

Seeking to Extend Diablo's Life Should Not Distract From Path to Reliability

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Wind turbines near the Salton Sea. Replacement of Diablo Canyon nuclear power with other zero-emission resources must be done without sacrificing reliability, the California Wind Energy Association said.

Jennifer Boyer/Flickr

Editor's note: The following guest column reflects the viewpoint of Nancy Rader, executive director of the California Wind Energy Association, in response to Gov. Gavin Newsom's recent announcement that the state will explore federal funding to keep the Diablo Canyon nuclear power plant operational beyond its scheduled retirement because of electric-capacity shortages in the state. Owned by Pacific Gas & Electric, the plant's two units are due to shut down in 2024 and 2025.

California's transition away from the fossil fuels that threaten catastrophic climate change must not come at the expense of a reliable electricity system. That much is clear from Gov. Gavin Newsom's recent proposal to extend the life of the Diablo Canyon nuclear power plant.

But meeting the many challenges involved in prolonging Diablo's 40-year life is far from certain. Attention should therefore be focused on the practical challenges of meeting our reliability goals with other carbon-free resources.

The California Public Utilities Commission has conducted rigorous planning to ensure that California's lights will stay on when Diablo Canyon closes in 2025. Meeting the agency's development targets for replacing the nuclear plant—along with several retiring natural gas plants—with renewable energy, storage and demand-response resources would substantially exceed traditional reliability standards. The central issue is whether California can install 28 GW of such resources by 2026. This challenge requires resolving the near-term hurdles facing the needed projects, including permitting and grid access, and promoting resource diversity.

Without land-use permits, clean-energy projects cannot be built. But permitting wind and solar projects, which is done at the local level, has become increasingly fraught with opposition from entities opposed to renewable-energy expansion in their backyards.

Two wind projects, representing 10 percent of the state's wind planning target, were recently rejected by local officials in Humboldt and Shasta counties for political reasons despite their compliance with all environmental requirements. Instead—as the governor rightly recognized in his proposed May budget revision—such projects should have the option to seek permits from the California Energy Commission, with its statewide perspective, just as gas and other thermal projects are permitted today. Streamlining the overly complex permitting process is another obvious reform.

Grid access is another major barrier to project development. PG&E must prioritize completion of several long-planned transmission upgrades that are delaying many clean-energy and storage projects. The state must also embark immediately on the additional backbone transmission infrastructure that will be needed to achieve the state's long-term greenhouse gas-reduction goals. Meanwhile, simple modifications to the California Independent System Operator's grid-interconnection requirements would expedite grid access for dozens of projects without requiring any new wires. In a nutshell, CAISO's study methodology for granting projects reliability credit assumes many grid-operating conditions that were not present during the August 2020 rolling blackouts, but which are preventing wind, storage and solar projects from coming on line to help prevent such outages. CAISO will be reviewing some of these assumptions this summer. Robust reforms could, by themselves, enable interconnection of clean-resource capacity at least equal to Diablo's capacity.

Finally, to increase the odds of meeting our project-development and reliability goals, the state should foster greater resource diversity. In calling for extending Diablo Canyon's life, the governor invoked the U.S. Commerce Department's investigation of possible evasion of tariffs imposed on Chinese solar products, which threatens to delay more than 4 GW of solar-plus-storage projects that California needs by 2024 (see [CEM No. 1690](#)). This situation points to the risks associated with the solar- and battery-heavy portfolio currently envisioned by the CPUC.

Further diversifying the portfolio with land-based and offshore wind energy, geothermal and other resources that have different supply chains and are complementary to the daytime production profile of solar energy can reduce such risks. Any time and resources spent on Diablo Canyon should not distract from these practical ways of ensuring that the clean resources we need are built on time.

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