



February 22, 2024

U.S. Nuclear Regulatory Commission  
Office of Administration  
Mail Stop: TWFN-7-A60M Washington, DC 20555-0001

ATTN: Program Management, Announcements and Editing Staff

Subject: Docket ID NRC-2023-0192  
American Nuclear Society Comments on Notice of Intent to Conduct  
Scoping Process and Prepare Environmental Impact Statement; Pacific  
Gas and Electric Company; Diablo Canyon Nuclear Power Plant, Units 1  
and 2

Dear Sir or Madam:

On behalf of the 10,000 nuclear science and technology professionals that make up the American Nuclear Society (ANS), we are pleased to provide comments to the Nuclear Regulatory Commission (NRC) on its intent to conduct a scoping process to gather information necessary to prepare an environmental impact statement (EIS) for the evaluation of the license renewal application of Diablo Canyon Power Plant (DCPP).

License renewal is a well-established NRC regulatory process that has provided environmental and economic benefits to the country as a whole and to the communities in the vicinity of operating nuclear power plants. Regarding DCPP's license renewal evaluation, we recommend that the NRC keep the EIS scope consistent with other license renewals and thereby avoid bringing in extraneous and unnecessary issues. It is important for the environmental review to be efficient and timely.

Furthermore, it is our view that the scoping process ought to fully recognize the environmental benefits, exemplary safety record, and environmental stewardship of DCPP when evaluating California's single-largest carbon-free energy resource.

We appreciate the NRC's inclusive approach in considering comments from any and all potential invested parties, such as local labor and indigenous representatives like the International Brotherhood of Electrical Workers, Local 1245 and the yak títu títu yak tihini (ytt) Northern Chumash Tribe. We urge the NRC to incorporate feedback received in a timely and expeditious manner.

DCPP is a well-performing nuclear power plant that has operated safely for nearly 40 years under the strict oversight of the NRC and the California-appointed Diablo



Canyon Independent Safety Committee. Extending DCCP operations will help to keep California's lights on and to meet state and federal climate and energy goals.

Environmental impacts for continued operation of the Diablo Canyon reactors after the expiration of the initial license period are already well-characterized because they will be comparable to the environmental impacts experienced during the initial license period.

A joint 2021 study by researchers from Stanford University and Massachusetts Institute of Technology (MIT) concluded that a premature shutdown of DCCP units 1 and 2 would inflict grave harm to California's environment, economy, and power grid.<sup>1</sup> Diablo Canyon's 2,240 megawatts (MW) capacity of baseload power constitutes roughly 15 percent of California's greenhouse-gas-free electricity supply and about 10 percent of California's total electricity supply.<sup>2</sup> DCCP remains an important source of safe, reliable, and dispatchable zero-emissions electricity. If DCCP was prematurely retired, most of its carbon-free electricity would be replaced by carbon-emitting natural gas- and coal-fired generation from outside of the state.<sup>3</sup>

Thanks to its superior capacity factor and high energy density, nuclear energy produces more electricity on less land than any other carbon-free energy resource.<sup>4</sup> Emissions-free nuclear generation avoids more pollution per megawatt-hour than other energy sources and produces less waste than any other energy source as well.

Nuclear energy also has the lowest lifecycle emissions among all energy sources, including solar panels and wind turbines, which require more energy usage for mining, component production, and transport.

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<sup>1</sup> Aborn J., et al., An assessment of the Diablo Canyon nuclear plant for zero-carbon electricity, desalination, and hydrogen production, Stanford University and Massachusetts Institute of Technology, 2021,

<https://drive.google.com/file/d/1RcWmKwqgzvlgllh0BB2s5cA6ajuVJJzt/view>

<sup>2</sup> "Extending Diablo Canyon Nuclear Plant would help California meet its climate goals, new study finds," Stanford Energy, Stanford University, 8 November 2021,

<https://energy.stanford.edu/news/extending-diablo-canyon-nuclear-plant-would-help-california-meet-its-climate-goals-new-study>

<sup>3</sup> Comments of the American Nuclear Society in Support of October 26, 2020 Complaint by Californians for Green Nuclear Power, Inc. under EL21-13., Docket EL21-13-000, Federal Energy Regulatory Commission, Accession Number: 20201113-5083, 12 November 2020, <https://elibrary.ferc.gov/eLibrary/filedownload?fileid=020A97EE-66E2-5005-8110-C31FAFC91712>

<sup>4</sup> "3 Reasons Why Nuclear is Clean and Sustainable," U.S. Department of Energy, Office of Nuclear Energy, 31 March 2021, <https://www.energy.gov/ne/articles/3-reasons-why-nuclear-clean-and-sustainable>



Continued operations of DCPD would spare California's remaining wilderness, coastlines, and farmlands from unnecessary development of land-intensive alternative energy technologies that intermittently generate smaller amounts of electricity.

If DCPD were to close prematurely, the Stanford-MIT study found that California would require more storage and at least 18 gigawatts capacity of new solar in order to meet its 2045 goal of a carbon-neutral power grid. Such a massive build-out of solar panels would require about 90,000 acres of land, compared to the DCPD site's 900 acres (140 acres constitute the plant itself and adjacent facilities). Finding that much available land would prove challenging due to a California executive order requiring the state to preserve 30 percent of its natural and coastal lands by 2030.

ANS looks forward to the NRC conducting its environmental review of DCPD in a timely and efficient manner.

Respectfully submitted,

Kenneth S. Petersen

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President 2023-2024  
American Nuclear Society

Craig H. Piercy

A handwritten signature in black ink, appearing to read "Craig H. Piercy", written in a cursive style.

Executive Director and CEO  
American Nuclear Society