Date of Hearing: June 25, 2025

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Cottie Petrie-Norris, Chair
SB 593 (Hurtado) – As Amended June 16, 2025

SENATE VOTE: 38-0

SUBJECT: Voltage changes: consumer protection

SUMMARY: Directs the CPUC to require electrical corporations to modify their consumer protection policies, if deemed necessary, to better protect customers from significant voltage changes that may result in damage to customer equipment and appliances.

Specifically, **this bill**:

1) Requires the CPUC, on or before July 1, 2027, to require electrical corporations to adjust their consumer protections to better protect customers from significant voltage changes that can result in damage to customers' equipment and appliances if the CPUC determines adjustments to the consumer protections are necessary.

2) Specifies the factors the CPUC would be required to evaluate when determining when to adjust consumer protections, including: the utility's claims process and notification procedures for customers affected by significant voltage changes resulting in property damage; the adequacy of customer outreach in relevant languages; and the customer's ability to appeal to the CPUC for further review.

3) Requires the governing boards of local publicly owned electric utilities, on or before January 1, 2027, to adopt policies to protect customers from voltage changes that cause damage to equipment and appliances. Also, requires each local publicly owned electric utility to post its policy—including its claims process for addressing such damage caused by voltage changes—on its internet website.

4) Requires the CPUC to annually publish a report that includes all investigations into gas or electric service safety incidents reported by any gas or electrical corporation, including claims of property damage of $5,000 or more by any gas corporation or electrical corporation.

5) Requires the CPUC to annually publish a report that includes a summary of staff safety investigations concluded during the prior calendar year and those that remain open for any gas or electrical corporation, with a link to the internet website with the report, and for each investigation, an explanation of why the investigation remains open if the investigation remains open for 12 or more months after a claim was filed.

EXISTING LAW:

1) Establishes the California Public Utilities Commission (CPUC) with regulatory authority over public utilities, including electrical corporations. (Article XII of the California Constitution)

2) Requires every public utility to furnish and maintain adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities, as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public. (Public Utilities Code §451)

3) Establishes the policy of the state that each electrical corporation is required to continue operating its electric distribution grid in its service territory and to do so in a safe, reliable, efficient, and cost-effective manner. (Public Utilities Code §399.2(a))

4) Authorizes the CPUC to supervise and regulate every public utility in the state and to do all things necessary and convenient in the exercise of such power and jurisdiction. (Public Utilities Code §701)

5) Requires the CPUC, beginning February 1, 2016, to annually publish a report that includes all investigations into gas or electric service safety incidents reported—pursuant to CPUC's requirements—by any gas or electrical corporation. The report must succinctly describe each investigation concluded during the prior calendar year, as well as those that remain open. (Public Utilities Code §911)

6) Provides that any public utility which does, causes to be done, or permits any act, matter, or thing prohibited or declared unlawful either by the Constitution, any law of this State, or any order or decision of the CPUC, shall be liable to the persons or corporations affected thereby for all loss, damages, or injury caused thereby or resulting therefrom. Provides that if the court finds that the act or omission was willful, it may award exemplary damages, in addition to actual damages. (Public Utilities Code §2106)

FISCAL EFFECT: Pursuant to Senate Rule 28.8, the Senate Appropriations Committee has determined that this bill is not expected to incur significant state costs.

CUSTOMER COST IMPACTS: Unknown.

BACKGROUND:

Electric Rule 2 – Electric 2, as approved by the CPUC, establishes the standards that govern the quality and reliability of electric service that IOUs must provide to customers.[1] The rule establishes the applicable transmission and distribution voltages that must be maintained at the point of delivery, typically where the utility's system connects to a customer's meter. As part of these requirements, utilities must maintain voltage levels within ±5% of the nominal value. For instance, customers receiving standard 120-volt service through a typical two-wire residential connection must be supplied with voltage between 114 and 126 volts.[2] These standards are designed to ensure safety and prevent equipment malfunction. However, Rule 2 also recognizes that deviations outside these limits may occur due to events beyond the utility's control—such as

[1] Electric Rule 2 is a utility-specific tariff that outlines electric service quality and reliability standards, including voltage requirements. It is not adopted as a statewide regulation but is approved by the CPUC through formal processes, such as advice letter filings or resolutions, in accordance with General Order 96-B**.** Once approved, these tariffs become binding on investor-owned utilities such as PG&E, SCE, and SDG&E
[2] CPUC, Energy Division, "Voltage Reduction Experience and Potential."; Docket No. G000/M209/K031/209031026; February 2020; Accessed June 20, 2025

severe weather, and equipment failure —and exempts utilities from liability in such circumstances. Additionally, the rule provides that if a customer requires more precise or constant voltage regulation than what is provided within the standard range, the customer is responsible for installing and maintaining voltage-regulating equipment—such as a constant voltage transformer on their side of the delivery point.

CPUC's Annual Safety and Enforcement Report – Existing law requires the CPUC to annually publish a report that includes all investigations into gas or electric service safety incidents reported, pursuant to the commission requirements, by IOUs.[3] The report is required to describe each safety investigation concluded during the prior calendar year and each investigation that remains open. For each incident, the report must include key details such as the month of occurrence, the type of facility involved, the reason for the investigation, and the owner of the facility. Incidents typically meet a reporting threshold of $5,000 or more in property damage, or a potential threat to public or employee safety. Additionally, the CPUC is required to provide a summary of all staff-conducted safety investigations, highlighting patterns or trends in utility safety performance. The report is required to include a link to the CPUC's website where the detailed data is posted, and made publicly accessible to ensure regulatory oversight and public transparency.

COMMENTS:

1) *Author's statement.* According to the author, "California ratepayers deserve transparency, accountability, and protection when it comes to voltage fluctuations that can cause significant damage and financial burdens for families already struggling with the high cost of living. Too often, families and businesses are left unaware when a damaging fluctuation in voltage occurs, only discovering the damage when their appliances, electronics, and other lifesaving systems stop working. These expensive repairs or replacements add unnecessary financial stress while leaving ratepayers with little recourse or support from utilities. SB 593 changes this by requiring the Public Utilities Commission and Publicly Owned Utilities to review electrical corporation's existing consumer protections related to these voltage events. SB 593 will provide much-needed additional consumer protections and by holding utilities accountable and ensuring transparency; provides peace of mind to millions of Californians who rely on HVAC systems, refrigerators, and other lifesaving medical devices."

2) *Highlighting Voltage-Related Incidents*. A "voltage-related incident" refers to an abnormal deviation in the electrical voltage delivered by a utility—such as a spike (overvoltage) or dip (undervoltage)—that exceeds the standard operating range. As noted earlier, the nominal residential service voltage at 120 volts, with an allowable variation of ±5%, meaning voltage should typically remain between 114 and 126 volts. When service falls outside this range, it can damage appliances, disrupt service, and pose safety risks. Currently, IOUs are required to file Electric Safety Incident Reports with CPUC's Safety and Enforcement Branch when an incident is reportable—typically within two hours during business hours or four hours otherwise—if it involves serious injury, fatality, serious injury or property damage exceeding $50,000. These reports must include details such as the date, location, voltage level of the facilities involved, and estimated damages.

[3] SB 705 (Hill, Chapter 552, Statutes of 2015)

However, these reports do not clearly indicate whether the incident was caused by anomalies in voltage levels. This bill seeks to enhance consumer protections and improve transparency by requiring the CPUC to track and report "significant voltage events" that result in customer equipment or appliance damage of $5,000 or more—highlighting visibility into voltage related incidents that often go unreported under current thresholds.

3) *Current Claim Processes*. The IOUs have established claims processes through which customers can seek compensation for property damage. Claims are reviewed on a case-by-case basis, and utilities provide a decision within 30 days from the date of submission; however, more complex cases may require additional time. Under California Law, compensation is limited to the lesser of the item's fair market value or the cost of repair. Customers may also be eligible for reimbursement through their insurance providers, which often cover such losses. If a customer is dissatisfied with the outcome of a claim submitted to an IOU—for example, if the claim is denied, delayed, or only partially compensated—they may file a complaint with the CPUC.

4) *Power Outages in Allensworth*. In 2023, severe winter storms led to the reemergence of Tulare Lake, causing significant flooding and disruptions to electric infrastructure in the region.[4] To maintain service to the community of Allensworth during the flood event, PG&E implemented an emergency reconfiguration of its distribution circuit, which involved relocating key equipment and rerouting power through a temporary arrangement. According to PG&E, this temporary configuration placed added strain on the system, leading to several momentary outages during periods of peak demand, when the circuit exceeded its available capacity. The circuit was restored to its normal configuration in September 2024, and PG&E reports that no further abnormalities have been observed since. While residents have raised concerns about repeated power surges and related damage to appliances, PG&E has reported that it received only one formal damage claim, which was resolved within 30 days.

5) *Tracking Delays.* This legislation requires the CPUC to annually publish a summary of staff safety investigations—both concluded and ongoing—into incidents reported by gas or electric corporations. For any investigation still open 12 months after a claim was filed, the report must include an explanation for the delay, along with a link to the full report on the CPUC's website. By requiring the CPUC to annually publish a summary of both concluded and ongoing staff investigations into safety incidents reported by gas or electric corporations, this provision ensures that such cases are subject to public and legislative oversight. Notably, the requirement to explain why any investigation remains unresolved more than 12 months after a claim was filed promotes accountability for prolonged delays. It also encourages the CPUC to prioritize timely resolution and avoid leaving investigations open indefinitely. More so, this reporting can help identify whether certain types of incidents—such as voltage-related damages—are sporadic or reflective of underlying infrastructure issues.

6) *Bill Requirements.* This measure directs the CPUC to require IOUs to adjust their consumer protections —if deemed necessary—to better safeguard customers from

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[4] Los Angeles Times, "Worry and suspicion reign as once-dry Tulare Lake drowns California farmland. "March 24, 2023; Accessed June 20, 2025.

significant voltage changes that may damage customer equipment and appliances. However, the legislation does not define what constitutes a "significant voltage change," including measurable thresholds for voltage deviation, duration, or frequency. Without clear parameters, the directive may result in regulatory ambiguity, inconsistent implementation across IOUs, and challenges in enforcement.

In addition, this bill seems to primarily address concerns raised in communities such as Allensworth, where residents have reported repeated voltage fluctuations and equipment damage. However, it does not provide statewide data on the frequency, geographic distribution, or overall prevalence of significant voltage changes. In the absence of comprehensive reporting, it remains unclear whether these events are isolated incidents or indicative of broader systemic issues—raising questions about whether a uniform statewide mandate is warranted at this time.

This legislation also requires the governing boards of publicly owned electric utilities to adopt, by January 1, 2027, a policy to protect customers from voltage changes that result in damage to equipment and appliances. While well-intentioned, this provision could be interpreted as extending utility responsibility beyond the meter and into private property—holding POUs accountable for infrastructure and appliances that have traditionally fallen outside their jurisdiction. This change would depart from the well-established boundary between utility and customer responsibility, which has historically guided utility regulation and liability. Therefore, POUs may face increased litigation risk for damages traditionally outside their operational scope. For smaller or resource-constrained utilities, the resulting costs could fall on ratepayers—despite absence of documented data indicating that significant voltage-related damage is a widespread or systemic issue across POUs.

In light of these considerations, the committee recommends deleting the operative provisions in Section 27748.8—which would include requiring IOUs to adopt new protections for customers affected by voltage changes—as well as the provisions in Section 9530, which include directing POUs to adopt voltage protection policies and post them publicly online. Instead, the committee recommends amendments directing the CPUC by July 1, 2026 to conduct a comprehensive study on voltage-related service incidents and the effectiveness of consumer protections within IOU territories. In summary, the study will quantify the frequency and geographic distribution of voltage changes over the past three years and identify their causes, including system failures, and natural disasters. It will assess how these events affect residential, commercial, and industrial customers—examining equipment damage, operational disruptions, and monetary losses. The CPUC will also evaluate customer complaints to identify potential systemic issues, review the clarity and accessibility of claims procedures, and assess how well IOUs serve low-income, limited-English-proficient, and medically vulnerable populations. In addition, the study will examine the timeliness and adequacy of utility responses, the transparency of reporting practices, and whether current regulatory oversight sufficiently addresses voltage-related incidents. Furthermore, the study will determine whether additional reporting or outreach is needed to ensure all customers can access protections and seek recourse. Subsequently, the CPUC shall provide a one-time report documenting its findings and recommendations to the Legislature no later than July 1, 2027.

7) *Prior Legislation.*

SB 705 (Hill) required the CPUC to annually publish a report that includes all investigations into gas or electric service safety incidents reported, pursuant to commission requirements, by investor-owned utilities (IOUs). Status: Chapter 552, Statutes of 2015.

REGISTERED SUPPORT / OPPOSITION:

Support

Allensworth Progressive Association
The Utility Reform Network (TURN)

Opposition

City of Burbank/Burbank Redevelopment Agency

Other

San Diego Gas and Electric Company

Analysis Prepared by: Lina V. Malova / U. & E. / (916) 319-2083