

July 31, 2025

Hon. Alex Padilla
United States Senate
255 E. Temple Street
Los Angeles, CA 90012
c/o Nate Bentham, nate bentham@padilla.senate.gov

SUBJECT: NRC final decisions refuse to grapple with serious seismic risk at

Diablo Canyon nuclear plant

Dear Senator Padilla,

Just two days after the 8.8 magnitude earthquake in eastern Russia, we write to inform you of two recent decisions by the U.S. Nuclear Regulatory Commission (NRC) renouncing the NRC's 2023 <u>commitment</u> made to you by then-NRC Chairman Christopher Hanson, to evaluate seismic risk to the Diablo Canyon nuclear plant as part of the license renewal process for the reactors.

<u>First</u>, on July 15, 2025, the NRC issued its <u>final decision</u> in the license renewal proceeding for Diablo Canyon, refusing to honor the NRC's commitment to you on the ground that seismic risks fall outside the scope of license renewal proceedings, a decision irreconcilable with the NRC's commitment to you. *See* pages 11-12. By that time, of course, President Trump had <u>fired</u> Commissioner Hanson without cause. Therefore, he had no opportunity to participate in the decision.

In an audacious display of circular reasoning, the Commissioners held that Pacific Gas & Electric (PG&E) was not required to address seismic risks in its license renewal application, and then faulted the petitioners for failing to show a problem with the same application. *Id*.

Second, on July 23, 2025, the NRC refused to review a decision by NRC's Petition Review Board (PRB) denying our seismic enforcement petition against continued operation of Diablo Canyon. The Commission's refusal to engage the PRB is very troubling because the PRB completely failed to address Dr. Peter Bird's serious and thoroughly reasoned and supported concerns¹ to the effect that continued operation of Diablo Canyon is unsafe and in violation of NRC regulatory requirements. Instead, the NRC regurgitated a collection of marginally-relevant

¹ See Petition submitted by San Luis Obispo Mothers for Peace, Friends of the Earth, and Environmental Working Group (March 4, 2024) (ML24067A066); Petition Supplement (June 7, 2024) (ML24162A079); Petitioners' Presentation to the PRB (July 17, 2024) (ML24198A105); Public Meeting Transcript (July 17, 2024) (ML24218A164); Petition Supplement (October 30, 2024) (ML24305A187); Comments on Proposed Director's Decision (May 15, 2025) (ML25136A355).

half-truths culled from previous filings by PG&E. See Dr. Bird's detailed criticism of the decision is attached.

By themselves, these decisions demonstrate a disturbingly cavalier disregard for your role in providing Congressional oversight of the NRC, including serving the interests of your California constituents. And of course the decisions were made in the much larger and deeply alarming context of the Trump Administration's <u>takeover</u> of the formerly independent NRC by DOGE; the issuance of <u>executive orders</u> to elevate cost considerations over safety; the <u>termination</u> of Commissioner Hanson, a strong safety advocate; and the <u>hollowing-out</u> of NRC's experienced senior management organization, leaving significant management responsibility to "acting officials." And the desertions continue. Just yesterday, even the solidly pro-industry Commissioner Annie Caputo <u>announced</u> her early retirement.

In conclusion, we stress that the NRC made an explicit commitment to you and to your California constituents through the words of its chairman in the presence of the other commissioners and much of the senior staff. We trust that you too are offended by the NRC's cavalier welching on that solemn commitment in a manner that would endanger much of California in the event of an earthquake comparable to Fukushima or to the one that just occurred in Russia.

Decline in the quality of NRC regulation seems inevitable in light of recent reckless Trump administration behavior elevating speed over safety. We urge you to insist that the NRC adhere to the commitments that it has made to the state of California and to you.

Sincerely,

/s/Jane Swanson
Jane Swanson, Board President
San Luis Obispo Mothers for Peace

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David A. Wright, Chair¹ Annie Caputo, Commissioner Bradley R. Crowell, Commissioner Matthew J. Marzano, Commissioner

Michael X. Franovich, Deputy Director Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555-001 By email to Dennis Galvin dennis.galvin@nrc.gov

SUBJECT: Director's Decision Regarding Seismic Core Damage Frequency For Diablo Canyon Nuclear Power Plant, Units 1 and 2

Dear NRC Commissioners and Mr. Franovich:

We write to protest the gross and alarming inadequacy of Director's Decision DD-25-01 (June 26, 2025) ("DD-25-01") to address the serious and thoroughly reasoned and supported concerns regarding seismic risk to the Diablo Canyon nuclear power plant ("DCPP") that have been raised by Dr. Peter Bird on behalf of San Luis Obispo Mothers for Peace, Friends of the Earth, and Environmental Working Group. Unfortunately, DD-25-01 is a collection of marginally-relevant half-truths culled from previous filings by Pacific Gas & Electric Co. ("PG&E") that completely fail to refute our key concerns. Specifically:

- (1) DD-25-01 fails to refute Dr. Bird's contention that PG&E's Seismic Source Characterization studies (2015, 2024) were deficient because they never investigated or modeled the mechanism of formation of the Pismo syncline since 5 Ma. Because of this, at least two gently-dipping thrust faults under the Irish Hills are missing from PG&E's fault geometry models, from which all hazard and risk estimates flowed. PG&E also failed to consider that the basement under the Irish Hills is Franciscan Complex, which was assembled by gently-dipping thrust faults, available for reactivation.
- (2) DD-25-01 also ignores PG&E's failure to include modern deformation modeling, as routinely contracted by the USGS for regional seismic hazard models. Deformation models would have shown that the ~ 1.8 mm/year shortening across the Irish Hills indicated by GPS geodesy data must lead to high slip rates on gently dipping thrusts, including at least one below DCPP.
- (3) Further, DD-25-01 fails to recognize that the Irish Hills are isostatically supported, as shown by their negative isostatic gravity anomaly. This means that every foot of relative vertical displacement (throw) on thrust faults produces only ~2 inches of surface uplift,

¹ To our knowledge, Mr. Wright's appointment as NRC Chairman has been confirmed and is awaiting imminent fulfillment.



while the footwall of the thrust subsides by ~ 10 inches. PG&E has underestimated the hazard from every thrust fault by a factor of 6 when they calculated slip rates from surface uplift rates, because they ignored isostasy.

- (4) Contrary to the NRC's assertion (DD-25-01 page 14) the vertical offset (throw) of map unit Tmo at the southern coast cannot be explained by Miocene normal faulting. In the specific fault geometry mapped by PG&E, any Miocene normal offset of unit Tmo would lead to a rate of Pliocene-Quaternary thrusting even higher than I have estimated.
- (5) As discussed in a recent meeting of the Diablo Canyon Independent Safety Committee ("DCISC"), Dr. Bird and the Seismic Review Team ("SRT") employed by the DCISC to evaluate Dr. Bird's claims agree that there is an active thrust fault directly under Diablo Canyon Power Plant. PG&E's claim to have considered such a model (in 2015 and 2024) is seriously misleading in two respects: first, PG&E assigned that model an unrealistic logic-weight of only ~10%, and (b) PG&E assigned an unrealistically low slip-rate and an unrealistically steep dip to minimize the hazard. Further, a member of the SRT confirmed that PG&E has not evaluated the capacity of this thrust fault.

PG&E's unrealistic modeling of this active thrust fault, coupled with its failure to evaluate the capacity of the fault, are highly troubling, given the fault's location directly beneath DCPP.

For all of the reasons stated above, the warning signs of an unacceptably high seismic hazard and risk at Diablo Canyon have not been dispelled.

Thank you for your consideration.

Sincerely,

Diane Curran

Counsel to San Luis Obispo Mothers for Peace

Peter Bird

Professor Emeritus

Peter Bird

Department of Earth, Planetary, and Space Sciences

University of California Los Angeles

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Technical advisor to San Luis Obispo Mothers for Peace

CC: Hon. Alex Padilla

Hon. Adam Schiff



Hon. Salud Carbajal

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CERTIFICATE OF SERVICE

I certify that on July 31, 2025, I posted a on the NRC's Electronic Information Exchange the attached letter from Jane Swanson to Senator Alex Padilla, with an attached letter from Diane Curran and Peter Bird to the Commissioners and Dennis Galvin of the NRC's Petition Review Board.

<u>Signed electronically by</u>
Jill ZamEk, San Luis Obispo Mothers for Peace