

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE COMMISSION**

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-323-LR  
March 4, 2024

**REQUEST BY SAN LUIS OBISPO MOTHERS FOR PEACE, FRIENDS OF THE EARTH  
AND ENVIRONMENTAL WORKING GROUP FOR HEARING ON  
PACIFIC GAS & ELECTRIC COMPANY'S LICENSE RENEWAL APPLICATION FOR  
THE DIABLO CANYON NUCLEAR PLANT**

**I. INTRODUCTION**

In accordance with the U.S. Nuclear Regulatory Commission's (NRC's) hearing notice, 88 Fed. Reg. 87,817 (Dec. 19, 2023), and pursuant to 10 CFR 2.309(f), San Luis Obispo Mothers for Peace ("SLOMFP"), Friends of the Earth ("FoE") and Environmental Working Group ("EWG") (collectively "Petitioners") hereby request the Commissioners of the U.S. Nuclear Regulatory Commission ("NRC" or "Commission") to grant a hearing on Pacific Gas & Electric Company's ("PG&E's") application for renewal of the operating licenses for the Diablo Canyon nuclear power plant Units 1 and 2 ("DCPP").

As demonstrated below in Section II, Petitioners have organizational standing to represent the interests of their members and supporters in this proceeding. Petitioners' contentions are set forth in Section III below. Those contentions are:

**CONTENTION 1: CONTINUED OPERATION OF DCPP UNDER A RENEWED LICENSE POSES AN UNACCEPTABLE SAFETY RISK AND SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACT OF SEISMIC CORE DAMAGE ACCIDENTS**

**CONTENTION 2: PG&E FAILS TO PROVIDE AN ADEQUATE PLAN TO MONITOR AND MANAGE THE EFFECTS OF AGING ON UNIT 1 REACTOR PRESSURE VESSEL.**

**CONTENTION 3: PG&E FAILS TO DEMONSTRATE COMPLIANCE WITH THE COASTAL ZONE MANAGEMENT ACT.**

## **II. DESCRIPTION OF PETITIONERS**

Petitioners are non-profit organizations with a longstanding record of concern about the safety and economic viability of the Diablo Canyon reactors. They seek a hearing in order to ensure that DCPD is not permitted to operate another twenty years unless and until the NRC addresses the significant safety and environmental risks that are now apparent and that would continue.

### **A. San Luis Obispo Mothers for Peace**

Located in San Luis Obispo, California, SLOMFP is a non-profit membership organization concerned with the dangers posed by Diablo Canyon and other nuclear reactors, nuclear weapons, and radioactive waste. SLOMFP also works to promote peace, environmental and social justice, and renewable energy. SLOMFP has participated in NRC licensing cases involving the Diablo Canyon reactors since 1973. SLOMFP's representational standing to participate in this proceeding is demonstrated by the attached Declarations of SLOMFP members Sherry Lewis, Julie Mansfield-Wells, Linda Seeley, Lucy Jane Swanson, and Jill ZamEk.<sup>1</sup>

### **B. Friends of the Earth**

FoE is a tax exempt, nonprofit environmental advocacy organization dedicated to improving the environment and creating a more healthy and just world.<sup>2</sup> The organization was founded in 1969 by David Brower in part to protest safety and environmental issues at the newly emerging Diablo Canyon. FoE has more than 282,000 members in all 50 states and the District of Columbia, approximately 42,600 of whom are in California. In addition to formal members, FoE has more than 8.6 million online activist supporters across the country. FoE also has office space

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<sup>1</sup> See Exhibits 1(A) – 1(E).

in Berkeley, California. FoE's representational standing to participate in this proceeding is demonstrated by the attached Declarations of FoE members Sherry Lewis, Julie Mansfield-Wells, Linda Seeley, Jane Swanson, and Jill ZamEk.<sup>3</sup>

### **C. Environmental Working Group**

EWG is a 501(c)(3) non-profit, non-partisan organization that works to empower people to live healthier lives in a healthier environment. EWG does this, in part, by creating and sharing research reports and consumer guides that help people educate themselves about the food they consume, the products they buy, and the companies they support, so that everyone can make safer and more informed choices. In furtherance of its mission, EWG engages in research and policy advocacy on a broad range of issues related to state and federal energy policy, climate change, renewable energy, toxic chemicals, food and agriculture, water and air pollution, and public health. EWG's work on energy policy has included rate design and public policy issues related to consumer use of and access to solar.

While EWG is a national organization, the group has a strong presence in California. Out of a nationwide group of 410,000 active supporters, more than 58,000 Californians have signed up to receive monthly EWG emails that seek to learn about supporters' concerns and opinions in order to guide EWG in establishing organizational goals.

Over several decades, EWG has developed public education information and has submitted formal testimony about radiological risks posed by reactors and facilities for nuclear waste transportation, storage and disposal. Since 2002, for example, EWG has examined and assisted

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<sup>2</sup> Friends of the Earth is a part of Friends of the Earth International, a federation of grassroots groups working in 74 countries on today's most urgent environmental and social issues. Friends of the Earth International is the world's largest grassroots environmental federation.

<sup>3</sup> See Exhibits 1(A) – 1(E).

the public in understanding the transportation implications of nuclear waste routes that could be utilized to transport deadly radioactive material from around the United States to California nuclear sites. EWG's President Ken Cook testified on the crucial issues surrounding the licensing process for the proposed facility for long-term storage of lethal, long-lived nuclear waste at Yucca Mountain in Nevada. Additionally, as ionizing radiation is known to cause cancer in humans, EWG provides educational and policy advocacy on radiation in drinking water. EWG's Tap Water Database reports that more than a dozen different radioactive elements are detected in American tap water. The most common are beryllium, radon, radium, strontium, tritium and uranium. EWG data show that radioactive contaminants are detected in water serving 165 million people across the U.S. Continuing Diablo Canyon's operation increases the risk that even more people will be exposed to cancer-causing radioactive elements in their drinking water. EWG has also participated in proceedings for the advocacy of alternatives to dangerous nuclear reactor operation. In California, EWG was found to have party status to intervene in a net energy metering tariff proceeding due to its interest in developing a tariff that supports sustainable growth of rooftop solar.<sup>4</sup>

EWG is highly concerned about -- and its supporters would be directly impacted by -- continued operation of the aging Diablo Canyon nuclear plant because of its high cost to taxpayers and extreme safety and environmental hazards. EWG and its supporters are concerned that continuing its operation hurts the state's shift to safe, renewable energy and prolongs the risk of a disaster at the plant. Californians are saddled with the cost of continuing to prop up the unnecessary and unsafe nuclear power plant. Allowing Diablo Canyon to keep operating will

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<sup>4</sup> CA NEM Proceeding: R20-08-020.

enable and compel PG&E and other companies with aging and uneconomic reactors to slow-walk the transition to those renewable and far less expensive energy sources.

While EWG is not technically a “membership” organization, it represents the interests of its supporters in a manner that satisfies the standard for organizational standing recently set forth by the U.S. Supreme Court in *Students for Fair Admissions, Inc. v. President and Fellows of Harv. Coll.*, 143 S.Ct. 2141, 600 U.S. 181 (2003). First, EWG seeks to participate in this license renewal proceeding in a good faith effort to ensure that its supporters’ interest in protecting public health and safety and the environment from radiological contamination and risks are represented in the NRC’s decision-making process.<sup>5</sup> Second, as stated in the attached declarations of EWG supporters June Cochran, Patricia Kohlen, and Linda Parks, they voluntarily support EWG and support its mission; they regularly receive emails from EWG seeking their input on its programs and activities; and EWG keeps them informed of the status of legal proceedings in which their interests are represented.<sup>6</sup> “[F]urther scrutiny” into “how EWG operates” is “not required.”<sup>7</sup> Thus, EWG has organizational standing in this proceeding.

In the event the NRC determines that EWG does not have organizational standing to represent its supporters’ interests, EWG seeks discretionary recognition of its standing to advocate for the interests of its supporters.<sup>8</sup> EWG respectfully submits that it satisfies the standard for discretionary intervention, as set forth in *Pebble Springs*, as follows:

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<sup>5</sup> *Students for Fair Admissions*, 143 S.Ct. at 2158 (requiring demonstration that organization represents its members in “good faith”). See also attached Declaration of Ken Cook, Exhibit 1(F) (attesting to good faith representation of supporters’ interests).

<sup>6</sup> See Exhibit 1(G) – 1(I). See also *Students for Fair Admissions*, 143 S.Ct. at 2158.

<sup>7</sup> *Students for Fair Admissions*, 143 S.Ct. at 2158.

<sup>8</sup> 10 C.F.R. § 2.309(e); *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 & 2), CLI-76-27, 4 N.R.C. 610, 616 (1976) (“*Pebble Springs*”).

- First, EWG will significantly contribute to the development of a sound record through its expertise on public health and environmental issues in California; that its thousands of supporters have significant property, financial, public health and safety and environmental interests in the state and the region; and that these interests will be affected by the NRC's decision in this proceeding.
- Further, EWG has no means other than this proceeding for protecting its interests. And SLOMFP and FoE may not be able to fully represent EWG's interests without the assistance and participation of EWG staff.

Finally, EWG's participation will not broaden this proceeding because EWG seeks to participate regarding the same contentions as SLOMFP and FoE. In addition, as demonstrated above, EWG's interest and activities fall within the zone of interest protected by the Atomic Energy Act and NEPA.<sup>9</sup>

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<sup>9</sup> *Students for Fair Admissions*, 143 S.Ct. at 2157 (requiring that interests sought to be protected must be "germane to the organization's purpose"). *See also* EWG Mission Statement at [ewg.org](http://ewg.org):

EWG's team of scientists, policy experts, lawyers and communications and data experts work tirelessly to reform our nation's broken chemical safety and agricultural laws. We push industries to adopt our standards and stand against chemicals of concern.

## CONTENTIONS

### **CONTENTION 1: CONTINUED OPERATION OF DCPD UNDER A RENEWED LICENSE POSES AN UNACCEPTABLE SAFETY RISK AND SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACT OF SEISMIC CORE DAMAGE ACCIDENTS**

#### **A. Statement of Contention**

The NRC should deny PG&E's license renewal application for DCPD because continued operation of the reactors poses an unacceptable risk of core damage accidents due to earthquakes. Therefore, renewal of PG&E's operating license would not satisfy the statutory standard set by the Atomic Energy Act that operation of DCPD will "provide adequate protection to the health and safety of the public."<sup>10</sup> By the same token, continued operation of DCPD also poses significant or "LARGE" adverse environmental impacts, not "SMALL" impacts as asserted by PG&E in its Environmental Report.<sup>11</sup> As required by the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4332(c)(iii), the Environmental Report should weigh the costs and benefits of the alternative that would avoid these impacts: closing DCPD on the reactors' current 2024/2025 retirement dates.<sup>12</sup>

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<sup>10</sup> 42 U.S.C. § 2232. The unacceptable risk of an earthquake-related core damage accident at DCPD is current and ongoing. Therefore, in conjunction with this Hearing Request, Petitioners have filed a separate petition with the Commissioners seeking immediate closure of the DCPD reactors unless and until the risk of an earthquake-related core damage accident can be significantly reduced.

<sup>11</sup> Environmental Report at 4-61 (asserting that PG&E's seismic risk analysis did not change the conclusion of the 1996 License Renewal Generic Environmental Impact Statement ("1996 License Renewal GEIS") that the environmental impacts of severe accidents are "SMALL."). While the NRC retains ultimate responsibility for independently evaluating environmental impacts and alternatives under NEPA, the NRC also relies on the information presented in environmental reports. 10 C.F.R. § 51.41.

<sup>12</sup> As discussed below, the risk posed by continued operation of DCPD is almost two orders of magnitude higher than the "SMALL" risk assumed by PG&E in the Environmental Report. Therefore, the Severe Accident Mitigation Alternatives ("SAMAs") listed in Appendix G of the

Quantification of the seismic risks and environmental impacts can be found in PG&E’s two most recent public reports on earthquake risks – its 2018 Seismic Probabilistic Risk Assessment (“SPRA”) and its 2023 Environmental Report. In the SPRA, PG&E estimates a value of  $3 \times 10^{-5}$  per year for seismic core damage frequency.<sup>13</sup> In the Environmental Report, PG&E asserts a similar value ( $2.96 \times 10^{-5}$ ) and characterizes their environmental significance as “SMALL.”<sup>14</sup> As set forth in the attached Declaration of Peter Bird, Ph.D (March 4, 2024), (“Bird Declaration”), however, PG&E’s SCDF estimate is too low by a factor of 47~70.<sup>15</sup>

PG&E’s significant underestimate of SCDF arises principally from its assumption that the majority of large earthquakes affecting DCPD are strike-slip earthquakes and its disregard of the significant contribution of thrust-faulting earthquake sources under the DCPD site and in the adjacent Irish Hills. But the January 2024 occurrence of the Noto Peninsula earthquakes on analogous faults in Japan now demonstrates in no uncertain terms that PG&E’s assumption is both unfounded and dangerous. As discussed below, these thrust-faulting earthquakes produce strong

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Environmental Report are grossly inadequate to address the magnitude of the environmental impacts involved. Where the risk of significant impacts is as high as for DCPD, denial of PG&E’s license renewal application and closure of the reactors is a reasonable alternative that should be considered.

<sup>13</sup> PG&E Letter DCL-18-027 re: Seismic Probabilistic Risk Assessment for the Diablo Canyon Power Plant, Units 1 and 2 – Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Seismic Aspects of Recommendation 2.1: Seismic of the (sic) Near-Term Task force Review of Insights from the Fukushima Dai-ichi Accident, Encl. 1 at 52 (Apr. 24, 2018) (NRC Accession No. ML18120A201) (“SPRA”).

The SPRA relies in turn on PG&E’s Seismic Source Characterization for the Diablo Canyon Power Plant, San Luis Obispo County, California; report on the results of SSHAC level 3 study, (Rev. A, March 2018) (Available online at <http://www.pge.com/dcpp-ltsp>) (“SSC”); and PG&E Letter DCL-15-035 re: Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Seismic Aspects of Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident: Seismic Hazard and Screening Report (Mar. 11, 2015) (NRC Accession No. ML15071A045).

<sup>14</sup> Environmental Report at 4-62.



shaking that leads to a much higher chance of seismic core damage than the strike-slip faults assumed by PG&E to predominate at DCP. <sup>16</sup> Applying the experience of the Noto earthquakes to the thrust-faulting earthquakes at and near DCP, a reasonable SCDF estimate could be as high as  $1.4 \times 10^{-3}$ /year. <sup>17</sup> As stated by Dr. Bird:

In the 2024 Noto Peninsula earthquake, we have the advantage of the finite-fault solution (USGS, 2024), which maps the amount of coseismic slip onto the active fault plane. This study showed maximum slip of 3.7 m under the center of the Noto Peninsula, with a mean slip that I visually estimate as 2.0 m (or 2000 mm) in the seismogenic depth range.

Dividing this mean slip of 2000 mm by the long-term tectonic slip-rate of 2.8 mm/a in the Irish Hills, the inferred recurrence rate for Noto-type earthquakes under the Irish Hills is 715 years. In other words, the inferred probability of Noto Peninsula-type earthquakes under the Irish Hills is the inverse of this, which is  $1.4 \times 10^{-3}$  /yr.

Again, reasonably presuming that the Noto Peninsula earthquake is a characteristic earthquake for this tectonic setting (shared by the Irish Hills in California), PGA values of 1.0~2.3 g (see section 1 above) must be expected with probability  $1.4 \times 10^{-3}$  /yr. However, in the 2015 SSC (specifically, in Figure 2.3.7-1 of PG&E, 2015L), we see that this outdated modeling associated this probability level with a PGA of only 0.32 g. Consequently, it appears that the 2015 SSC severely underestimated (by a factor of 3~7) the severity of shaking (PGA) that must be resisted every ~715 years. <sup>18</sup>

In other words, as asserted by Dr. Bird, the severe accident that PG&E asserts will occur only once in 33,000~50,000 years may actually occur every ~715 years. That means that a license extension

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<sup>15</sup> Dr. Bird's Declaration is attached as Exhibit 2.

<sup>16</sup> Bird Declaration, ¶¶ 14(5), 18-21.

<sup>17</sup> *Id.*, ¶¶ 4, 6, 29-30. As stated in ¶¶ 32-34 of Dr. Bird's Declaration, his SCDF estimate is based on information provided in the SPRA, for which some questions about the meaning of PG&E's terminology exist. And there may be differences of opinion about the appropriate interpretation of Noto Peninsula seismographs that should be resolved by further study. In the meantime, for purposes of evaluating PG&E's Environmental Report, it is reasonable to assume that the levels of shaking seen in the Noto Peninsula earthquake will cause seismic core damage at DCP if and when they occur in the Irish Hills of California.

<sup>18</sup> *Id.*, ¶¶ 4, 6, 29-30.

for 20 years would incur a ~2.8% probability of a severe accident.<sup>19</sup> Under NRC guidance, such a high core damage frequency calls for “immediate regulatory action” to “maintain the plant in a safe condition.”<sup>20</sup> In this context, it requires the denial of PG&E’s license renewal application.<sup>21</sup>

### **B. Basis Statement**

This contention is supported by the Bird Declaration, Exhibit 2. Dr. Bird, Professor Emeritus of Geophysics and Geology at the University of California at Los Angeles (“UCLA”), is highly qualified through 46 years of training and experience in the fields of geology and geophysics. His focus is on technophysics and seismicity, including plate motion and plate deformation. And Dr. Bird has done extensive work on the geology of California, including a number of academic papers on computer modeling methods and applications, including studies of the ongoing (neotectonic) deformation in California. He has also been a member or officer of several professional organizations relating to his expertise, including the Geological Society of America, the American Geophysical Union and the Southern California Earthquake Center. The former two organizations have recognized Dr. Bird’s work with two fellowships and an award.

Dr. Bird has a detailed understanding of the seismicity at DCP. In 2012, he participated in a Senior Seismic Hazards Analysis Committee (SSHAC) review sponsored by PG&E and run by Lettis Consultants International, regarding seismic hazard at DCP. He presented results on both strike-slip and compressional deformation rates affecting the region, which were derived from his computer models of neotectonics. These models were prepared for the Southern

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<sup>19</sup> *Id.*, ¶¶ 14(6), 4, 6, 29-30.

<sup>20</sup> NRC Office Instruction LIC-504, Integrated Risk-Informed Decision-Making Process for Emergent Issues at 4 (Rev. 6, Sept. 7, 2023) (ML23165A117) (“LIC-504”).

<sup>21</sup> *Id.* at 4-5 (including orders to shut down reactors among the “scenarios” that could result from application of LIC-504).

California Earthquake Center's project Unified California Earthquake Rupture Forecast, and also for the US Geological Survey's 2013 Update to the National Seismic Hazard Model.

In Section IV of his Declaration, Dr. Bird sets forth in detail the basis for the data and analyses supporting his expert opinion and this contention. As summarized in Section IV.A

(Abstract):

- (1) The Noto Peninsula earthquake in Japan (2024.01.01,  $m7.5$ , 10 km deep) produced peak ground accelerations (PGA) of 1.0~2.3 g (that is, 100~230% of gravity) at 5 modern digital strong-motion seismometers as far as 42 km from the rupture.
- (2) This strong shaking occurred in the Noto Peninsula, which is part of the hanging-wall (upper block) of two en-echelon thrust faults that run parallel to its two coasts.
- (3) The Irish Hills, San Luis Range, and DCPD site in California are at risk for similar earthquakes and similar shaking because they are underlain by similar thrust faults, including the inland Los Osos thrust fault and the Inferred Coastline thrust running along the shore by DCPD.<sup>22</sup>
- (4) The expected recurrence interval between such events at DCPD can be roughly estimated by dividing the expected fault slip (averaging 2 m in the Noto earthquake, according to the USGS finite-fault solution) by the total heave rate of the thrust faults under DCPD, which is about 2.8 mm/year . . . . The result is 715 years. The inverse of this is the rate:  $1.4 \times 10^{-3}$  /yr.
- (5) In the existing SSC (PG&E, 2015; 2015L), the intensity of shaking at this return period of 715 years has been underestimated by a factor of 3~7. This means that the chance of seismic core damage is much higher when thrust-faulting earthquake sources are included.
- (6) Applying Dr. Bird's analysis to these facts, the probability of a severe accident of earthquake origin at DCPD has been underestimated by a factor of  $(1.4 \times 10^{-3} \text{ /yr}) / (2 \sim 3 \times 10^{-5} \text{ /yr}) = 47 \sim 70$ . In other words, the severe accident that PG&E asserts will occur only once in 33,000~50,000 years may actually occur every ~715 years. That

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<sup>22</sup> "Inferred Coastline thrust" is Dr. Bird's own term for a distinct fault surface whose trace follows the coastline opposite DCPD. Unlike the Shoreline fault in the same area, the Inferred Coastline thrust dips at a gentle angle beneath DCPD and has the up-dip rake of a thrust fault.

means that a license extension for 20 years would incur a ~2.8% probability of a severe accident.

This contention is also supported by two NRC guidance documents which demonstrate that the SCDF of  $1.4 \times 10^{-3}/\text{yr}$  estimated by Dr. Bird poses a significant safety and environmental risk. First, LIC-405 characterizes the “risk impact from external events” as “high” and therefore warrants “immediate regulatory action to place or maintain the facility in safe condition” if:

Conditional core damage frequency (CCDF) (i.e., CDF because of the issue) is high (e.g., greater than or on the order of  $1 \times 10^{-3}/\text{year}$ ).<sup>23</sup>

Second, NRC Regulatory Guide 1.174, Rev. 1, An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis (Jan. 2018) states that if total CDF is “considerably” greater than  $10^{-4}$  per reactor year, the NRC’s focus in considering licensing actions “should be on finding ways to decrease rather than increase” the risk.<sup>24</sup> Extending the DCPD license by 20 years clearly increases the risk to the public.

In this case, the significant risk and adverse impact posed by continued operation of DCPD can and should be eliminated by closing the reactors no later than their current retirement dates of 2024 (Unit 1) and 2025) Unit 2, *i.e.* implementing the “no action” alternative under NEPA.<sup>25</sup>

Finally, this contention is supported by the NRC’s correspondence with PG&E, which demonstrates that the NRC has found that DCPD poses a high seismic risk level compared to other reactors and required PG&E to perform a seismic risk analysis and seismic PRA – and yet failed to

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<sup>23</sup> *Id.* at 4 (NRC Accession No. ML23165A117).

<sup>24</sup> *Id.* at 28 (NRC Accession No. ML17317A256).

<sup>25</sup> Because the unacceptable seismic risks also apply during the current license term, Petitioners have submitted a separate request to the Commissioners to take immediate enforcement action.

make Atomic Energy Act-based safety findings in the course of reviewing those studies.<sup>26</sup> As noted in NRC guidance, the word “safety” is used in NRC review documents to connote that an evaluation measured compliance with the “adequate protection” standard of the Atomic Energy Act and NRC regulations.<sup>27</sup> That statutory language does not appear in either the NRC 12/21/16 Letter or the NRC 01/22/19 Letter. Therefore, in the absence of any Atomic Energy Act-based safety evaluation by the NRC of PG&E’s SSC and SPRA, there is no precedential value in this license renewal review.

Accordingly, it is both necessary and appropriate to review PG&E’s seismic risk analyses in light of the new information provided by the Noto Peninsula earthquake and assessed by Dr. Bird, with respect to whether continued operation of DCPD poses an unacceptable safety risk to public health and safety and/or environmental risks that can only be avoided by denying PG&E’s license renewal application.

### **C. Demonstration that the Contention is Within the Scope of the Proceeding**

This contention is within the scope of this license renewal proceeding by virtue of the

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<sup>26</sup> See Letter from Frankie Vega, NRC, to Edward D. Halpin, PG&E, re: Diablo Canyon Power Plant, Unit Nos. 1 and 2 – Staff Assessment of Information Provided Under Title 10 of the Code of Federal Regulations Part 50, Section 50.54(f), Seismic Hazard Reevaluation for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident (CAC Nos. MF5275 and MF5276), Encl. at 1 (Dec. 21, 2016) (“NRC 12/21/16 Letter”) (NRC Accession No. ML16341C057); Letter from Louise Lund, NRC, to James M. Welsh, PG&E, re: Diablo Canyon Power Plant, Unit Nos. 1 and 2 – Staff Review of Seismic Probabilistic Risk Assessment Associated With Reevaluated Seismic Hazard Implementation of the Near-Term Task Force Recommendation 2.1 “Seismic (EPID No. L-2018-JLDE-0006) (Jan. 22, 2019) (“NRC 1/21/19 Letter”) (NRC Accession No. ML20093B934).

<sup>27</sup> See Office Instruction LIC-101, License Amendment Review Procedures (Rev. 6, July 31, 2020) (NRC Accession No. ML19248C539):

[L]icensing actions typically require findings of reasonable assurance that operation of the facility can be conducted without endangering the health and safety of the public and will not be inimical to the health and safety of the public (e.g., 10 CFR 50.57(a)).

commitment made by NRC Chairman Christopher T. Hanson on behalf of the full Commission, whose members sat with him at the hearing, to California Senator Alex Padilla to review seismic safety and environmental risks as part of the proceeding. In an April 19, 2023, hearing before the Senate Committee on Environment and Public Works, Senator Padilla questioned Chairman Hanson regarding the NRC’s plans for ensuring that DCPD is “operationally safe with specific concern about seismic risk.”<sup>28</sup> Mr. Hanson responded that in addition to ongoing safety oversight:

We’re going to be looking at updated safety information *as part of that license renewal process*. We did require all plants to take a look at the enhanced . . . you know to relook at their risks after Fukushima; Diablo, of course did look at their seismic risk again, and *we’ll take another look at that as part of the license renewal process . . .*<sup>29</sup>

Commissioner Hanson’s statements are also consistent with the NRC’s authority and obligation under the Atomic Energy Act to ensure that its licensing decisions pose no undue risk to public health and safety.<sup>30</sup>

In addition, Commissioner Hanson’s commitment on behalf of the full Commission is consistent with NEPA’s requirement that all federal agencies must take a “hard look” at the environmental impacts of their proposed actions.<sup>31</sup> Because the Environmental Report is the preliminary environmental risk evaluation on which the NRC will eventually rely for its EIS, its analysis must be rigorous and thorough.<sup>32</sup> Petitioners challenge the adequacy of the Environmental

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<sup>28</sup> A recording of the hearing is posted on the Committee’s website at: <https://www.epw.senate.gov/public/index.cfm/hearings?ID=DD1B6EC6-588A-4A56-9961-F9961BE12270>. Sen. Padilla’s question can be found at approximately 1:45:26.

<sup>29</sup> *Id.* (emphasis added). Chairman Hanson’s response can be found at approximately 1:45:55.

<sup>30</sup> 42 U.S.C. § 2232 (requiring NRC to ensure that licensed activities will “provide adequate protection to the health and safety of the public.”). *See also Yankee Atomic Electric Co.* (Yankee Rowe Nuclear Power Station), CLI-91-11, 34 N.R.C. 3, 12 (1991) (“The Commission has the ultimate responsibility to ensure the safe operation of the facilities that it licenses.”).

<sup>31</sup> *Sierra Club v. Fed. Energy Regulatory Comm’n*, 867 F.3d 1357, 1367 (D.C. Cir. 2017).

<sup>32</sup> 10 C.F.R. § 51.41.

Report and PG&E's most recent seismic studies that purport to find that the safety and environmental risks of operating DCPD in a renewed operating license term are acceptable or insignificant. Chairman Hanson has committed the agency to review these issues in the course of the license renewal proceeding.

Therefore, the consistency of Chairman Hanson's commitments on behalf of the full Commission with the NRC's statutory responsibilities for its licensing decisions under the Atomic Energy Act establish that Petitioners' contention is within the scope of the proceeding.

**D. Demonstration that the Contention is Material to the Findings NRC Must Make to Renew PG&E's Operating License**

Petitioners' contention is material to the finding that Chairman Hanson and his fellow Commissioners have committed to make in the license renewal proceeding, *i.e.*, whether continued operation of Diablo Canyon is "operationally safe" with respect to seismic risks. This commitment is also material to the NRC's statutory responsibility under the Atomic Energy Act to ensure that continued operation of DCPD will "provide adequate protection to the health and safety of the public."<sup>33</sup> Finally, and also consistent with the Chairman's commitment on behalf of the full NRC to Senator Padilla, Petitioner's contention is material to the analysis required by NEPA regarding the significance of environmental impacts and reasonable alternatives for avoiding or mitigating those impacts.<sup>34</sup>

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<sup>33</sup> See note 30, *supra*.

<sup>34</sup> See note 31, *supra*.

**E. Concise Statement of the Facts or Expert Opinion Supporting the Contention, Along with Appropriate Citations to Supporting Scientific or Factual Materials**

The facts, NRC guidance, and expert opinion relied on in Petitioners' contention are provided in the Statement of the Contention, the Basis Statement, and the attached Bird Declaration.

**CONTENTION 2: PG&E FAILS TO PROVIDE AN ADEQUATE PLAN TO MONITOR AND MANAGE THE EFFECTS OF AGING ON UNIT 1 REACTOR PRESSURE VESSEL.**

**A. Statement of Contention**

PG&E's license renewal application does not include an adequate plan to monitor and manage the effects of aging due to embrittlement of the Unit 1 reactor pressure vessel ("RPV") or an adequate time-limited aging analysis ("TLAA"), as required by 10 C.F.R. § 54.21.

**B. Basis Statement**

As set forth in Exhibit 3, the Declaration of Digby Macdonald, Ph.D., the pressure vessel is a uniquely important and vulnerable component in a nuclear reactor, because it holds water on the highly radioactive reactor core, and because it has no backup if it should crack and lose water during an accident. Therefore, compliance with NRC requirements for monitoring the condition of the plant-specific pressure vessel is essential.

PG&E's proposed aging management program for the RPV relies heavily upon and perpetuates the preexisting and inadequate surveillance program that PG&E has used during the decades-old initial operating license period. That program is fundamentally deficient due to serious indications of an unacceptable degree of embrittlement, coupled with a lack of information to establish otherwise. These deficiencies are summarized in Section V of Dr. Macdonald's



Declaration (Exhibit 2) with reference to his more detailed analysis of September 14, 2023.<sup>35</sup>

Deficiencies include failure to consider serious indications of embrittlement that existed in 2003 and failure to conduct further monitoring of the Unit 1 RPV in the subsequent two decades, including removal of specimens for “Charpy” testing and ultrasound inspection of reactor beltline welds. In Section VI of his Declaration, Dr. Macdonald identifies additional, more recent concerns, including the erroneous assumption that embrittlement accrues in a non-Markovian manner, the appearance of Extrema in Capsule V CGraphs and Tables, the general failure by both PG&E and the NRC to address the significance of errors in PG&E’s analyses, and PG&E’s failure to address the potentially significant role of hydrogen in the embrittlement/crack propagation process.

Taking all of these deficiencies into account, Dr. Macdonald concludes that the NRC must reject PG&E’s license renewal application because it relies on this outdated preexisting program without addressing or resolving its multiple serious inadequacies.

### **C. Demonstration that the Contention is Within the Scope of the Proceeding**

Contention 2 is within the scope of this proceeding because it challenges the adequacy of PG&E’s aging management program with respect to the Unit 1 RPV, a component that is explicitly covered by the NRC’s Part 54 regulations. As provided by 10 C.F.R. § 54.4(a)(3), the “scope” of the regulations includes “[a]ll systems, structures, and components relied on in safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for . . . pressurized thermal shock (10 CFR 50.61).”

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<sup>35</sup> Declaration of Digby Macdonald, Ph.D. in Support of Hearing Request and Request for Emergency Order by San Luis Obispo Mothers for Peace and Friends of the Earth (Sept. 14, 2023) (“9/14/23 Declaration”) (NRC Accession No. ML23257A302). A copy of my 9/14/23 Declaration is attached to this Declaration as Attachment 1.

**D. Demonstration that the Contention is Material to the Findings NRC Must Make to Renew PG&E's Operating License**

The issue of whether PG&E has proposed an adequate plan for monitoring and management of RPV embrittlement is material to this relicensing proceeding because the NRC must make certain findings as to the public health and safety; and if serious risks are found, it must either deny the application or impose significant modifications on the applicant's operations.

**E. Concise Statement of the Facts or Expert Opinion Supporting the Contention, Along with Appropriate Citations to Supporting Scientific or Factual Materials**

The facts and expert opinion supporting this contention are set forth in the Statement of Contention, the Basis Statement, and Dr. Macdonald's expert Declaration.

**CONTENTION 3: PG&E FAILS TO DEMONSTRATE COMPLIANCE WITH THE COASTAL ZONE MANAGEMENT ACT.**

**A. Statement of Contention**

The NRC may not approve renewal of PG&E's operating licenses for DCPD because PG&E has not demonstrated compliance with the Coastal Zone Management Act ("CZMA"), 16 U.S.C. § 1451, *et seq.* For the same reason, PG&E's Environmental Report also fails to satisfy the requirements of NRC's own regulations mandating the content of environmental reports.<sup>36</sup>

**B. Basis Statement**

While Appendix F of PG&E's Environmental Report contains a document entitled "Coastal Zone Consistency Certification" ("Consistency Certification"), by itself the Consistency Certification is insufficient to support license renewal. Before the NRC may grant license renewal, PG&E's Consistency Certification must be sanctioned by the State of California.<sup>37</sup> In addition, the

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<sup>36</sup> 10 C.F.R. §§ 51.45(b), (c), and (d).

<sup>37</sup> 16 U.S.C. § 1456(c)(3); 15 C.F.R. § 930.50 *et. seq.* See also NRC Reg. Guide 4.2, Preparation of Environmental Reports for Nuclear Power Stations at 21 (Rev. 3, Sept. 2018) (NRC Accession No. ML18071A400) (emphasis added):

State must grant any necessary coastal development permits (“CDPs”).<sup>38</sup> Neither of these crucial approvals have occurred.

NRC regulations reflect these requirements at 10 C.F.R. §§ 51.45(b) and (c), which together requires license renewal applicants to address the environmental impacts of their proposed actions as well as alternatives for avoiding or mitigating them. Pursuant to 10 C.F.R. § 51.45(d), a license renewal applicant must also catalogue required approvals that must be obtained prior to license renewal.<sup>39</sup> Thus, through approvals such as CZMA consistency and permitting, the license renewal application must incorporate State-imposed restrictions for addressing, avoiding and mitigating adverse environmental impacts of the proposed action.

In this case, the State agency responsible for implementation of the CZMA, the California Coastal Commission (“CCC”), has formally rejected PG&E’s certification as incomplete and insufficient on multiple grounds (“CCC Letter,” Exhibit 4).<sup>40</sup> These grounds include PG&E’s failure to address effects on coastal uses and resources for the full 20-year period covered by PG&E’s license renewal application instead of only five years; effects on fragile coastline areas and recreational activities of a proposed reduction in the size of the security area around DCP; the substantial loss of marine life productivity from continued reliance on DCP’s once-through cooling system; effects of proposed dredging activities at DCP; effects of continued operation on

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Applicants must submit to both the NRC and to the State a certification that the proposed activity complies with the enforceable policies of the State’s program. *If the Coastal Zone Management Act applies to the project, the NRC cannot issue its license or permit until the State has concurred with the applicant’s certification of a coastal consistency determination.*

<sup>38</sup> California Public Resources Code § 30600.

<sup>39</sup> 10 C.F.R. § 51.45(b).

<sup>40</sup> Letter from Tom Luster, CCC, to Tom Jones, PG&E re: Pacific Gas & Electric Company’s Requested Nuclear Regulatory Commission License Renewal for Diablo Canyon Power Plant, San Luis Obispo County – Incomplete Consistency Certification at 3-8 (Dec. 7, 2023).

Environmentally Sensitive Habitat Areas, and effects of continued operation on traffic and circulation.<sup>41</sup>

In addition, the CCC Letter notes that PG&E may be required to obtain a CDP if the CCC finds that some of its activities meet the definition of “development” as provided by CCC policies for implementation of the CZMA:

The proposed extension of the operating license would affect a variety of coastal uses and resources beyond those acknowledged by PG&E in its consistency certification, and the Commission must evaluate those effects for consistency with the applicable policies of the CCMP [California Coastal Management Program.] Moreover, as described below, the extended intake and discharge of seawater that would be carried out as part of license renewal constitutes “development” within the meaning of Section 30106 [of CCMP policies.] It is also reasonably foreseeable that the proposed license extension includes other uses and activities that likely constitute “development” within the meaning of Section 30106 – for example, intake cove dredging and a new or expanded spent fuel facility.<sup>42</sup>

Accordingly, given the CCC’s unequivocal rejection of PG&E’s Coastal Certification as incomplete and inadequate, and given the potential requirement to obtain one or more CDPs, the NRC may not approve PG&E’s license renewal application. Moreover, PG&E’s license renewal application is incomplete because it does not address this issue.

### **C. Demonstration that the Contention is Within the Scope of the Proceeding**

Contention 3 is within the scope of this proceeding because the CZMA requires that PG&E must comply with its requirements before license renewal can be approved. In addition, NEPA and NRC regulations require that PG&E must accurately and reasonably describe the environmental

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<sup>41</sup> *Id.* at 3-8.

<sup>42</sup> *Id.* at 2. *See also id.* at 3 n.6 (clarifying that the CCC has not determined “that there would be no development requiring a CDP for a license extension”).

impacts of its actions and alternatives to avoid or mitigate those impacts.<sup>43</sup> And PG&E must demonstrate compliance with all relevant federal and State permitting requirements.<sup>44</sup>

**D. Demonstration that the Contention is Material to the Findings NRC Must Make to Renew PG&E's Operating License**

Contention 3 is material to the findings NRC must make to renew PG&E's operating license because the NRC's Environmental Impact Statement for renewal of PG&E's operating license will rely on the Environmental Report to comprehensively address the environmental impacts of PG&E's renewed operation and alternatives for avoiding or mitigating those impacts. As discussed above in Section B, the Environmental Report is inadequate to fulfill that purpose with respect to the consistency certification and development permits that are required or may be required. As also discussed above in Section B, the NRC must also find that the State has confirmed PG&E's compliance with the CZMA before re-licensing Diablo Canyon.

**E. Concise Statement of the Facts or Expert Opinion Supporting the Contention, Along with Appropriate Citations to Supporting Scientific or Factual Materials**

The facts supporting this contention are described above in the Statement of Contention and Basis Statement. Further support is also provided in Exhibit 3, the attached CCC Letter.

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<sup>43</sup> 10 C.F.R. §§ 51.45(b), (c). *See also State of New York v. NRC*, 681 F.3d 471, 476 (D.C. Cir. 2012) (renewal of reactor operating licenses constitutes a major federal action requiring evaluation of environmental impacts and alternatives under NEPA).

<sup>44</sup> 10 C.F.R. §§ 51.45(b), (c), and (d).

### III. CONCLUSION

For the foregoing reasons, the NRC should find that Petitioners have standing and grant their hearing request.

Respectfully submitted,

/signed electronically by/  
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/signed electronically by/  
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*Counsel to Environmental Working Group*

March 4, 2023

## CERTIFICATE OF SERVICE

I certify that on March 4, 2023, I sent copies of the foregoing REQUEST BY SAN LUIS OBISPO MOTHERS FOR PEACE, FRIENDS OF THE EARTH AND ENVIRONMENTAL WORKING GROUP FOR HEARING ON PACIFIC GAS & ELECTRIC COMPANY'S LICENSE RENEWAL APPLICATION FOR THE DIABLO CANYON NUCLEAR PLANT and Exhibits 1, 2, and 3 to the Secretary of the Commission and counsel for PG&E and the NRC Staff as follows:

NRC hearing docket, [Hearing.Docket@nrc.gov](mailto:Hearing.Docket@nrc.gov)

NRC Office of the Secretary,

Paul Bessette, [paul.bessette@morganlewis.com](mailto:paul.bessette@morganlewis.com)

Ryan Lighty, [ryan.lighty@morganlewis.com](mailto:ryan.lighty@morganlewis.com)

Timothy Matthews, [timothy.matthews@morganlewis.com](mailto:timothy.matthews@morganlewis.com)

Jeremy Wachutka, [jeremy.wachutk@nrc.gov](mailto:jeremy.wachutk@nrc.gov)

Catherine Kanatas, [catherine.kanatas@nrc.gov](mailto:catherine.kanatas@nrc.gov)

Adam Gendelman, [adam.gendelman@nrc.gov](mailto:adam.gendelman@nrc.gov)

I have requested access to the EIE docket and will upload the hearing request to the docket as soon as I am granted access.

*Electronically signed by*  
Diane Curran

## **EXHIBIT 1 – STANDING DECLARATIONS**

**Exhibit 1(A) Declaration of Sherry Lewis**

**Exhibit 1(B) Declaration of Julie Mansfield-Wells**

**Exhibit 1(C) Declaration of Linda Seeley**

**Exhibit 1(D) Declaration of Lucy Jane Swanson**

**Exhibit 1(E) Declaration of Jill ZamEk**

**Exhibit 1(F) Declaration of Ken Cook**

**Exhibit 1(G) Declaration of June Cochran**

**Exhibit 1(H) Declaration of Patrician Kohlen**

**Exhibit 1(I) Declaration of Linda Parks**



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF SHERRY LEWIS**

Under penalty of perjury, Sherry Lewis declares as follows:

1. My name is Sherry Lewis. I am a member of San Luis Obispo Mothers for Peace (SLOMFP) and Friends of the Earth (FOE).
2. I live at 209 Longview Lane, San Luis Obispo, CA 93405.
3. My home is located within the 50-mile ingestion pathway zone of Diablo Canyon Unit 1 and Unit 2 nuclear reactors (DCPP). I am aware that the licensee, Pacific Gas and Electric Company (PG&E), has requested the U.S. Nuclear Regulatory Commission (NRC) to renew the DCPP operating licenses for 20 years.
4. Based on my knowledge that the Diablo Canyon nuclear reactors are operating with aging equipment, including an embrittled reactor pressure vessel that has not been inspected for over 20 years; and based on the location of the Diablo Canyon reactors on or near a web of significant earthquake faults, I believe that the continued operation of the Diablo Canyon reactors for a renewed operating license term poses an unacceptable radiological accident risk that jeopardizes my health and safety and the environment.
5. Therefore, I have authorized SLOMFP and FOE to represent my interests by submitting a hearing request in this license renewal proceeding.

Executed in Accordance with 10 C.F.R. § 2.304(d) by  
Sherry Lewis

Date: February 24, 2024

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF JULIE MANSFIELD-WELLS**

Under penalty of perjury, Julie Mansfield-Wells declares as follows:

1. My name is Julie Mansfield-Wells. I am a member of San Luis Obispo Mothers for Peace (SLOMFP) and Friends of the Earth (FOE).
2. I live at 509 Mar Vista Drive, Los Osos, CA.
3. My home is located within the 50-mile ingestion pathway zone of Diablo Canyon Unit 1 and Unit 2 nuclear reactors (DCPP). I am aware that the licensee, Pacific Gas and Electric Company (PG&E), has requested the U.S. Nuclear Regulatory Commission (NRC) to renew the DCPP operating licenses for 20 years.
4. Based on my knowledge that the Diablo Canyon nuclear reactors are operating with aging equipment, including an embrittled reactor pressure vessel that has not been inspected for over 20 years; and based on the location of the Diablo Canyon reactors on or near a web of significant earthquake faults, I believe that the continued operation of the Diablo Canyon reactors for a renewed operating license term poses an unacceptable radiological accident risk that jeopardizes my health and safety and the environment.
5. Therefore, I have authorized SLOMFP and FOE to represent my interests by submitting a hearing request in this license renewal proceeding.

Executed in Accordance with 10 C.F.R. § 2.304(d) by  
Julie Mansfield-Wells

Date: February 24, 2024

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF LINDA M. SEELEY**

Under penalty of perjury, Linda M. Seeley declares as follows:

1. My name is Linda M. Seeley. I am a member of San Luis Obispo (SLOMFP) and Friends of the Earth (FOE).
2. I live at 1512 7<sup>th</sup> Street, Los Osos, CA 93402.
3. My home is located within the 50-mile ingestion pathway zone of Diablo Canyon Unit 1 and Unit 2 nuclear reactors (DCPP). I am aware that the licensee, Pacific Gas and Electric Company (PG&E), has requested the U.S. Nuclear Regulatory Commission (NRC) to renew the DCPP operating licenses for 20 years.
4. Based on my knowledge that the Diablo Canyon nuclear reactors are operating with aging equipment, including an embrittled reactor pressure vessel that has not been inspected for over 20 years; and based on the location of the Diablo Canyon reactors on or near a web of significant earthquake faults, I believe that the continued operation of the Diablo Canyon reactors for a renewed operating license term poses an unacceptable radiological accident risk that jeopardizes my health and safety and the environment.
5. Therefore, I have authorized SLOMFP and FOE to represent my interests by submitting a hearing request in this license renewal proceeding.

Executed in Accordance with 10 C.F.R. § 2.304(d) by  
Linda M. Seeley

Date: February 24, 2024

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF LUCY JANE SWANSON**

Under penalty of perjury, Lucy Jane Swanson declares as follows:

1. My name is Lucy Jane Swanson. I am a member of San Luis Obispo Mothers for Peace (SLOMFP) and Friends of the Earth (FOE).
2. I live at 313 Presidio Place, San Luis Obispo, CA 93401.
3. My home is located within the 50-mile ingestion pathway zone of Diablo Canyon Unit 1 and Unit 2 nuclear reactors (DCPP). I am aware that the licensee, Pacific Gas and Electric Company (PG&E), has requested the U.S. Nuclear Regulatory Commission (NRC) to renew the DCPP operating licenses for 20 years.
4. Based on my knowledge that the Diablo Canyon nuclear reactors are operating with aging equipment, including an embrittled reactor pressure vessel that has not been inspected for over 20 years; and based on the location of the Diablo Canyon reactors on or near a web of significant earthquake faults, I believe that the continued operation of the Diablo Canyon reactors for a renewed operating license term poses an unacceptable radiological accident risk that jeopardizes my health and safety and the environment.

Executed in Accordance with 10 C.F.R. § 2.304(d) by  
Lucy Jane Swanson

Date: February 24, 2024

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF JILL ZAMEK**

Under penalty of perjury, Jill ZamEk declares as follows:

1. My name is Jill ZamEk. I am a member of San Luis Obispo Mothers for Peace (SLOMFP) and Friends of the Earth (FOE).
2. I live at 1123 Flora Road, Arroyo Grande, CA.
3. My home is located within the 50-mile ingestion pathway zone of Diablo Canyon Unit 1 and Unit 2 nuclear reactors (DCPP). I am aware that the licensee, Pacific Gas and Electric Company (PG&E), has requested the U.S. Nuclear Regulatory Commission (NRC) to renew the DCPP operating licenses for 20 years.
4. Based on my knowledge that the Diablo Canyon nuclear reactors are operating with aging equipment, including an embrittled reactor pressure vessel that has not been inspected for over 20 years; and based on the location of the Diablo Canyon reactors on or near a web of significant earthquake faults, I believe that the continued operation of the Diablo Canyon reactors for a renewed operating license term poses an unacceptable radiological accident risk that jeopardizes my health and safety and the environment.
5. Therefore, I have authorized SLOMFP and FOE to represent my interests by submitting a hearing request in this license renewal proceeding.

Executed in Accordance with 10 C.F.R. § 2.304(d) by  
Jill ZamEk

Date: February 24, 2024

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF KEN COOK**

Under penalty of perjury, Ken Cook declares as follows:

1. My name is Ken Cook. I am President and co-founder of Environmental Working Group (EWG).
2. EWG is a 501(c)(3) non-profit, non-partisan organization that works to empower people to live healthier lives in a healthier environment. EWG does this, in part, by creating and sharing research reports and consumer guides that help people educate themselves about the food they consume, the products they buy, and the companies they support, so that everyone can make safer and more informed choices. In furtherance of its mission, EWG engages in research and policy advocacy on a broad range of issues related to state and federal energy policy, climate change, renewable energy, toxic chemicals, food and agriculture, water and air pollution, and public health. EWG's work on energy policy has included rate design and public policy issues related to consumer use of and access to solar.
3. While EWG is a national organization, the group has a strong presence in California. Out of a nationwide group of 410,000 active supporters, more than 58,000 Californians have signed up to receive monthly EWG emails that seek to learn about supporters' concerns and opinions in order to guide EWG in establishing organizational goals. EWG also uses these emails to keep our supporters informed of the status of legal proceedings in which their interests are represented.
4. Over several decades, EWG has developed public education information and has submitted formal testimony about radiological risks posed by reactors and facilities for nuclear waste transportation, storage and disposal. Since 2002, for example, EWG has examined and assisted the public in understanding the transportation implications of nuclear waste routes that could be utilized to transport deadly radioactive material from around the United States to California nuclear sites. For instance, I testified on the crucial issues surrounding the licensing process for the proposed facility for long-term storage of lethal, long-lived nuclear waste at Yucca Mountain in Nevada.
5. Additionally, as ionizing radiation is known to cause cancer in humans, EWG provides educational and policy advocacy on radiation in drinking water. EWG's Tap Water Database reports that more than a dozen different radioactive elements are detected in

American tap water. The most common are beryllium, radon, radium, strontium, tritium and uranium. EWG data show that radioactive contaminants are detected in water serving 165 million people across the U.S. Continuing Diablo Canyon's operation increases the risk that even more people will be exposed to cancer-causing radioactive elements in their drinking water. EWG has also participated in proceedings for the advocacy of alternatives to dangerous nuclear reactor operation. In California, EWG was found to have party status to intervene in a net energy metering tariff proceeding due to its interest in developing a tariff that supports sustainable growth of rooftop solar.<sup>1</sup>

6. EWG and its supporters are highly concerned about continued operation of the aging Diablo Canyon nuclear plant because of its high cost to taxpayers and extreme safety and environmental hazards. We are also concerned that continuing Diablo Canyon's operation hurts the state's shift to safe, renewable energy and prolongs the risk of a disaster at the plant. Californians are saddled with the cost of continuing to prop up the unnecessary and unsafe nuclear power plant. Allowing Diablo Canyon to keep operating will enable and compel PG&E and other companies with aging and uneconomic reactors to slow-walk the transition to those renewable and far less expensive energy sources.
7. EWG seeks to participate in this license renewal proceeding in a good faith effort to represent our supporters' interest in protecting public health and safety and the environment from radiological accidents and contamination.

Executed in Accordance with 10 C.F.R. § 2.304(d) by



Ken Cook

Date:



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<sup>1</sup> CA NEM Proceeding: R20-08-020.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF JUNE COCHRAN**

Under penalty of perjury, June Cochran declares as follows:

1. My name is June Cochran. I am a supporter of Environmental Working Group (EWG). As an EWG supporter, I receive monthly EWG emails that provides me with public education information about health risks posed by toxic and radiological contamination of consumer products and the environment. In these emails, EWG regularly asks about supporters' concerns and opinions in order to guide it in establishing organizational goals. I am pleased with EWG's work and believe EWG generally represents my interests and concerns.
2. I live at 2622 Barcelona in Pismo Beach, California 93449. My home is located within the 50-mile ingestion pathway zone of Diablo Canyon Unit 1 and Unit 2 nuclear reactors (DCPP).
3. I am aware that the licensee, Pacific Gas and Electric Company (PG&E), has requested the U.S. Nuclear Regulatory Commission (NRC) to renew the DCPP operating licenses for 20 years.
4. Based on my knowledge that the Diablo Canyon nuclear reactors are operating with aging equipment, including an embrittled reactor pressure vessel that has not been inspected for over 20 years; and based on the location of the Diablo Canyon reactors on or near a web of significant earthquake faults, I believe that the continued operation of the Diablo Canyon reactors for a renewed operating license term poses an unacceptable radiological accident risk that jeopardizes my health and safety and the environment.
5. Therefore, I have authorized EWG to represent my interests by submitting a hearing request in this license renewal proceeding.



Date: March 1, 2024

June Cochran



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF PATRICIA KOHLEN**

Under penalty of perjury, Patricia Kohlen declares as follows:

1. My name is Patricia Kohlen. I am a supporter of Environmental Working Group (EWG). As an EWG supporter, I receive monthly EWG emails that provides me with public education information about health risks posed by toxic and radiological contamination of consumer products and the environment. In these emails, EWG regularly asks about supporters' concerns and opinions in order to guide it in establishing organizational goals. I am pleased with EWG's work and believe EWG generally represents my interests and concerns.
2. I live at 359 Los Cerros Drive, San Luis Obispo, CA 93405. My home is located within the 50-mile ingestion pathway zone of Diablo Canyon Unit 1 and Unit 2 nuclear reactors (DCPP).
3. I am aware that the licensee, Pacific Gas and Electric Company (PG&E), has requested the U.S. Nuclear Regulatory Commission (NRC) to renew the DCPP operating licenses for 20 years.
4. Based on my knowledge that the Diablo Canyon nuclear reactors are operating with aging equipment, including an embrittled reactor pressure vessel that has not been inspected for over 20 years; and based on the location of the Diablo Canyon reactors on or near a web of significant earthquake faults, I believe that the continued operation of the Diablo Canyon reactors for a renewed operating license term poses an unacceptable radiological accident risk that jeopardizes my health and safety and the environment.
5. Therefore, I have authorized EWG to represent my interests by submitting a hearing request in this license renewal proceeding.

Executed in Accordance with 10 C.F.R. § 2.304(d) by  
Patricia Kohlen

Date: Feb. 24, 2024

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE SECRETARY

In the matter of  
Pacific Gas and Electric Company  
Diablo Canyon Nuclear Power Plant  
Units 1 and 2

Docket Nos. 50-275-LR, 50-373-LR

**DECLARATION OF LINDA PARKS**

Under penalty of perjury, Linda Parks declares as follows:

1. My name is Linda Parks. I am a supporter of Environmental Working Group (EWG). As an EWG supporter, I receive monthly EWG emails that provides me with public education information about health risks posed by toxic and radiological contamination of consumer products and the environment. In these emails, EWG regularly asks about supporters' concerns and opinions in order to guide it in establishing organizational goals. I am pleased with EWG's work and believe EWG generally represents my interests and concerns.
2. I live at 242 Butte Drive, Los Osos. My home is located within the 50-mile ingestion pathway zone of Diablo Canyon Unit 1 and Unit 2 nuclear reactors (DCPP).
3. I am aware that the licensee, Pacific Gas and Electric Company (PG&E), has requested the U.S. Nuclear Regulatory Commission (NRC) to renew the DCPP operating licenses for 20 years.
4. Based on my knowledge that the Diablo Canyon nuclear reactors are operating with aging equipment, including an embrittled reactor pressure vessel that has not been inspected for over 20 years; and based on the location of the Diablo Canyon reactors on or near a web of significant earthquake faults, I believe that the continued operation of the Diablo Canyon reactors for a renewed operating license term poses an unacceptable radiological accident risk that jeopardizes my health and safety and the environment.
5. Therefore, I have authorized EWG to represent my interests by submitting a hearing request in this license renewal proceeding.

Executed in Accordance with 10 C.F.R. § 2.304(d) by



Date: March 1, 2024