



# P E R S P E C T I V E S

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## Grab the Garlic!

### *Let's Reserve Resurrection for Religion*

Here they go again! It never ceases to amaze how far Pacific Gas and Electric (PG&E), a “public utility,” will go in harming the public interest.

Their latest ploy is an attempt to surreptitiously resurrect the nearly 40-year-old Diablo Canyon nuclear plant, which is scheduled to close by 2025. They want to bring it back from the dead even though none of the outrageous safety and financial reasons for the original decision to let it die have changed.

You would think that, as the largest utility in the nation, PG&E would have learned from its past mistakes which have caused needless death, extensive property destruction, and massive forest fires, including:

Being guilty of 84 felony counts of involuntary manslaughter for illegally causing, due to faulty equipment, the 2018 Camp Fire which killed scores of people and destroyed the town of Paradise (NPR).

Together with Southern California Edison being responsible for many of the massive forest fires in California.

Being found guilty of numerous additional felonies for obstructing investigators looking into the deadly 2010 explosion, and for violations of gas pipeline safety regulations, which killed eight people and destroyed 38 homes in San Bruno (LA Times).

Imagine, the only utility in the United States repeatedly guilty of felonies, continues with unfettered greed that, PG&E has orchestrated by stealth in trying to keep Diablo Canyon running for another 10 to 20 years at a cost of over \$1M/year just for operation and still refuses to test the embrittlement condition of the main reactor! That's greed at a whole new level.

PG&E signed a 2018 agreement with the California Public Utilities Commission (CPUC), labor unions, and key public interest groups to shutter Diablo's two nuclear units in 2024/2025, so it is relying on the concerted pro-nuclear industry campaign to vitiate the agreement.

The central plank of this strategy is a 2021 Report by Stanford and MIT which argues that California should reverse course and delay closing Diablo Canyon for another decade or two, even though significant evidence shows that tens of millions of California are living in harm's way. The Report argues that keeping Diablo Canyon open is a matter of “climate incoherence.” In addition to continuing to produce “carbon-free” electricity, the nuclear facility would be expanded to create new revenue streams by adding a large desalination plant to produce clean water and a solar-power electrolysis facility to generate “green” hydrogen—the cost of will be 100 percent non-competitive in the emerging global green hydrogen market.

The Report projects that maintaining Diablo Canyon for just one decade, would cut California's utility emissions by more than 10 percent through burning less natural gas and save the state \$2.6 billion in power system costs. Hogwash! It is a terrible idea on every level.

Keeping Diablo Canyon running beyond its planned closure in 2025 is misguided and fails to address California's legislative goals of transitioning to a carbon-free, nuclear-free, energy economy by 2050.

The rationales for opposing this pro-nuclear campaign were summarized on December 14, 2021 in the Los Angeles Times editorial, "No, California should not extend the life of its last nuclear plant. There are better ways to fight climate change." The main takeaways from this article are:

PG&E decided not to pursue a renewed operator's license in 2016 largely because closing the plant and replacing the power it generates with renewables and storage would be far cheaper than keeping it running.

Those arguing to keep the plant open seem to ignore or discount how impractical and even risky this would be. Seismic risks, ecological damage due to seawater used for cooling, and what to do with the ever-mounting nuclear waste are all big problems that remain unresolved.

Seismic retrofitting and other upgrades needed to continue operations would cost an excess of \$1 billion – money that would be better spent on rapid additions of renewable resources and storage, and on upgrading aging transmission lines to curb fire dangers.

The answer is not to reinvest in Diablo Canyon. Rather, it's to rapidly build and deploy far cheaper, safer, and more flexible carbon-free technologies such as solar farms and wind turbines and electrolyze it into green hydrogen for a massive for later use in fuel cells.

Fortunately, it looks like wiser heads will prevail in this "resurrection" debate, making it highly unlikely that Diablo Canyon's life will be extended, but we should not get complacent.

California Governor Gavin Newsom has publicly affirmed his opposition. This is no surprise, especially since, as a member of the State Lands Commission, Newsom worked for years with the CPUC, union members, host communities, and environmental groups to develop a long-term plan to retire and replace Diablo Canyon with zero-emission resources.

There is no indication that the CPUC is actively considering keeping Diablo Canyon open, especially since the business case presented in the 2021 Report is a non-starter based on overly optimistic financial assumptions. Three-quarters of the projected revenues come from super-sized desalination and hydrogen plants that are remote from customers, but the costs to desalinate the water and the transportation costs for water and hydrogen resources are totally absent from the Report's projections.

Even PG&E has put on the façade of showing no interest in extending the nuclear power plant's life. As reported by Mothers for Peace, the San Luis Obispo-based group that has opposed Diablo Canyon since day one together with the Academy, reports that the Diablo Canyon Decommissioning Panel continues to meet regularly to close it, and deal with the issue of long-term storage of existing high-level nuclear waste.

The flawed 2021 Report is part of a broader international campaign by the nuclear industry and its academic cheerleaders to repackage highly expensive and extremely dangerous nuclear power (remember Chernobyl and Fukushima which recent estimates say will take 45 more years to clean up!) as the "solution for climate change." In addition to lobbying for extending the life of the aging US nuclear fleet, the campaign seeks to build more new nuclear power plants.

The Academy's fundamental opposition to this line of thinking is outlined in our 2014 white paper, Nuclear Power: Totally Unqualified to Combat Climate Change.

Unfortunately, this is not the last we'll see of industry efforts to save nuclear power from the dustbin of technological history. Bankrolled by massive government subsidies, and PG&E's ability to keep charging consumers unlimited dollars, like Dracula rising from his coffin, we need to bring out the garlic and drive a stake in the heart of this vampire plant.