

SENATE PRIVACY, DIGITAL TECHNOLOGIES, AND CONSUMER PROTECTION COMMITTEE
Senator Christopher Cabaldon, Chair
2025-2026 Regular Session

SB 1011 (McNerney)
Version: February 10, 2026
Hearing Date: April 20, 2026
Fiscal: Yes
Urgency: No
CK

SUBJECT

Energy: Utility Infrastructure AI Safety, Oversight, and Workforce Protection Act

DIGEST

This bill requires the California Public Utilities Commission (CPUC) to adopt standards for electrical and gas corporations' use of AI models, as specified.¹

EXECUTIVE SUMMARY

California's electrical and natural gas infrastructure is essential to public safety, wildfire prevention, and economic stability. As investor-owned utilities and public utilities increasingly deploy AI systems, it is imperative to ensure there is human oversight and the professional judgment required to handle high-stakes situations, such as detecting wildfires, malfunctioning equipment, and natural gas leaks, and coordinating emergency response to disasters.

This bill tasks the CPUC with adopting standards for electrical and gas corporations' use of AI systems that include specified elements. The CPUC must require these corporations to file plans demonstrating compliance and is authorized to prohibit use of an AI model if it finds it would negatively impact service provision. Community choice aggregators and local publicly owned electric utilities are also required to adopt policies for utility use of AI that are consistent with the CPUC standards.

This bill is sponsored by the California Federation of Labor Unions and the Utility Workers Union of America Locals 132, 483, and 522. The bill is supported by Oakland Privacy and the California School Employees Association. It is opposed by local government associations and the California Chamber of Commerce. This bill passed out of the Senate Energy, Utilities, and Communications Committee on a vote of 13 to 3.

¹ Extensive amendments were agreed to in the previous committee with the amendments to be taken in this Committee. This analysis is of the bill as agreed to be amended.

PROPOSED CHANGES TO THE LAW

Existing law:

- 1) Requires the CPUC to establish rules for a public utility and revise those requirements through an order or rule whenever the CPUC, after a hearing, finds that existing rules, practices, equipment, appliances, facilities or service of any public utility or manufacturing, distribution, transmission, storage or supply methods employed by the public utility are unjust, unreasonable, unsafe, improper, inadequate, or insufficient. (Pub. Util. Code § 761.)
- 2) Requires every public utility to establish and maintain adequate, efficient, just, and reasonable services, instruments, equipment and facilities needed to promote the health, safety and comfort of customers, employees, and the public. Any rule adopted by a public utility regarding its services or rates for the public must be just and reasonable. (Pub. Util. Code § 451)
- 3) Establishes the Office of Energy Infrastructure Safety in the Natural Resources Agency to oversee electrical corporations' compliance with wildfire safety requirements, as specified. (Gov. Code § 15470 et. seq.)
- 4) Requires the California Department of Technology (CDT) to conduct a comprehensive inventory of all high-risk automated decision systems (ADS) that have been proposed for use, development, or procurement by, or are being used, developed, or procured by, any state agency. It defines the relevant terms:
 - a) "Automated decision system" means a computational process derived from machine learning, statistical modeling, data analytics, or AI that issues simplified output, including a score, classification, or recommendation, that is used to assist or replace human discretionary decisionmaking and materially impacts natural persons. "Automated decision system" does not include a spam email filter, firewall, antivirus software, identity and access management tools, calculator, database, dataset, or other compilation of data.
 - b) "High-risk automated decision system" means an ADS that is used to assist or replace human discretionary decisions that have a legal or similarly significant effect, including decisions that materially impact access to, or approval for, housing or accommodations, education, employment, credit, health care, and criminal justice. (Gov. Code § 11546.45.5.)
- 5) Defines "AI" as an engineered or machine-based system that varies in its level of autonomy and that can, for explicit or implicit objectives, infer from the input it

receives how to generate outputs that can influence physical or virtual environments. (Gov. Code § 11546.45.5.)

This bill:

- 1) Establishes the Utility Infrastructure AI Safety, Oversight, and Workforce Protection Act.
- 2) Requires the CPUC, as part of a new or existing proceeding, on or before January 1, 2028, to adopt standards for electrical and gas corporations' use of AI models.
- 3) Requires these standards to achieve at least all of the following:
 - a) Establish disclosure requirements for an electrical or gas corporation to specify the types of AI models it uses and how these models are used by the electrical and gas corporation.
 - b) Require an electrical or gas corporation to identify the employee job classifications impacted by any planned implementation of an AI model and efforts taken to ensure effective education and training and retention for impacted employees.
 - c) Identify steps an electrical or gas corporation shall take to ensure that AI models do not impact utility safety, affordability, and reliability.
 - d) Establish requirements for human review and approval for the deployment and use of AI models to ensure that electrical and gas services are safe, affordable, and reliable, including requirements for the placement of human review in the deployment of AI models. Standards for human review and approval of AI models shall ensure staff conducting the review and approval meet all the following:
 - i. Have relevant expertise in the operational area affected by the AI model.
 - ii. Have been provided sufficient information, time, and access to data to meaningfully evaluate the model's output or recommendations.
 - iii. Retain unimpeded authority to reject, modify, or defer implementation without adverse consequence to the reviewer.
 - iv. Have not been subject to a workflow design, performance metric, or operational pressure that renders rejection of the system output functionally impractical.
 - e) Ensure that deployment of AI models does not displace utility employees needed for the safe, affordable, and reliable provision of electrical and gas services. For any job classification identified as responsible for human review and approval for an AI model, the electrical or gas corporation shall demonstrate that its workforce plan maintains sufficient personnel in that classification to ensure that human review and approval processes are not rendered nominal by understaffing.

- f) Establish requirements for human review and approval of any AI system that does any of the following:
 - i. Makes or directly implements operational decisions affecting the mapping, design, configuration, operation, maintenance, or oversight of electrical or gas infrastructure without a mandatory human approval step integrated into the operational workflow prior to implementation.
 - ii. Generates recommendations that the covered electrical or gas corporation has configured to be automatically implemented without case-by-case human review.
 - iii. Performs any act that could directly and foreseeably result in physical harm to persons, a service interruption or outage, or an impact on public safety.
- 4) Authorizes the CPUC to prohibit an electrical or gas corporation's use of an AI model if the commission finds that deployment of the model would negatively impact the provision of safe, affordable, and reliable electrical or gas service.
- 5) Requires the CPUC to direct an electrical or gas corporation to file plans that demonstrate the corporation's compliance with the adopted standards. The CPUC may request records as it deems necessary to verify compliance. The CPUC must ensure that impacted bargaining units are consulted in the development of these plans.
- 6) Requires the CPUC to ensure that plans filed by an electrical corporation may be reviewed by the Office of Energy Infrastructure Safety to ensure that any AI model used for wildfire mitigation is consistent with the electrical or gas corporation's wildfire mitigation plan, as provided.
- 7) Requires community choice aggregators and local publicly-owned electric utilities to adopt policies regarding the utility's use of AI models that are consistent with the CPUC standards.
- 8) Clarifies that it establishes minimum safety and governance standards of AI models and does not limit, waive, or alter any rights, remedies, or obligations under state or federal law or any collective bargaining agreement, with respect to technological change, staffing, workload, training, or working conditions.
- 9) Includes a severability clause.

COMMENTS

1. The risks presented by AI models and applications

With recent dramatic advances in the capabilities of AI systems, the need for frameworks for accountability and responsible development has become ever more urgent.

As directed by the National AI Initiative Act of 2020, the National Institute of Standards and Technology (NIST) developed the AI Risk Management Framework to assist entities designing, developing, deploying, and using AI systems to help manage the many risks of AI and promote trustworthy and responsible development and use of AI systems. That framework highlights the serious risks at play and the uniquely challenging nature of addressing them in this context:

Artificial intelligence (AI) technologies have significant potential to transform society and people's lives – from commerce and health to transportation and cybersecurity to the environment and our planet. AI technologies can drive inclusive economic growth and support scientific advancements that improve the conditions of our world. AI technologies, however, also pose risks that can negatively impact individuals, groups, organizations, communities, society, the environment, and the planet. Like risks for other types of technology, AI risks can emerge in a variety of ways and can be characterized as long- or short-term, high or low-probability, systemic or localized, and high- or low-impact.

While there are myriad standards and best practices to help organizations mitigate the risks of traditional software or information-based systems, the risks posed by AI systems are in many ways unique. AI systems, for example, may be trained on data that can change over time, sometimes significantly and unexpectedly, affecting system functionality and trustworthiness in ways that are hard to understand. AI systems and the contexts in which they are deployed are frequently complex, making it difficult to detect and respond to failures when they occur. AI systems are inherently socio-technical in nature, meaning they are influenced by societal dynamics and human behavior. AI risks – and benefits – can emerge from the interplay of technical aspects combined with societal factors related to how a system is used, its interactions with other AI systems, who operates it, and the social context in which it is deployed.

These risks make AI a uniquely challenging technology to deploy and utilize both for organizations and within society. [. . .]

AI risk management is a key component of responsible development and use of AI systems. Responsible AI practices can help align the decisions about AI system design, development, and uses with intended aim and values. Core concepts in responsible AI emphasize human centricity, social responsibility, and sustainability. AI risk management can drive

responsible uses and practices by prompting organizations and their internal teams who design, develop, and deploy AI to think more critically about context and potential or unexpected negative and positive impacts. Understanding and managing the risks of AI systems will help to enhance trustworthiness, and in turn, cultivate public trust.

This highlights how the risks posed by AI are inherently complex and ever-changing. Constant adaptations and nimble responses to addressing potential risks are of critical importance.

More recently, the Biden Administration published its Blueprint for an AI Bill of Rights, which is a set of five principles and associated practices to help guide the design, use, and deployment of AI to protect the rights of the American public. One key piece focuses on the safety of these systems: “*Safe and Effective Systems*: You should be protected from unsafe or ineffective systems. Automated systems should be developed with consultation from diverse communities, stakeholders, and domain experts to identify concerns, risks, and potential impacts of the system.”²

While the future is unclear, the need to respond to these potential harms now is evident. The Center for New American Security puts a fine point on it:

While there is significant uncertainty in how the future of AI develops, current trends point to a future of vastly more powerful AI systems than today’s state of the art. The most advanced systems at AI’s frontier will be limited initially to a small number of actors but may rapidly proliferate. Policymakers should begin to put in place today a regulatory framework to prepare for this future. Building an anticipatory regulatory framework is essential because of the disconnect in speeds between AI progress and the policymaking process, the difficulty in predicting the capabilities of new AI systems for specific tasks, and the speed with which AI models proliferate today, absent regulation. Waiting to regulate frontier AI systems until concrete harms materialize will almost certainly result in regulation being too late.³

2. Establishing a framework for AI deployment in the energy sector

According to the author:

² *Blueprint For An AI Bill Of Rights* (October 2022) Office of Science and Technology Policy, <https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf>. All internet citations are current as of April 16, 2026.

³ Paul Scharre, *Future-Proofing Frontier AI Regulation* (March 2024) Center for New American Security, https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/CNAS-Report_AI-Trends_FinalC.pdf. This, and all further, internet citations are current as of June 14, 2025.

AI has the potential to improve efficiency in California's power grid and quicken response to wildfires and life-threatening dangers, but AI also presents significant risks. AI can hallucinate – make mistakes that could pose serious threats. Without human oversight, unchecked AI could trigger catastrophic equipment failures, service outages for thousands of residents, or life-threatening safety hazards. California can't afford to outsource the safety of our power grid to unproven, unmonitored algorithms. California also needs to protect workers in the power sector from widespread job displacement. SB 1011 is a commonsense solution that will reduce risk by ensuring that AI use supports human decision-making rather than replacing it.

This bill obligates the CPUC, as part of a new or existing proceeding, on or before January 1, 2028, to adopt standards for electrical and gas corporations' use of AI models. The bill lays out a series of elements that must be included within these standards. This includes establishing clear disclosure requirements about the type of AI models used and how they are used, and requirements to identify the job classifications impacted and the efforts taken to ensure effective education, training, and retention. The standards must also identify required steps to ensure AI does not impact utility safety, affordability, and reliability. There must be requirements around human review and approval. The standards must ensure that AI deployment does not displace employees necessary for the proper provision of electrical or gas services.

The bill also authorizes the CPUC to prohibit AI use if it finds that such deployment would negatively impact the proper provision of the relevant services. The CPUC is obligated to direct electrical and gas corporations to file plans that demonstrate compliance with the above standards and authorized to request records necessary to verify such compliance. Impacted bargaining units must be consulted in development of these plans.

Specific to wildfire safety, the CPUC must ensure that plans filed by an electrical corporation may be reviewed by the Office of Energy Infrastructure Safety to ensure that any AI model used for wildfire mitigation is consistent with the electrical or gas corporation's wildfire mitigation plan.

Community choice aggregators and local, publicly-owned electrical utilities are required to adopt policies regarding their use of an AI model that is consistent with the CPUC standards.

The California Federation of Labor Unions, a co-sponsor of the bill, explains the need for this legislation:

Utilities are currently using AI tools with the goal of reducing hours-long document search tasks and helping staff focus on higher-value analysis.

While this kind of AI application is described as necessary for improvements to efficiency, it raises concerns about error risks in critical environments, and future expansion into core operational decision-making without appropriate governance. Such risks include incorrect or misleading outputs, often referred to as “hallucinations,” particularly when AI systems operate outside their training data or encounter novel conditions. In utility operations, even small errors in mapping, system records, or control recommendations can cascade into serious reliability or safety events such as the failure to detect or prevent devastating wildfires or natural gas leaks.

The rapid deployment of automated systems raises concerns about the displacement of experienced, licensed engineers, technical specialists, and field personnel whose expertise is essential to safe utility operations. Without clear statewide standards for human oversight, testing, transparency, and workforce protections, unchecked AI deployment could undermine system reliability, weaken safety controls, and erode the skilled workforce responsible for operating California’s critical infrastructure.

Registered opposition focuses on definitions and provisions governing the use of ADS. The bill, as agreed to be amended and as analyzed herein, is an entirely new approach. Many of those in opposition have indicated that they are still processing these recent amendments.

SUPPORT

California Labor Federation, AFL-CIO (co-sponsor)
Utility Workers Union of America Locals 132, 483, and 522 (co-sponsor)
California School Employees Association
Oakland Privacy

OPPOSITION

Burbank Water and Power
California Chamber of Commerce
California Municipal Utilities Association
Southern California Public Power Authority

RELATED LEGISLATION

SB 833 (McNerney, 2026) requires an oversight personnel for an operator that deploys a covered AI system to establish a human oversight mechanism that ensures a human monitors the AI system’s operations in real time and reviews and approves any plan or

action proposed by an AI system before execution. "Operator" means a state agency responsible for operating, managing, overseeing, or controlling access to critical infrastructure. SB 833 is currently in the Assembly Appropriations Committee.

SB 947 (McNerney, 2026) regulates the use of ADS in the employment context by requiring employers to provide postuse notices that inform workers that they are subject to ADS and of the ADS details. It provides a series of prohibited uses, such as where it may interfere with existing labor protections or where it conducts predictive behavior analysis, as defined. Workers have the right to access information used by the ADS, including inputs, outputs, and any corroborating evidence used by the employer in making the decision. SB 947 is set to be heard the same day as this bill in this Committee.

PRIOR VOTES:

Senate Energy, Utilities and Communications Committee (Ayes 13, Noes 3)
