

Date of Hearing: May 6, 2026

ASSEMBLY COMMITTEE ON APPROPRIATIONS

Buffy Wicks, Chair

AB 2647 (Calderon) – As Amended April 16, 2026

Policy Committee:	Natural Resources	Vote:	11 - 1
	Utilities and Energy		16 - 0

Urgency: No State Mandated Local Program: No Reimbursable: No

SUMMARY:

This bill requires the California Energy Commission (CEC) to assess the potential role for advanced nuclear technologies in supporting critical infrastructure in California and the potential for new in-state nuclear powerplants to cost-effectively meet statewide needs for new electricity resources and meet the state's clean energy goals.

Specifically, this bill:

- 1) Requires CEC, by July 1, 2027, as part of the integrated energy policy report or as a separate report, prepare a comprehensive assessment of the potential role for advanced nuclear technologies in supporting critical infrastructure in California and of the potential for new in-state nuclear powerplants to cost-effectively meet statewide needs for new electricity resources, and to meet the expressed policy of the state to achieve 100% zero-carbon electricity by 2045, pursuant to SB 100 (De León), Chapter 312, Statutes of 2018.
- 2) Requires CEC to consider nine specified topics in its assessment, including an assessment of the ratepayer, taxpayer, and private costs associated with spent nuclear fuel management in comparison with systemwide costs of waste, storage, and byproduct management across other electricity generation technologies; the potential for employment of a skilled and trained workforce in the construction, operation, and maintenance of nuclear powerplants; and recommended revisions to state law and regulations.
- 3) Requires CEC to consult with the California Public Utilities Commission (CPUC), the California Independent Systems Operator (CAISO), and other state agencies, as applicable.
- 4) Requires the CEC to hold workshops and solicit participation and comments from a broad range of stakeholders, including academic experts, potential developers, investors, electric corporations, labor, ratepayer advocates, and environmentalists.
- 5) Authorizes the CEC to update the assessment as appropriate.
- 6) Allows the CEC, CPUC, CAISO, and other public agencies to evaluate the potential of nuclear energy to meet long-term resource needs, notwithstanding the conditional statutory prohibitions on siting new nuclear plants, as specified.

FISCAL EFFECT:

- 1) CEC estimates annual costs of approximately \$990,000 (Energy Resources Programs Account (ERPA)) for two years for four limited-term staff. CEC notes this bill necessitates significant coordination across its technical, analytical, legal, and environmental disciplines and that the July 2027 deadline is infeasible given CEC's current staffing levels and existing commitments. Workload created by this bill includes, among other things, nuclear technology, waste, and safety analyses; grid modeling and reliability impact analyses; economic and cost assessments; environmental and public health impact evaluations; and regulatory reviews (including laws governing nuclear power plant siting). According to CEC, ERPA is in a structural deficit.
- 2) Costs of an unknown, likely minor, amount to CPUC, CAISO, and other state agencies to consult with CEC on the assessment (various funds).

COMMENTS:

- 1) **Purpose.** According to the author:

I'm pleased to author AB 2647, a companion measure to SB 100, which was signed in 2018 to mandate 100% clean electricity by 2045 using sources defined as those with zero net greenhouse gas emissions. Since then, California has adopted the most progressive clean energy policies to reduce greenhouse gas emissions and combat climate change. AB 2647 requires the California Energy Commission, on or before July 1, 2027, to prepare a comprehensive assessment of the potential role for advanced nuclear technologies in supporting critical infrastructure in California.

- 2) **Background.** Since 2012, only one of the four nuclear power plants developed in California by electric utilities has continued to operate – Pacific Gas and Electric's Diablo Canyon powerplant. Legislation in the 1970s established a moratorium on permitting new nuclear power plants. Since then, CEC has not found that a high-level waste disposal technology has been demonstrated or approved. Likewise, the Nuclear Regulatory Commission (NRC), which regulates commercial nuclear power plants and other uses of nuclear materials, has never made a finding that a demonstrated technology exists for either nuclear fuel rod reprocessing plants or the disposal of high-level nuclear waste. The U.S. does not have a permanent repository or reprocessing facility for commercial spent nuclear fuel.

According to the Assembly Utilities and Energy Committee, nuclear energy may be helpful in achieving California's ambitious clean energy goals. Nuclear energy is a type of firm energy resource, meaning it is available when other sources of energy, such as wind and solar, are unavailable or offline. This weather- and season-dependent nature of some renewable resources creates reliability challenges that need to be addressed for California to meet its clean energy goals. Therefore, firm resources, such as nuclear (among others), may provide a critical path forward. Nuclear energy already plays a significant role in the state's energy profile, with Diablo Canyon contributing about 9% of the state's total electricity supply.

Among others in support, the California Large Energy Consumers Association (CLECA) argues that "advanced nuclear reactors – by design characterized by enhanced safety features, reduced waste generation, and improved fuel efficiency relative to prior generations – can

provide baseload generation that intermittent resources simply cannot replicate.” CLECA notes its members have watched electricity costs climb steadily as the system relies more heavily on natural gas backup, storage procurement, and transmission upgrades to compensate for intermittency, and that “expanding the portfolio to include advanced nuclear has the potential to reduce the overall system cost of achieving California’s clean energy goals, and that cost reduction flows directly to ratepayers, including our members.”

Writing in opposition to the bill, a coalition of environmental organizations argues that facing “a major budget deficit and deep cuts to critical programs, it does not make sense to expend scarce state resources to conduct a study of nuclear technologies that are currently banned by longstanding California law.” The coalition asserts that an expensive state study is not needed “to know the key facts about nuclear power: the nuclear waste problem remains unsolved, nuclear safety oversight has been severely weakened by the Trump administration, and nuclear energy remains among the most expensive energy sources on the planet.”

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