
SENATE COMMITTEE ON APPROPRIATIONS

Senator Sabrina Cervantes, Chair
2025 - 2026 Regular Session

SB 1011 (McNerney) - Energy: Utility Infrastructure AI Safety, Oversight, and Workforce Protection Act

Version: April 22, 2026

Urgency: No

Hearing Date: May 4, 2026

Policy Vote: E.,U.&C.13-3,P.D.T&C.P.7-2

Mandate: Yes

Consultant: Ashley Ames

Bill Summary: This bill would require the California Public Utilities Commission (CPUC) to adopt standards for an electrical or gas corporation's use of artificial intelligence (AI) models, as provided, and to direct corporations to file a demonstrating its compliance with those standards. It would also authorize the CPUC to prohibit use of an AI model if it finds that deployment of the model would negatively impact the provision of safe, affordable, and reliable electrical or gas service.

Fiscal Impact:

- The CPUC estimates ongoing costs of about \$1.4 million annually (ratepayer funds) to adopt standards governing the use of AI models in utility operations, review and evaluate utility AI safety plans for compliance, establish oversight and enforcement mechanisms to ensure adherence to adopted standards, and assess and monitor high-risk applications, including wildfire mitigation, grid design, and critical system operations.

Background: Utilities' use of generative AI is nascent; however, some utilities are seeking ways to develop AI tools that are trained to help with specific power sector needs. Diablo Canyon Power Plant partnered with Atomic Canyon to deploy a generative AI system that uses the Nuclear Regulatory Commission database and the Oak Ridge National Laboratory's Frontier supercomputer to search data from Diablo Canyon's files to synthesize information for federal regulatory filings. This use of AI is the first commercial use of generative AI at any nuclear power facility in the nation.

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.

Proposed Law: This bill would:

1. Require the CPUC, as part of a new or existing proceeding, on or before January 1, 2028, to adopt standards for an electrical corporation's or gas corporation's use of artificial intelligence models. Require the standards adopted to do at least all of the following:
 - a. Establish disclosure requirements for an electrical corporation or gas corporation to specify the types of artificial intelligence models it uses and

how those models are used by the electrical corporation or gas corporation.

- b. Require an electrical corporation or gas corporation to identify the employee job classifications impacted by any planned implementation of an artificial intelligence model and efforts taken to ensure effective education, training, and retention for impacted employees.
 - c. Identify steps an electrical corporation or gas corporation shall take to ensure that artificial intelligence models do not impact utility safety, affordability, and reliability.
 - d. Establish requirements for human review and approval for the deployment and use of artificial intelligence 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 artificial intelligence models.
 - e. Ensure that deployment of artificial intelligence models do 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 of an artificial intelligence model, the electrical corporation or gas corporation shall demonstrate that its workforce plan maintains sufficient personnel in that job 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 artificial intelligence model 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 before implementation.
 - ii. Generates recommendations that the electrical corporation 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 a person or a service interruption or outage, or impact on public safety.
 - iv. Provide requirements for human review and approval of artificial intelligence models to ensure staff conducting the review and approval meet specified criteria.
2. Authorize the CPUC to prohibit an electrical corporation's or gas corporation's use of an artificial intelligence model if the commission finds that deployment of

the artificial intelligence model would negatively impact the provision of safe, affordable, and reliable electrical or gas service.

3. Require the CPUC to direct an electrical corporation or gas corporation to file a plan that demonstrates the corporation's compliance with the standards adopted pursuant to this section. Allow the CPUC to request records as it deems necessary to verify compliance.
4. Require the CPUC to ensure that a plan filed by an electrical corporation may be reviewed by the Office of Energy Infrastructure Safety to ensure that any artificial intelligence model used for wildfire mitigation is consistent with the electrical corporation's wildfire mitigation plan.
5. Require the CPUC to ensure that impacted bargaining units are consulted in the development of plans filed.
6. Require each community choice aggregator and local publicly owned electric utility to adopt a policy regarding its use of an AI model consistent with the standards adopted by the CPUC, as provided.

Related Legislation:

SB 947 (McNerney) of 2026, limits employers' use of ADS in certain employment decisions and requires the Labor Commissioner to oversee employers' use of ADS in workplace decisions.

SB 833 (McNerney) of 2025, establishes requirements for human oversight over AI systems used with critical infrastructure. The bill also defined AI as including ADS. The bill is pending in the Assembly.

SB 420 (Padilla) of 2025, regulates the use of high-risk ADS, including requiring ADS developers and deployers to performing impact assessments on their systems. The bill establishes the right of individuals to know when an ADS has been used, details about the systems, and an opportunity to appeal ADS decisions, where technically feasible. The bill is pending in the Assembly.

SB 53 (Weiner, Chapter 138, Statutes of 2025) required large developers of certain AI tools to adopt protocols to address catastrophic risks associated with AI, disclose certain information about their AI models, and submit specified reports to Office of Emergency Services.

SB 7 (McNerney) of 2025, would have established limitations and notices for the use of ADS in employment decisions. The bill was vetoed.

AB 1018 (Bauer-Kahan) of 2025, would have regulated the use of ADS. It established obligations on developers and deployers of ADS designed or used to make or facilitate "consequential decisions. The bill is on the Senate Inactive File.