requires the battery operator to make available to the engineer or consultant and the requesting municipality or county the following documents if held or created by the battery operator:

- at the time the operator first submits an application for a building permit or other authorization from the relevant political subdivision to install the battery energy storage facility:
 - o documents relating to the site layout;
 - o any manufacturer specifications for the facility;
 - a UL 9540A report and any UL listings and associated documentation for the facility;
 - o NFPA standards, including any associated documentation, for the facility;
 - o electrical drawings for the facility;
 - o monitoring procedures for the facility; and
 - o fire protection system documentation for the facility; and
- at the commencement of installation, the emergency operations plan required by the bill and a hazard mitigation analysis for the battery energy storage facility.

C.S.H.B. 3824 requires each battery operator, at least once every five years and at the battery operator's expense, to select and contract with an independent, third-party engineer licensed in Texas or other consultant with appropriate expertise to produce a fire safety inspection report for the battery operator's battery energy storage facility and provide the report to the municipality in which the facility is located or, if the facility is in an unincorporated area, to the county in which the facility is located. The bill requires the report to identify any noted deficiencies, recommend appropriate actions to correct them, and include an evaluation of the following:

- the structural integrity and weatherproofing of any enclosure against design specifications at the site of the facility;
- the maintenance schedule and any associated documentation for the facility;
- the emergency operations plan required by the bill;
- any hazard mitigation analysis for the facility;
- any monitoring procedures and gas or fire safety alarm activation history for the facility;
- fire protection system inspection and testing records for the facility; and
- the ventilation equipment of the facility or other safety equipment with the same or a similar function.

Emergency Operations Plans

C.S.H.B. 3824 sets out provisions relating to emergency operations plans for battery energy storage facilities and authorizes the commissioner of insurance by rule to prescribe procedures

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or requirements as necessary for purposes of those provisions. The bill requires a battery operator or a municipally owned utility to produce a site-specific emergency operations plan for each battery energy facility site owned or operated by the battery operator or utility. The bill requires the plan to include the following:

- an identification of potential risks and hazards specific to the site, including an assessment of any potential environmental effects resulting from an equipment failure;
- a hazard mitigation analysis;
- procedures for the safe shutdown, de-energizing, or isolation of equipment and facilities under emergency conditions, including emergency procedures to be followed in case of fire:
- procedures for handling equipment damaged in a fire or other emergency event;
- procedures and schedules for conducting drills using the procedures specified in this list and documentation related to the performance of the drills;
- procedures for communication between the operator of the facility and first responders, including procedures that facilitate communication between first responders and emergency contacts designated by the operator or utility; and
- emergency operations protocols to ensure safety during critical events, including protocols that provide for the safety of nearby residents, neighboring properties, and first responders.

The bill requires the battery operator or municipally owned utility to provide the plan, before operating the battery energy storage facility, to the local first responder responsible for providing fire protection services in the area in which the facility is located and to maintain safety data sheets or comparable documents and the plan at an on-site location accessible to personnel responsible for the operations and maintenance of the facility and first responders.

C.S.H.B. 3824 requires the battery operator or municipally owned utility to offer to local first responders, at no cost to the responders, education and annual training regarding responding to an equipment failure incident at the battery energy storage facility site, including the following:

- training on specific characteristics of battery energy storage technology;
- training on protecting first responders during incident response;
- training on hazards commonly associated with incident response;
- training on incident response protocols, including an overview of the site-specific emergency operations plan; and
- an on-site review of the perimeter, major equipment, and ingress and egress to the site.

Enforcement

C.S.H.B. 3824 requires the commissioner of insurance by rule to do the following:

- delegate to the state fire marshal the authority to take disciplinary and enforcement actions, including the imposition of administrative penalties, to enforce the bill's provisions in the manner provided under Government Code provisions regarding such actions by the state fire marshal; and
- adopt a schedule of administrative penalties for violations subject to a penalty under the bill's provisions to ensure that the amount of an administrative penalty imposed is appropriate to the violation, in the manner provided by those Government Code provisions.

The bill expressly states that those Government Code provisions apply to the enforcement of the bill's provisions by the state fire marshal.

Definitions

C.S.H.B. 3824 defines the following terms:

• "battery energy storage facility" as a battery energy storage resource and any facility or equipment necessary to support the operation of the battery energy storage resource, other than a facility or equipment owned by an electric utility;

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- "battery energy storage resource" as an electrochemical device, whether connected at the transmission or distribution level, that charges from the grid or a co-located generation resource and discharges that energy at a later time;
- "battery operator" as an electric cooperative, an electric utility, a power generation company, a self-generator, or another person that owns or operates a battery energy storage facility;
- "commissioner" as the commissioner of insurance;
- "electric cooperative" and "municipally owned utility" by reference to the meanings assigned by Public Utility Regulatory Act provisions applicable to all utilities;
- "electric utility" and "power generation company" by reference to the meanings assigned by Public Utility Regulatory Act provisions relating to electric utilities; and
- "first responder" by reference to the meaning assigned by Civil Practice and Remedies Code provisions relating to limited liability for first responders regarding wellness checks at a civil commitment facility.

EFFECTIVE DATE

September 1, 2025.

COMPARISON OF INTRODUCED AND SUBSTITUTE

While C.S.H.B. 3824 may differ from the introduced in minor or nonsubstantive ways, the following summarizes the substantial differences between the introduced and committee substitute versions of the bill.

While both the introduced and the substitute provide for the establishment of standards and requirements for fire safety standards with respect to battery energy storage, the versions differ as follows:

- whereas the introduced required the state fire marshal to adopt fire safety standards and testing requirements for battery energy storage, the substitute instead requires the commissioner of insurance by rule to adopt fire safety standards and testing requirements for the design, installation, operation, and safety of battery energy storage facilities;
- the substitute makes certain clarifying changes with respect to the requirement to base the adopted standards and requirements solely on certain nationally recognized standards and NFPA standards; and
- whereas the introduced required the state fire marshal to periodically update the adopted standards and requirements, the substitute authorizes the commissioner to periodically update the standards and requirements as necessary to reflect changes in the nationally recognized standards and the NFPA standards.

Accordingly, the substitute replaces references to "battery energy storage" with references to "battery energy storage facility" in the bill's provisions relating to those standards and requirements.

Whereas the introduced defined "battery energy storage" as a battery energy storage facility or battery energy storage equipment considered to be a generation asset under the Public Utility Regulatory Act and operated inside or outside the ERCOT power region, the substitute defines the following terms:

- "battery energy storage facility" as any facility or equipment necessary to support the operation of the battery energy storage resource, other than a facility or equipment owned by an electric utility; and
- "battery energy storage resource" as an electrochemical device, whether connected at the transmission or distribution level, that charges from the grid or a co-located generation resource and discharges that energy at a later time.

Additionally, the substitute revises the introduced version's definition of "battery operator" to include a self-generator or another person that owns or operates a battery energy storage facility,

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in addition to electric cooperatives, electric utilities, and power generation companies, which are included in both versions.

The substitute includes a provision absent from the introduced restricting application of the bill's provisions to a battery energy storage facility with a capacity of one megawatt hour or greater installed on or after January 1, 2027.

Whereas the introduced required each battery operator or municipally owned utility that owns or operates battery energy storage to ensure that the storage meets the adopted fire safety standards and testing requirements at the time of interconnection, the substitute requires each battery operator or municipally owned utility that owns or operates a battery energy storage facility to ensure that the facility meets the adopted standards in effect at the time the operator or utility first submits an application for a building permit or other authorization from the relevant political subdivision to install the facility.

Both the introduced and the substitute prohibit a municipality or county from adopting, enforcing, or maintaining an ordinance, order, or rule regulating conduct in a field of regulation that is inconsistent with the adopted standards and testing requirements. However, the introduced specified that an ordinance, order, or rule that violates that prohibition is void and unenforceable, whereas the substitute does not.

With respect to the requirements for a battery operator to contract with an engineer or other consultant for certain purposes, the substitute clarifies that the operator selects the engineer or consultant, whereas the introduced did not.

Both the introduced and the substitute require a battery operator that contracts with an engineer or consultant for an evaluation of design, safety, and installation before the start of operations on request by an applicable municipality or county to make available to the engineer or consultant and the requesting municipality or county certain documents if held or created by the battery operator. However, the substitute specifies that the emergency operations plan and hazard mitigation analysis must be made available at the commencement of installation and that the other documents must be made available at the time the operator first submits an application for a building permit or other authorization from the relevant political subdivision to install the battery energy storage facility, which the introduced did not specify. The substitute omits a provision from the introduced that included alarm activation criteria for the battery energy storage among such documents.

The substitute changes the minimum frequency with which a battery operator must contract with an engineer or consultant to produce a fire safety inspection report from every three years, as in the introduced, to every five years. Additionally, the introduced and the substitute differ in the following ways with respect to the items for which the inspection report must include an evaluation:

- whereas the introduced included the structural integrity and weatherproofing of any enclosure at the site, the substitute includes only the structural integrity and weatherproofing of any enclosure against design specifications at the site;
- whereas the introduced included monitoring history, the substitute includes gas or fire safety alarm activation history; and
- whereas the introduced included the ventilation systems of the storage, the substitute includes the ventilation equipment of the facility or other safety equipment with the same or a similar function.

The substitute makes the bill's requirements regarding emergency operations plans applicable to battery energy storage facility sites, instead of battery energy storage sites as in the introduced. The substitute omits a provision from the introduced that made those requirements applicable only to a battery operator or a municipally owned utility that owns or operates battery energy storage, whether standalone or colocated with another generation asset.

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The substitute includes an authorization not in the introduced for the commissioner of insurance by rule to prescribe procedures or requirements as necessary for purposes of the bill's provisions relating to emergency operations plans.

With respect to the required components of an emergency operations plan, the introduced and the substitute differ as follows:

- the substitute includes a specification not in the introduced that an identification of potential risks and hazards specific to the site includes an assessment of any potential environmental effects resulting from an equipment failure; and
- the substitute omits a provision from the introduced requiring the inclusion of emergency operations protocols that provide for the safety of the environment, including measures to mitigate or prevent pollution of air, soil, groundwater, or surface water.

The substitute includes provisions absent from the introduced regarding enforcement of the bill's provisions by the state fire marshal.

The substitute omits a provision from the introduced establishing that the bill's provisions apply only to battery energy storage facilities or equipment for which interconnection is approved by the independent system operator of jurisdiction on or after January 1, 2027.

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