Office of Senate Floor Analyses
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THIRD READING

Bill No: AB 696
Author: Ransom (D), et al.
Amended: 8/20/25 in Senate
Vote: 21

SENATE GOVERNMENTAL ORG. COMMITTEE: 15-0, 7/8/25
AYES: Padilla, Valladares, Archuleta, Ashby, Blakespear, Cervantes, Dahle, Hurtado, Jones, Ochoa Bogh, Richardson, Rubio, Smallwood-Cuevas, Wahab, Weber Pierson

SENATE ENVIRONMENTAL QUALITY COMMITTEE: 8-0, 7/16/25
AYES: Blakespear, Valladares, Dahle, Gonzalez, Hurtado, Menjivar, Padilla, Pérez

SENATE APPROPRIATIONS COMMITTEE: Senate Rule 28.8

ASSEMBLY FLOOR: 79-0, 6/4/25 - See last page for vote

SUBJECT: Lithium-ion vehicle batteries: emergencies: advisory group

SOURCE: Author

DIGEST: This bill requires the Office of the State Fire Marshal (SFM) to convene the Lithium-Ion Car Battery Advisory Group (Advisory Group) to review, and advise the Legislature on, policies pertaining to the safety and management of lithium-ion vehicle batteries involved in an emergency situation, as specified.

ANALYSIS:

Existing law:

1) Requires the Secretary for Environmental Protection, until January 1, 2027, to convene the Lithium-Ion Car Battery Recycling Advisory Group to review, and advise the Legislature on, policies pertaining to the recovery and recycling of lithium-ion batteries sold with motor vehicles in the state, and requires the

secretary to appoint members to the committee from specified departments, vocations, and organizations.

2) Establishes, pursuant to the California Emergency Services Act (ESA), OES within the Governor's office, under the supervision of the Director of OES, and makes the office responsible for the state's emergency and disaster response services for natural, technological, or manmade disasters and emergencies.

3) Establishes the SFM, within the Department of Forestry and Fire Protection (CAL FIRE), as specified.

4) Provides that any report required or requested by law be submitted by a state or local agency to a committee of the Legislature or the Members of either house of the Legislature generally, to instead be submitted as a printed copy to the Secretary of the Senate, as an electronic copy to the Chief Clerk of the Assembly, and as an electronic or printed copy to the Legislative Counsel, as specified.

This bill:

1) Requires the SFM, on or before December 31, 2026, to convene the Advisory Group to review, and advise the Legislature on, policies pertaining to the safety and management of lithium-ion vehicle batteries involved in an emergency situation, including, but not limited to, a battery fire, other non-fire damage to a lithium-ion vehicle battery, submerged vehicle recovery, and roadway collisions.

2) Requires the Advisory Group, until July 1, 2028, to meet at least quarterly and requires the Advisory Group to consult with universities and research institutions that have conducted research in the area of lithium-ion batteries, with manufacturers of electric and hybrid vehicles, and both state and local first responders.

3) Requires the SFM to appoint at least one member to the Advisory Group from each of the following:

   a) The California Environmental Protection Agency (CalEPA).
   b) The Department of Toxic Substances Control (DTSC).
   c) The Office of the SFM.
   d) A certified unified program agency.

e) An organization that represents first responders that respond to vehicle battery fires.
f) An organization that represents one or more vehicle manufacturers that produce lithium-ion battery-powered vehicles.
g) An automobile dismantler or an organization that represents one or more automobile dismantlers.
h) A lithium-ion battery manufacturer.
i) A standards-developing organization that has a focus on automotive engineering.
j) A member representing advanced recycling of electric vehicle batteries, with expertise in electric vehicle battery recovery and hazard mitigation in emergency response.

4) Requires the Advisory Group, on or before July 1, 2028, to develop standards, based on local, state, and national guidance and research, aimed at ensuring best standards and practices are created that allow first responders to respond to lithium-ion vehicle battery emergencies in a safe and efficient manner. In developing the standards, the Advisory Group shall consider both state and local solutions.

5) Provides that this bill shall remain in effect only until January 1, 2029, and as of that date is repealed.

Background

Author Statement. According to the author's office, "AB 696 is an essential piece of legislation which addresses concerns surrounding California's growing use of lithium-ion batteries. As electric vehicles become more widespread, the need for proper safety protocols for their batteries becomes increasingly urgent. The fires resulting from damaged lithium-ion batteries are difficult to contain and extinguish, endangering the lives of residents and first responders alike. In the Palisades and Eaton fires, which tore through our southern California communities in the beginning of this year, the high-energy density of lithium-ion batteries presented a significant danger to first responders fighting to defend neighborhoods. These incidents make it clear: California urgently needs effective emergency protocols for handling these batteries on-scene."

Further, "AB 696 would bring together state and local firefighting professionals, vehicle and battery manufacturers, and other key stakeholders to provide our first

responders with evidence-based protocols to keep themselves and others safe as they protect our communities."

Lithium-ion Batteries. Lithium-ion batteries are comprised of an anode, cathode, separator, electrolyte, and two current collectors (positive and negative). The anode and the cathode store the lithium. The electrolyte carries positively charged lithium ions from the anode to the cathode and vice versa through the separator. The movement of the lithium ions creates free electrons in the anode, which creates a charge at the positive current collector. The electrical current then flows from the current collector through a device being powered (cellphone, computer, etc.) to the negative current collector. The separator blocks the flow of electrons inside the battery.

Compared to other high-quality rechargeable battery technologies (nickel-cadmium, nickel-metal-hydride, or lead-acid), lithium batteries have a number of advantages. They have one of the highest energy densities of any commercial battery technology, approaching 300 watt-hours per kilogram (Wh/kg) compared to roughly 75 Wh/kg for alternative technologies. High energy densities and long lifespans have made lithium-ion batteries the market leader in portable electronic devices and electrified transportation, including electric vehicles and jets.

Risk of Thermal Runaway. One of the primary risks related to lithium-ion batteries is thermal runaway. Thermal runaway 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, smoke, and fire. Faults in a lithium-ion cell can result in a thermal runaway, and these faults can be caused by internal failure or external conditions. Lithium-ion battery fires and explosions are triggered by the thermal runaway reactions inside the cell and, when 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, until all the flammable chemicals in the battery have been consumed by the combustion reaction.

One such example occurred in Rancho Cordova in June of 2022, when a Tesla Model S, which had been badly damaged in a collision was sitting in a wrecking yard and suddenly erupted in flames. When firefighters arrived the car was engulfed, according to the Sacramento Metropolitan Fire District, "[e]very time the blaze was momentarily extinguished, the car's battery compartment reignited." Eventually, the firefighters used a tractor to create a pit in the dirt, were able to get the car inside, and then filled the hole with water. That allowed the firefighters to

suffocate the battery pack and ultimately extinguish the fire, which burned hotter than 3,000 degrees and took more than an hour and 4,500 gallons of water to extinguish.

CalEPA's Lithium-Ion Car Battery Advisory Group. AB 2382 (Dahle, Chapter 822, Statutes of 2018) required the Secretary of CalEPA to convene a research group to review, and advise the Legislature on, policies pertaining to the recovery and recycling of lithium-ion vehicle batteries sold with motor vehicles in the state, as specified. That advisory group concluded its work for which it was established in March of 2022, and completed its final policy recommendations to the Legislature in its ***Lithium-ion Car Batter Recycling Advisory Group Final Report***. The meetings and materials that led up to the final recommendations are additionally available on CalEPA's internet website under the Past Meetings section.

The Lithium-ion Car Battery Recycling Advisory Group was created to advise the Legislature on policies pertaining to the recovery and recycling of lithium-ion vehicle batteries sold with motor vehicles in the state. It was led by CalEPA, DTSC, and the Department for Resources Recycling and Recovery (CalRecycle). Additional members came from the environmental community, auto dismantlers, public and private representatives involved in the manufacturing, collection, processing and recycling of electric vehicle batteries, and other interested parties.

Office of the State Fire Marshal. The Office of the SFM supports the mission of CAL FIRE by focusing on fire prevention. The SFM provides support through a wide variety of fire safety responsibilities including: regulating buildings in which people live, congregate, or are confined in; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death and destruction by fire; by providing statewide direction for fire prevention within wildland areas; by regulating buildings standards; and by providing training and education in fire protection methods and responsibilities. These achievements are accomplished through several major program elements including engineering, education, enforcement, and support from the State Board of Fire Services.

Reports to the Legislature. State or local agencies required to file reports with the Legislature must submit a printed copy to the Secretary of the Senate, an electronic copy to the Chief Clerk of the Assembly, and an electronic or printed copy to the Office of Legislative Counsel. The Assembly and Senate each compile a list of reports received. The public may access and search agency reports by keywords, agency, authority type, recipient, or due date online at www.agencyreports.ca.gov.

An article in CalMatters from December of last year titled "most reports ordered by California's Legislature this year are shown as missing," noted that at the time, of the 867 reports due between January 1 and December 9 of 2024, "84% have not been filed to the Office of Legislative Counsel." Further, of the "16% that were submitted – 138 reports – 68 were filed late. Another 344 reports are due by Dec. 31." The article notes that the "data is in line with previous CalMatters reporting that found 70% of about 1,1000 reports due between February 2023 and February 2024 had not been filed to the Office of Legislative Counsel. About half of those that were filed were late."

OES's Lithium-Ion Car Batter Advisory Group. This bill requires the SFM, on or before December 31, 2026, to convene the Advisory Group to review, and advise the Legislature on, policies pertaining to the safety and management of lithium-ion vehicle batteries involved in an emergency situation. This bill requires the SFM to appoint members to the Advisory Group from various specified state departments, agencies, as well as various vocations and organizations. Additionally, this bill requires the Advisory Group to meet at least quarterly until July 1, 2028, coinciding with this bill's requirement that the Advisory Group develop and report on specified standards. This bill includes a repeal provision sun-setting the Advisory Group on January 1, 2029.

Prior/Related Legislation

SB 283 (Laird, 2025) establishes the Clean Energy Safety Act of 2025 by requiring energy storage systems authorized by the California Energy Commission or a local jurisdiction to comply with new fire safety standards and inspection requirements. This bill is pending in the Assembly Appropriations Committee.

AB 841 (Patel, 2025) requires the SFM, in consultation with the Division of Occupational Safety and Health, to develop a working group to make recommendations regarding personal protective equipment used in responding to lithium-ion battery fires, as specified. This bill is pending in the Senate Appropriations Committee.

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

Senate Rule 28.8

SUPPORT: (Verified 8/21/25)

Big Pine Fire Protection District

California Association of Environmental Health Administrators
California Electric Transportation Coalition
California State Association of Counties
Redwood Materials, INC.
State of California Auto Dismantlers Association

OPPOSITION: (Verified 8/21/25)

None received

ARGUMENTS IN SUPPORT: In support of the bill, the California State Association of Counties and the California Association of Health Administrators jointly write that, "Lithium-ion batteries are widely used in zero emission vehicles (ZEVs) and in the first quarter of 2024, nearly 24% of all new cars sold in California were ZEVs. According to a study by the National Transportation Safety Board (NTSB), lithium-ion vehicle batteries can pose major safety risks to first responders, including electric shock and thermal runaway, an uncontrollable increase in temperature causing fires and explosions. Batteries can be ejected from a battery pack or casing during an incident, which can spread the fire or cause a cascading incident with secondary ignitions. Even after extinguishing a lithium-ion battery fire, there is a risk of re-ignition. Therefore, firefighters need to adopt strategic cooling methods to manage these incidents effectively.

ASSEMBLY FLOOR: 79-0, 6/4/25
AYES: Addis, Aguiar-Curry, Ahrens, Alanis, Alvarez, Arambula, Ávila Farías, Bains, Bauer-Kahan, Bennett, Berman, Boerner, Bonta, Bryan, Calderon, Caloza, Carrillo, Castillo, Chen, Connolly, Davies, DeMaio, Dixon, Elhawary, Ellis, Flora, Fong, Gabriel, Gallagher, Garcia, Gipson, Jeff Gonzalez, Mark González, Hadwick, Haney, Harabedian, Hart, Hoover, Irwin, Jackson, Kalra, Krell, Lackey, Lee, Lowenthal, Macedo, McKinnor, Muratsuchi, Nguyen, Ortega, Pacheco, Papan, Patel, Patterson, Pellerin, Petrie-Norris, Quirk-Silva, Ramos, Ransom, Celeste Rodriguez, Michelle Rodriguez, Rogers, Blanca Rubio, Sanchez, Schiavo, Schultz, Sharp-Collins, Solache, Soria, Stefani, Ta, Tangipa, Valencia, Wallis, Ward, Wicks, Wilson, Zbur, Rivas

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