

Climate Guru Tells Calif. Governor Not To Close Diablo Canyon Nuclear Plant

James Conca, Forbes, 8-14-16

On Thursday,a letter to Governor Jerry Brown of California, about how nuclear energy was essential to fighting global warming, was sent by Dr. James Hansen and the leading climate scientists in the world, plus a long list of environmentalists.

The letter was prompted by a recent announcement by Pacific Gas & Electric Company to close its well-running, low-carbon, low-cost nuclear reactors at Diablo Canyon because of political pressure from the state of California and especially its Lt. Governor.

The widespread claim—that dozens of nuclear plants merit subsidies to protect the earth's climate—has been borne out by reality. At the same time, tax subsidies for renewables, plus low natural gas prices, are making reactors uneconomic in the short term.

New York addressed this imbalance last week when it passed a true Clean Energy Standard that supports both renewables and nuclear. Passage came after all parties acknowledged carbon emissions would go up if even a single nuclear plant closed.

But, strangely, California doesn't seem impressed by the threat of global warming, even after the state's carbon emissions jumped when the San Onofre nuclear plant closed from a combination of technical and political reasons. That carbon-free electricity was replaced by natural gas and costly out-of-state purchases.Similarly, if Diablo Canyon closes, its almost 18 billion kWhs per year, the largest and lowest-carbon electricity generation in California, will be replaced by less than 2 billion kWhs per year of similarly-low-carbon renewables, less than 2 billion kWhs per year from efficiency, and over 10 billion kWhs per year from high-carbon natural gas and more out-of-state purchases. California would have little hope of achieving its emissions goals by 2030.

Global Warming does not care what technology is used, just how much carbon is emitted. All wind energy in California only produced 12 billion kWhs in 2015, much less than Diablo Canyon. The two Diablo Canyon nuclear reactors would produce almost 18 billion kWhs every year for the next 25 years if not prematurely closed for political reasons. Since wind turbines have to be replaced about every 20 years, this means that just to stay even, California would have to install three times as many wind turbines as exist today. There are no plans for installing that many wind turbines.

Which is why James Hansen, and most of the rest of us, seem at wit's end at such foolishness on the part of what is usually the most environmentally-conscious state. It's as if the Governor's Mansion ideological hatred of nuclear exceeds their concern about global warming.

Hence, the following letter from Dr. James Hansen to Governor Jerry Brown (full letter [here](#)):

The Honorable Edmund G. Brown, Jr., Governor of California

August 11, 2016

Dear Governor Brown,

Several months ago we wrote to you to raise our concerns about Diablo Canyon, California's last nuclear plant. Pacific Gas and Electric (PG&E) has now agreed in a Joint Proposal with Friends of the Earth, the Natural Resources Defense Council, the Alliance for Nuclear Responsibility and other groups to close the plant in 2025.

We request that you ask the California Public Utility Commission (CPUC) to delay consideration of that and any other proposal to close Diablo until the legislature and the public, who will have to foot the bill, can openly debate how California can most quickly and cost-effectively stop the damage to the climate from our electrical system emissions. There are serious questions about whether this proposal is good for ratepayers, the environment and the climate.

Retirement of the plant will make a mockery of California's decarbonization efforts. Diablo Canyon's yearly output of 17,600 gigawatt-hours supplies 9 percent of California's total in-state electricity generation and 21 percent of its low-carbon generation. If Diablo closes it will be replaced mainly by natural gas, and California's carbon dioxide emissions will rise...

...The economic losses from Diablo Canyon's premature closure will also be substantial. Electricity rates will rise from the replacement of cheap nuclear power with more expensive renewable power. According to the Joint Proposal, ratepayers will pay a "non-bypassable charge" to make good decommissioning costs that would have been funded had Diablo completed a typical 60-year service life. San Luis Obispo and Santa Barbara counties will lose \$27 million per year in local tax, 1,500 well-paying jobs at the plant and a yearly payroll of over \$200 million that indirectly supports a further 2,800 local jobs.

These problems are all familiar from the closure of the San Onofre nuclear plant a few years ago.

Despite environmentalists' hopes, San Onofre was replaced mainly by gas-fired generation. Greenhouse emissions and electricity rates increased. California's share of gas-fired generation immediately rose from 45 percent to 61 percent...

...That gas dependency will increase further, to 70 percent or more, if Diablo Canyon closes. When natural gas prices rise again, higher dependency will mean economic vulnerability as well—and undermine California's reputation as a leader on climate policy. Under your own administration, the percent of electricity generated in-state from clean sources declined, mostly because of San Onofre's closure...

Given the serious harm to the environment, the economy and ratepayer interests that will flow from Diablo's closure, we are deeply troubled by the lack of democratic process surrounding the Joint Proposal. It was decided in secret negotiations between PG&E and unaccountable anti-nuclear groups, some with financial ties to the renewables sector. Sending this proposal to the CPUC, an institution that is struggling with its own crisis of credibility relating to improper relationships with regulated industries, would raise further doubts about the legitimacy of the proceedings.

...The loss of one-fifth of California's clean electricity is of such significance as to merit the direct attention of the state legislature. These questions deserve a broad, considered and transparent discussion by the public and their elected representatives. We ask you to support this position, and to help initiate the public debate that needs to happen.

...It would be a tragedy if we were to allow irrational fear to harm the climate and endanger the future our children and grandchildren. As California's governor you have an opportunity to safeguard your environmental legacy by overcoming anti-nuclear prejudice that is jeopardizing our progress on clean energy.

We look forward to hearing from you.

Sincerely,

James Hansen

and a long list of other climate scientists and environmentalists, myself included.

Dr. James Conca is a geochemist, an energy expert, an authority on dirty bombs, a planetary geologist and professional speaker. Follow him on Twitter @jimconca and see his book at Amazon.com