UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of:

PACIFIC GAS AND ELECTRIC COMPANY Docket No. 50-275-LR Docket No. 50-323-LR

(Diablo Canyon Power Plant, Units 1 and 2)

APPLICANT'S ANSWER TO PETITION TO INTERVENE AND RESPONSE TO REQUESTS FOR WAIVERS

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I. <u>INTRODUCTION</u>

Pursuant to 10 C.F.R. § 2.309(h), Pacific Gas and Electric Company ("PG&E"), applicant in this matter, hereby answers the "Request For Hearing and Petition to Intervene" ("Petition" or "Pet."), dated March 22, 2010, filed by the San Luis Obispo Mothers For Peace ("SLOMFP" or "Petitioners"). In connection with two of their proposed contentions, the Petitioners also request a waiver from certain of the NRC's regulations. *See* "San Luis Obispo Mothers for Peace's Petition for Waiver of 10 C.F.R. Part 51 Subpart A Appendix B and 10 C.F.R. § 51.53(c)(2)," dated March 22, 2010 ("Waiver Request"). Pursuant to 10 C.F.R. § 2.335(b), PG&E also responds to the Waiver Request herein.

On November 23, 2009, PG&E submitted an application to renew the operating licenses for Diablo Canyon Power Plant, Units 1 and 2 ("Diablo Canyon" or "DCPP") for an additional 20 years beyond the period specified in the current operating licenses. The current licenses expire on November 2, 2024, and August 26, 2025, respectively. The U.S. Nuclear Regulatory Commission ("NRC") accepted the application for docketing and published the

"Notice of Hearing and Opportunity to Petition for Leave to Intervene" on January 21, 2010. 75 Fed. Reg. 3493. Petitioners timely filed their petition to intervene on March 22, 2010.

II. <u>SUMMARY OF ARGUMENT</u>

In proposed Contention TC-1, Petitioners assert, without expert support, that PG&E has failed to demonstrate "reasonable assurance" that it can and will manage the effects of aging on equipment within the scope of license renewal during the period of extended operation. Pet. at 2. This proposed contention raises current operational issues outside the scope of license renewal and fails to establish a genuine factual dispute with the application on any material issue. Accordingly, proposed Contention TC-1 is inadmissible.

In proposed Contention EC-1, Petitioners assert, without expert support, that PG&E's Severe Accident Mitigation Analysis ("SAMA") is "not based on complete information that is necessary for an understanding of seismic risks." Pet. at 8. This proposed contention is an impermissible challenge to the current licensing basis (the seismic design basis) of the plant and therefore is outside the scope of license renewal. Additionally, PG&E carefully considered seismic risk in its SAMA analysis. The Petitioners fail to offer any factual or expert support to show that PG&E's SAMA analysis is deficient, fail to challenge the conclusions of PG&E's SAMA analysis, and fail to present any cost information associated with seismic risk or any proposed mitigation alternatives. Proposed Contention EC-1 is therefore inadmissible.

Proposed Contentions EC-2 and EC-3 impermissibly challenge the Commission's generic environmental evaluation of spent fuel storage, including the risk of accidents caused by a seismic event or an attack on the spent fuel pools, without satisfying the Commission's criteria for granting a waiver. As such, these contentions are inadmissible. Furthermore, even if a waiver were justified, neither contention meets the Commission's strict admissibility criteria. Proposed Contention EC-2 challenges the seismic design of the spent fuel pools. This challenge

to the seismic design basis is outside the scope of license renewal. Additionally, Petitioners fail to present any expert or factual support for their assertion that the risk of a spent fuel pool accident due to a seismic event at Diablo Canyon is different from what was considered in the Commission's Generic Environmental Impact Statement for License Renewal ("GEIS"). Likewise, with respect to Contention EC-3, the Petitioners fail to present any expert or factual information to suggest that the risk of a spent fuel pool accident due to a terrorist attack at Diablo Canyon is different from what was considered in the GEIS. Accordingly, proposed Contentions EC-2 and EC-3 are inadmissible.

Proposed Contention EC-4 impermissibly challenges the Commission's generic environmental evaluation in the GEIS of sabotage risks related to reactor operations without requesting a waiver. On that basis alone, the contention is inadmissible. Furthermore, even if a waiver had been requested and was granted, Contention EC-4 is inadmissible because the Commission specifically considered the environmental effects of a hypothetical terrorist attack in the GEIS. The Petitioners have not provided any factual information or expert support to suggest that risks of a terrorist attack at Diablo Canyon would differ from those described in the GEIS (*i.e.*, impacts would be no worse than those caused by a severe accident). Proposed Contention EC-4 is therefore inadmissible.

As discussed in detail below, Petitioners have not satisfied the Commission's requirements to intervene in this proceeding because they have failed to propose at least one admissible contention. In addition, the Waiver Request should not be granted. The Petitioners' request for a hearing should be denied.

III. <u>REGULATORY BACKGROUND</u>

A. <u>Standing Requirements</u>

Any person who requests a hearing or seeks to intervene in a Commission proceeding must demonstrate that he or she has standing. 10 C.F.R. § 2.309(a). An organization may establish standing to intervene based on the standing of its members — that is, "representational standing." In proceedings involving nuclear power reactors, the Commission has historically applied a proximity presumption, whereby a petitioner can base its standing upon a showing that his or her residence, or that of its members, is within the geographical zone (usually taken to be 50 miles) that might be affected by an accidental release of fission products. *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-79-10, 9 NRC 439, 443 (1979). This proximity presumption extends to license renewal proceedings. *See, e.g., Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), LBP-98-33, 48 NRC 381, 385 n.1 (1998). To support its standing, Petitioners have submitted affidavits from several of its members who reside within 50 miles of DCPP. Under Commission precedent, the mere fact that members reside within 50 miles of DCPP is sufficient to establish standing for an organization. Accordingly, PG&E does not object to Petitioners' standing.

B. <u>Contention Admissibility Requirements</u>

In addition to establishing standing, petitioners must proffer at least one contention that meets the admissibility standards in 10 C.F.R. § 2.309(f)(1)(i)-(vi).¹ A proposed contention must contain:

(i) A specific statement of the issue of law or fact raised;

¹ The seventh contention admissibility requirement — 10 C.F.R. § 2.309(f)(1)(vii) — is only applicable in proceedings arising under 10 C.F.R. § 52.103(b), and therefore has no bearing on the admissibility of the Petitioners' contentions in this proceeding.

- (ii) A brief explanation of the basis for the contention;
- (iii) A demonstration that the issue is within the scope of the proceeding;
- (iv) A demonstration that the issue is material to the findings that the NRC must make regarding the action which is the subject of the proceeding;
- (v) A concise statement of the alleged facts or expert opinions supporting the contention; and
- (vi) Sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact.

The contention admissibility standard is "strict by design." *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001). Failure to meet any one of the six admissibility criteria is grounds for rejecting a proposed contention. "Changes to Adjudicatory Process; Final Rule," 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

A Petitioner must provide the necessary information to satisfy the basis requirement for the admission of its contentions and demonstrate that there is a genuine dispute with the application on an issue within the scope of this proceeding. *Balt. Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-14, 48 NRC 39, 41 (1998). Failure to do so requires the Board to reject the contention. 10 C.F.R. § 2.309(f)(1)(v). Vague references to documents do not suffice — the petitioner must identify specific portions of the documents on which it relies. *Pub. Serv. Co. of N.H.* (Seabrook Station, Units 1 & 2), CLI-89-03, 29 NRC 234, 240-41 (1989). A contention also "will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits,' but instead only 'bare assertions and speculation.'" *Fansteel*, CLI-03-13, 58 NRC at 203 (quoting *GPU Nuclear* (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 208 (2000)).

C. <u>Scope of License Renewal Proceeding</u>

To be admissible, a contention must raise an issue within the scope of the proceeding. *Portland Gen. Elec. Co.* (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289 n.6 (1979). The scope of a license renewal proceeding is defined by the scope of the technical and safety review required under 10 C.F.R. Part 54 and the scope of the environmental review under 10 C.F.R. Part 51

1. Technical and Safety Reviews

The license renewal safety review is limited to the plant systems, structures, and components (as delineated in 10 C.F.R. § 54.4) that require an aging management review for the period of extended operation or are subject to time-limited aging analyses ("TLAAs"). 10 C.F.R. §§ 54.21(a) and (c), 54.29, and 54.30. Only "passive" structures and components — those that perform their intended functions without moving parts or change in configuration, that are "long lived," and that serve or could impact various safety functions — are within the scope of license renewal. The operability of "active" equipment or equipment with a defined replacement term is assured on a routine basis by ongoing surveillance and maintenance programs and is not subject to aging effects unique to the period of extended operation.

A fundamental principle of license renewal is that the Current Licensing Basis ("CLB") of an operating plant provides an acceptable level of safety and that the NRC's ongoing regulatory process is adequate to ensure compliance with the CLB.² 56 Fed. Reg. at 64,946. As the Commission explained in *Turkey Point:*

[CLB is] a term of art comprehending the various Commission requirements applicable to a specific plant that are in effect at the time of the license renewal application ... The [CLB] represents an "evolving set of requirements and commitments for a specific plant that are modified as

The term "current licensing basis" is defined in 10 C.F.R. § 54.3.

necessary over the life of a plant to ensure continuation of an adequate level of safety." 60 Fed. Reg. at 22,473. It is effectively addressed and maintained by ongoing agency oversight, review, and enforcement.

Turkey Point, CLI-01-17, 54 NRC at 9. The Commission concluded that requiring a full reassessment of safety issues that were "thoroughly reviewed when the facility was first licensed" and continue to be "routinely monitored and assessed by ongoing agency oversight and agency-mandated licensee programs" would be "both unnecessary and wasteful." *Id.* at 7.³

A second and equally important principle of license renewal holds that the plantspecific licensing basis must be maintained during the renewal term in the same manner and to the same extent as during the original licensing term. "Nuclear Power Plant License Renewal; Revisions, Final Rule" 60 Fed. Reg. 22461, 22464 (May 8, 1995). This principle is "accomplished, in part, through a program of age-related degradation management for systems, structures, and components that are important to license renewal." *Id*.

At bottom, the scope of the license renewal review is necessarily limited because, "with the exception of the detrimental effects of aging and a few other issues related to safety only during the period of extended operations, the [NRC's] existing regulatory processes are sufficient to ensure that the licensing bases of operating plants provide an acceptable level of safety to protect the public health and safety." 60 Fed. Reg. at 22464. The scope of a review under 10 C.F.R. Part 54 "is confined to the small number of issues uniquely determined by the Commission to be relevant for protecting the public health and safety during the renewal term, leaving <u>all other issues</u> to be addressed by the agency's existing regulatory processes." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC

³ Issues that are related to current operations (and implementation of existing programs) must be addressed through ongoing regulatory processes and should not be deferred until the license renewal period.

138, 152 (2001) (emphasis added). The NRC's license renewal regulations thus deliberately reflect the distinction between *aging management issues* to be addressed in license renewal and operational issues addressed by the *ongoing regulatory process* (*e.g.*, inspection and oversight).

2. Environmental Reviews

The NRC's review of environmental issues for license renewal is limited in accordance with 10 C.F.R. §§ 51.71(d) and 51.95(c). *See* NUREG-1437, "Generic Environmental Impact Statement (GEIS) for License Renewal of Nuclear Plants"; "Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, Final Rule," 61 Fed. Reg. 28467 (1996), *amended by* 61 Fed. Reg. 66537 (1996). In the GEIS, the NRC has documented its evaluation of generic environmental impacts, which are well understood based on experience gained from the operation of the existing fleet of U.S. nuclear power plants.

Certain environmental issues are classified as "Category 1" issues, which means that "the Commission resolved the issues generically for all plants and those issues are not subject to further evaluation in any license renewal proceeding." *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-01-06, 53 NRC 138, 152-53 (2001) (emphasis added). On the other hand, an applicant must address environmental issues for which the Commission was not able to make generic environmental findings. These issues are identified in the GEIS as "Category 2," or "plant specific," issues.

The NRC's rules provide limited opportunities (*e.g.*, apply for waiver, request rulemaking) to address new and significant information that might render the NRC's prior generic finding invalid. Absent action by the Commission, a Category 1 environmental issue — even if based on allegedly new and significant information — does not need to be addressed in a site-specific environmental review and cannot be adjudicated in a plant-specific license renewal proceeding.

IV. DISCUSSION

The Petitioners have not satisfied the Commission's requirements to intervene in this proceeding because they have failed to propose an admissible contention.

A. <u>Contention TC-1 raises current operational issues that are outside the scope of the license</u> renewal review.

In proposed Contention TC-1, Petitioners assert that PG&E has failed to demonstrate "reasonable assurance" that it can and will manage the effects of aging on equipment within the scope of license renewal during the period of extended operation. Pet. at 2. The Petitioners argue that PG&E has failed to show "how it will address and rectify an ongoing pattern of management failures with respect to the operation and maintenance of safety equipment." *Id.* In support of the contention, the Petitioners cite recent NRC inspection reports which they say document an ongoing failure to identify and resolve problems or manage safety equipment. The Petitioners then assert that the PG&E aging management program is deficient because it "does not discuss how it will avoid repeating the chronic and significant errors that it is currently committing in the management of safety equipment." *Id.* As discussed below, the proposed contention fails to establish a genuine dispute *with the application* on a material issue or provide any expert support for its conclusions. This proposed contention also raises current operational issues that are outside the scope of the license renewal inquiry.

1. Contention TC-1 does not raise a genuine dispute with the application.

In Contention TC-1, the Petitioners do not challenge any aspect of the license renewal application or its assessment of age-related degradation. Other than an obtuse reference to organizational structure, the contention does not even cite the application. Pet. at 3. The Petitioners have not identified any alleged deficiencies in PG&E's aging management plans or the TLAAs included in the application. To the extent that the Petitioners are attempting to rely on the trend identified in the various inspection reports that they cite, they do not link the trend to aging-related mechanisms, programs, or analyses. In fact, the examples cited by Petitioners involve discrete performance or compliance issues — that is, issues that are not within the scope of the limited license renewal review.

For example, Petitioners cite several instances of failures to perform adequate evaluations under 10 C.F.R. § 50.59, including an evaluation of containment sump modifications. Pet. at 4. The inspection reports cited by Petitioners also mention PG&E's failure to recognize a condition outside of the plant design basis relating to a potentially explosive mixture of oxygen and hydrogen and a failure to maintain design control for emergency diesel generators. *Id.* at 4-5. But sump modifications and design control failures do not implicate age-related degradation. Instead, such modifications implicate the CLB, which, as discussed above, is outside the scope of the license renewal review. 56 Fed. Reg. at 64946. The NRC's ongoing regulatory processes are adequate to ensure compliance with the CLB during both the current and renewed license terms. *Id.*

Thus, proposed Contention TC-1 fails to establish a genuine dispute with the application and falls far short of meeting the specificity requirements in the Commission's contention pleading rules. 10 C.F.R. § 2.309(f)(1)(i), (vi).

2. Contention TC-1 raises a current operational issue, not an aging issue.

The proposed contention raises discrete performance and compliance matters that are applicable to current operations rather than to operations during the renewal term. The proposed contention is therefore outside the scope of this license renewal proceeding. License renewal, by its very nature, contemplates a limited inquiry — *i.e.*, the safety and environmental consequences of an additional 20-year operating period. *See Florida Power & Light Co.* (Turkey Point Nuclear Generating Station, Units 3 & 4), CLI-01-17, 54 NRC 3, 6-13 (2001). License

renewal focuses on *aging* issues, not on everyday operating issues. *See id.* at 7, 9-10. The Commission has confined Part 54 to those issues uniquely relevant to the public health and safety during the period of extended operation, leaving <u>all other safety issues</u> to be addressed by the existing regulatory processes. 60 Fed. Reg. at 22463; *see also Turkey Point*, LBP-01-6, 53 NRC 138, 152 (2001).

This limited scope is based on the principle established in the original Part 54 rulemaking that the NRC's ongoing regulatory process is adequate to ensure compliance with the CLB and to maintain an adequate level of safety during the renewal term. 60 Fed. Reg. at 22464, 22481-82. Consequently, license renewal does not focus on operational issues because these issues "are effectively addressed and maintained by ongoing agency oversight, review, and enforcement." *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-04-36, 60 NRC 631, 638 (2004). Indeed, the Commission has made clear that license renewal reviews should not duplicate the Commission's ongoing compliance oversight:

Both the licensees' programs for ensuring safe operation and the Commission's regulatory oversight have been effective in identifying and correcting plant-specific non-compliances with the licensing bases. These programs will continue to be implemented throughout the remaining term of the operating license, as well as the term of any renewed license. In view of the comprehensiveness, effectiveness, and continuing nature of these programs, the Commission concludes that license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to the Commission's ongoing compliance oversight activity.

56 Fed. Reg. 64943, 64952 (Dec. 13, 1991).⁴

⁴ The Commission indicated that there would be two situations where specific allegations of non-compliance might be relevant to a license renewal proceeding, but neither of these situations is applicable here:

[[]A]llegations that the implementation of a licensee's proposed actions to address age-related degradation . . . has or will cause noncompliance with the plant's current licensing basis during the period of extended operation,

Here, the proposed contention is clearly focused on current operational issues and not on the effects of aging. The Petitioners cite recent NRC inspection reports, which are generated in the course of the NRC's ongoing oversight efforts. The inspection findings are obviously relevant to current operations and will necessarily be addressed now, during the current operational period. Neither PG&E nor the NRC will wait until the renewal period to evaluate and resolve deficiencies. The issues, therefore, have no nexus to this proceeding.

More specifically, the Petitioners challenge PG&E's ability to "identify, evaluate, and resolve" the issues identified in the inspection reports. Pet. at 3-5. The contention therefore challenges the adequacy of PG&E's current Corrective Action Program, which is a part of its Quality Assurance Program. *See* 10 C.F.R. Part 50, Appendix B, Criterion XVI. Challenges to the adequacy of PG&E's Quality Assurance Program are beyond the scope of license renewal. *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 253 (2006) ("[T]he Commission made clear in its 1995 Statement of Consideration that a licensee's quality assurance program is excluded from license renewal review.").⁵ An applicant's Quality Assurance Program and Corrective Action Program are part of the CLB and are unaffected by aging. As noted above, the scope of license renewal does not include issues

or that the failure of the licensee to address age-related degradation . . . in a particular area has or will cause such noncompliance during the period of extended operation would be valid subjects for contention, since the claim essentially questions the adequacy of the licensee's program to address age-related degradation.

56 Fed. Reg. at 64,952 n.1.

⁵ The Statement of Considerations provides, "the portion of the CLB than can be impacted by the detrimental effects of aging is limited to the design-bases aspects of the CLB. All other aspects of the CLB, e.g., quality assurance, physical protection (security), and radiation protection requirements, are not subject to physical aging processes that may cause non-compliance with those [design-bases] aspects of the CLB." 60 Fed. Reg. at 22475. related to a plant's CLB that "already [are] monitored, reviewed, and commonly resolved as needed by ongoing regulatory oversight." *Id., citing Turkey Point*, CLI-01-17, 54 NRC at 8. Human performance issues are also beyond the scope of a license renewal proceeding. *Duke Energy Corp.* (McGuire Nuclear Stations, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), LBP-02-4, 55 NRC 49, 114-18 (2002).

The Petitioners have also failed to provide any expert or factual information to support their broad allegation that PG&E will be unable to reverse the adverse trend or manage the effects of aging during the renewal term. Unsupported speculation that PG&E will contravene the NRC rules at some point in the future is not an adequate basis for a contention. *See GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 207 (2000) (absent documentary support that an applicant is likely to violate NRC regulations, "this agency has declined to assume that licensees will contravene our regulations").

For all of these reasons, proposed Contention TC-1 is outside the scope of this limited license renewal proceeding and otherwise fails to demonstrate a genuine dispute with the application on a material issue.

B. <u>Contention EC-1 impermissibly challenges the current licensing basis and otherwise fails</u> to demonstrate a genuine dispute with PG&E's SAMA analysis.

Petitioners allege in proposed Contention EC-1 that PG&E's SAMA analysis fails to satisfy 40 C.F.R. § 1502.22 because the analysis is "not based on complete information that is necessary for an understanding of seismic risks to the Diablo Canyon nuclear power plant and because PG&E has failed to acknowledge the absence of the information or demonstrated that the information is too costly to obtain." Pet. at 8. At bottom, the Petitioners are arguing that the SAMA analysis is necessarily incomplete so long as PG&E and the NRC continue their assessment of a geologic feature, identified by PG&E and the U.S. Geological Survey ("USGS"), known as the Shoreline Fault. *Id.* at 9. As discussed below, proposed Contention EC-1 fails to raise an issue within the scope of the proceeding and otherwise fails to provide adequate support for its challenge to PG&E's SAMA analysis.

At its most basic, the contention is an impermissible challenge to the CLB, specifically to the adequacy of the Diablo Canyon seismic design.⁶ As discussed above, challenges to the CLB are outside the scope of the proceeding. License renewal does not include issues related to a plant's CLB, such as the seismic design basis. *Turkey Point*, CLI-01-17, 54 NRC at 8. The Shoreline Fault and any implications with respect to the adequacy of the DCPP seismic design basis is a current operational issue. As discussed below and as alluded to by Petitioners (*see* Pet. at 9-13), the NRC and PG&E are actively and aggressively addressing the Shoreline Fault as part of the NRC's ongoing oversight of DCPP.⁷ The Shoreline Fault does not

⁶ At the time of initial licensing, the geological and seismic characteristics of the site were reviewed by PG&E and the NRC based on the data compiled and studies completed at the time, the recommendations of the USGS, and review by the Advisory Committee on Reactor Safeguards, and in accordance with 10 C.F.R. Part 100, Appendix A. The NRC required a Safe Shutdown Earthquake ("SSE") for DCPP, which represented as a horizontal peak ground acceleration ("PGA") of 0.75g based on a postulated magnitude 7.5 earthquake on the Hosgri fault located at 5 km from the DCPP site. NUREG-0675, "NRC Supplemental Safety Evaluation Report 4; Diablo Canyon Nuclear Power Plant" (May 1976). This is referred to as the Hosgri ground motion for DCPP. See, e.g., Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-644, 13 NRC 903 (1981). License Condition 2.C(7) required PG&E to develop and implement what is known as the Long Term Seismic Program ("LTSP"). The LTSP Final Report, which included detailed evaluations of existing and new geologic and seismologic data, enabled PG&E to conclude that a maximum earthquake magnitude of 7.2 on the Hosgri fault zone provides a very conservative basis for evaluating the adequacy of the plant structures, systems, and components. Therefore, after completion of the LTSP, the DCPP seismic design basis includes the Hosgri seismic design.

⁷ As referenced by Petitioners (Pet. at 14), the NRC has performed an independent review of possible implications of the potential Shoreline Fault to the DCPP. *See* Letter to J. Conway, PG&E, from A. Wang, NRC, "Diablo Canyon Power Plant, Unit Nos. 1 and 2 – NRC Preliminary Review of Potential Shoreline Fault (TAC NOS. ME0174 AND ME0175)," dated April 8, 2009 (ADAMS Accession No. ML090930459). The NRC concluded that "the design and licensing basis evaluations of the DCPP structures,

raise issues that are aging-related or unique to the renewal period. Neither the NRC nor PG&E will wait until the expiration of the current license term to address seismic issues that arise during the initial period of operation.⁸

Petitioners in other license renewal proceedings have raised similar contentions, which have been rejected by Licensing Boards. For example, in the *Indian Point* proceeding, the Petitioner's proposed Contention 14 argued that the SAMA analysis was incomplete and insufficient because it failed to include more recent information regarding the type, frequency, and severity of potential earthquakes. *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Station, Units 2 and 3), LBP-08-13, 68 NRC _____ (slip op. July 30, 2008) at 69. The Board rejected the proposed contention, in part, because the Petitioner failed to explain why "the most recent information" was sufficiently different from the earlier data to make a material change in the conclusions of the seismic SAMA. *Id.* at 74-75. The Board also faulted the Petitioner for failing to suggest feasible alternatives to address risks posed by the new data and for failing to estimate the cost of the increased margin of safety that would result from any severe accident mitigation action. *Id.*

For similar reasons, proposed Contention EC-1 is also inadmissible. As discussed in Attachment F of its Environmental Report (available to the Petitioners), PG&E carefully considered seismic risk in its SAMA analysis. PG&E's SAMA analysis used the current Level 1 DCPP seismic model to identify and quantify potential plant enhancements. *See* ER at F-67.

systems, and components are not expected to be adversely affected and the current licensing basis remains valid and supports continued operability of the DCPP site." *Id.* The Petitioners have not challenged this conclusion in the Petition.

⁸ Any change to the DCPP licensing basis to address the Shoreline Fault that requires a license amendment could itself offer an opportunity for a hearing. The Petitioners would have an opportunity to raise any NEPA concerns associated with any required license amendment at that time.

The SAMA identification process included a review of all seismic sequences with potential averted cost-risks of \$100,000 or more. *Id.* at F-69. In Phase 1, PG&E's SAMA analysis identified several potential SAMAs (and their costs) to reduce seismic risk:

	Phase 1 SAMA List ⁹
SAMA 3	Alternate DC Generator
SAMA 6	Use Alternate Engine Driven HP Pump for Secondary Side Makeup
SAMA 9	Backup Air System for PORV PCV 474
SAMA 14	Fully Automate Feed and Bleed Initiation
SAMA 18	Seismically Qualified Alternate 480V AC EDG to Support Long Term AFW Operation and a Seismically Qualified 480V AC Self Cooled PDP for RCS Makeup
SAMA 19	Replace Critical Relays with High Seismic Capacity Relays
SAMA 20	Use Alternate Signal to De-energize the 480V AC Busses that Supply the Rod Drive Motor Generator Sets
SAMA 22	Install a Redundant Actuation System for AFW
SAMA 23	Reinforce Steam Generator and Associated RCS Piping Supports

The Phase 1 SAMAs were screened (*i.e.*, eliminated from further consideration) based on whether the implementation cost was greater than the maximum averted cost risk, in which case the SAMA cannot be cost-beneficial. ER at F-84 to F-85. Those SAMAs that passed the screen were carried forward to Phase 2.

See ER, Table F.5-3, at F-234 et seq.

Phase 2 SAMA List ¹⁰				
SAMA 3	Alternate DC Generator			
SAMA 9	Backup Air System for PORV PCV 474			
SAMA 18	Seismically Qualified Alternate 480V AC EDG to Support Long Term AFW Operation and a Seismically Qualified 480V AC Self Cooled PDP for RCS Makeup			
SAMA 22	Install a Redundant Actuation System for AFW			

In the Phase 2 analysis, PG&E evaluated the remaining SAMAs to quantify the risk benefit. The quantification process used the seismic PRA to quantify the change in seismic core damage frequency ("CDF") resulting from SAMA implementation. The change in CDF was correlated to a dollar value (in proportion to the internal events risk), which was then used to assess whether a particular SAMA was cost-beneficial. *Id.* at F-86 to F-87. The Phase 2 SAMAs that addressed seismic risk were not cost-beneficial or were screened out based on PRA insights. *Id.*, Table F.6-1, at F-242 *et seq*.

PG&E's SAMA analysis also included a 95th percentile sensitivity analysis. The 95th percentile PRA results were used to address uncertainty in PRA parameters. *Id.* at F-145. While the factor used to simulate the use of the 95th percentile PRA results was not specifically based on seismic parameters, the factor (2.34) was applied to all of the averted cost-risk results (including seismic and fire). The results indicate whether any SAMA would become cost beneficial if all of the risk contributors were assumed to be 2.34 time greater than their best estimate values. *Id.* As the analysis in the ER shows, even if the seismic risk doubles, the change would be bounded by the 95th percentile PRA sensitivity results — that is, the conclusions of the SAMA analysis would not change.

See ER, Table F.6-1, at F-242 et seq.

The Petitioners fail to offer any factual or expert support to show that PG&E's SAMA analysis is deficient. SLOMFP simply wants PG&E to "do more" without providing any information to suggest that "more" is needed or would lead to different results. According to the Commission, a petitioner must approximate the relative cost and benefit of a challenged SAMA in order to get an adjudicatory hearing. *Duke Energy Corporation* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 11-12 (2002). A petitioner must at least present some notion of a difference in the results and provide at least some ballpark consequence and implementation costs should the SAMA be performed. *Indian Point*, LBP-08-13, slip op. at 67-68. But here, the Petitioners have not directly challenged the conclusions in the SAMA analysis or provided any information regarding the potential costs associated with either an increase in seismic risks or an upgrade in DCPP's response to seismic events. Given the total absence of such information in the Petition, proposed Contention EC-1 should be rejected.

In a transparent attempt to avoid the prohibition on challenges to the CLB, the Petitioners cite 40 C.F.R. § 1502.22 for the proposition that the SAMA analysis is inadequate "because it is not based on complete information that is necessary for an understanding of seismic risks to the Diablo Canyon nuclear power plant and because PG&E has failed to acknowledge the absence of the information or demonstrated that the information is too costly to obtain." Pet. at 8. This citation cannot support an admissible contention here.

As an independent regulatory agency, the NRC is not bound by CEQ regulations. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 n.22 (2002). Regardless, the regulation, by its terms, does not apply unless "the incomplete information relevant to reasonably foreseeable significant adverse impacts is

essential to a reasoned choice among alternatives." 40 C.F.R. § 1502.22(a) (emphasis added). Here, PG&E has carefully and exhaustively considered potential SAMAs, including those related to seismic risk.¹¹ See ER, Appendix E, Attachment F. There is no basis asserted on which to conclude that the SAMA analysis would change if the Shoreline Fault were explicitly considered. As noted by the Petitioners (Pet. at 12), the NRC Staff has determined that the Hosgri Fault "bounds" the Shoreline Fault. See Letter to J. Conway, PG&E, from A. Wang, NRC, "Diablo Canyon Power Plant, Unit Nos. 1 and 2 – NRC Preliminary Review of Potential Shoreline Fault (TAC NOS. ME0174 AND ME0175)," dated April 8, 2009 (ADAMS Accession No. ML090930459) (concluding that Hosgri ground motion "bounds" the Shoreline Fault based on PG&E's initial evaluation and the NRC's best estimate 84th percentile deterministic seismicloading levels predicted for a maximum magnitude earthquake on the Shoreline Fault). The NRC also took into consideration the uncertainty surrounding the Shoreline Fault. See id. ("Considering the results of the deterministic analyses as a whole and the current level of uncertainty, the NRC staff concludes that the postulated Shoreline Fault will not likely cause ground motions that exceed those for which the DCPP has already been analyzed."). And, as noted above, even a doubling of the seismic risk would not alter the conclusions of the SAMA analysis. ER at F-146. Thus, there is no indication that the Shoreline Fault is "essential" to a choice among alternatives.¹²

¹¹ See Southern Oregon Citizens Against Toxic Sprays, Inc. v. Clark, 720 F.2d 1475, 1479 (9th Cir. 1983), cert. denied, 469 U.S. 1028 (1984) (finding that an analysis under 1502.22 is not required if an agency has carefully studied the potential environmental impacts of a proposed action and has determined, with a reasonable degree of certainty, the probability and consequences of such impacts).

¹² In *Colorado Environmental Coalition v. Dombeck*, the court addressed the implications of section 1502.22 in evaluating the impacts of forest planning efforts on lynx. 185 F.3d 1162, 1172-73 (10th Cir. 1999). The court found that CEC failed to show how

The Petitioners suggest that the NRC should suspend its license renewal review while seismic studies are ongoing — as though at some point in the future all research will be complete and the area fully characterized from a seismic perspective. Pet. at 14-15. But, the nature of scientific research is that it is always ongoing. PG&E, the NRC, and the USGS, among others, will continue to investigate seismology and geology throughout the initial (and, if granted, the renewed) license term. While there "will always be more data that could be gathered," agencies "have some discretion to draw the line and move forward with decisionmaking." *Town of Winthrop v. FAA*, 535 F.3d 1, 11 (1st Cir. 2008); *see also, Pilgrim*, CLI-10-11, slip op. at 37. NEPA "should be construed in the light of reason if it is not to demand" virtually infinite study and resources. *Natural Resources Defense Council v. Hodel*, 865 F.2d 288, 294 (D.C. Cir. 1988). PG&E and the NRC are vigorously evaluating the issue using the best information and tools reasonably available.¹³ Thus, the issue is being addressed through the normal, ongoing regulatory process; there is no basis to suspend the proceeding or the license renewal review.¹⁴

additional, site-specific lynx data was "essential" to reasoned decision making. The court therefore held that the Forest Service did not violate section 1502.22(a) or NEPA.

- ¹³ There is no NEPA requirement to use the latest scientific methodology. *Pilgrim*, CLI-10-11, slip op. at 37, *citing*, *e.g.*, *Hells Canyon Alliance v. United States Forest Serv.*, 227 F.3d 1170, 1185 (9th Cir. 2000). Likewise, an environmental impact statement is not intended to be a "research document," reflecting the frontiers of scientific methodology, studies and data. *Town of Winthrop*, 535 F.3d at 11-13.
- ¹⁴ The Commission's general policy is to expedite adjudicatory proceedings. *See generally Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18 (1998). The Commission sees suspension of licensing proceedings as a "drastic" action that is only warranted in the event of "immediate threats to public health and safety." *Vermont Yankee Nuclear Power Corp. & AmerGen Vermont, LLC* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 173-74 (2000). Even in the wake of the September 11th terrorist attacks, the Commission ultimately rejected requests for suspension of proceedings pending the Commission's review of anti-terrorist measures at licensed facilities. *Private Fuel Storage, LLC*, (Independent Spent Fuel Storage

Finally, to the extent that the proposed contention is based on the Petitioners' assertion that PG&E has failed to comply with California Assembly Bill 1632, that aspect of the proposed contention is also outside the scope of the NRC's license renewal proceeding. The requirements of State law are for State bodies to determine, and are beyond the jurisdiction of NRC adjudicatory bodies. *Northern States Power Company* (Tyrone Energy Park, Unit 1), ALAB-464, 7 NRC 372, 375 (1978).

For all of the above reasons, proposed Contention EC-1 is inadmissible.

C. <u>Contention EC-2 impermissibly challenges the generic evaluation of spent fuel storage</u> accidents, which is a Category 1 issue, and does not justify a waiver.

In proposed Contention EC-2, the Petitioners assert that the ER is inadequate because it does not address the airborne environmental impacts of a reasonably foreseeable spectrum of spent fuel pool accidents, including accidents caused by earthquakes. Pet. at 16. Although the Petitioners acknowledge that spent fuel storage is a Category 1 issue and therefore not required to be discussed in the license renewal application, they nevertheless seek to challenge the conclusions in the license renewal GEIS. Relying on a <u>draft</u> update to the GEIS, the Petitioners assert that the conclusions in the actual GEIS are inapplicable to DCPP (Pet. at 16-19) and seek a waiver of the NRC's regulations that apply the GEIS conclusions to the DCPP license renewal application. *See* Waiver Request at 1-2. Assuming that a wavier is granted, the Petitioners assert that the ER should provide a complete analysis of the consequences of spent fuel pool accidents, including health effects, the economic and societal effects of widespread land contamination, and the need to relocate the population. The Petitioners also assert that the ER should address alternatives for avoiding or mitigating those impacts.

Installation), CLI-01-26, 54 NRC 376 (2001). Such drastic action is likewise not warranted here. As noted above, if further action is required as a result of the Shoreline Fault, PG&E (and NRC) will take action at that time.

As discussed further below, spent fuel storage, including pool accidents, is a Category 1 issue that cannot be litigated in individual licensing proceedings. The Petitioners have failed to demonstrate "special circumstances" that would warrant a waiver from the NRC's regulations. Moreover, even if a waiver were granted, the Petitioners have failed to provide a basis for an admissible contention.

1. Spent fuel storage is a Category 1 Issue.

The Commission's rules explicitly conclude that "[t]he expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on site with small environmental effects through dry or pool storage at all plants if a permanent repository or monitored retrievable storage is not available." 10 C.F.R. Part 51, Appendix B, Table B-1; *see Oconee*, CLI-99-11, 49 NRC at 343-44. Although the Petitioners assert that conclusions in the GEIS were made "with very little discussion" (Pet. at 16), the GEIS provides the background analyses and justification for this generically applicable finding. GEIS at 6-70 to 6-86. The GEIS also takes full account of "the total accumulated volumes of spent fuel after an additional 20 years of operation." *Id.* at 6-79; *see also id.* at 6-80 to 6-81. The GEIS finds "ample basis to conclude that continued storage of existing spent fuel and storage of spent fuel generated during the license renewal period can be accomplished safely and without significant environmental impacts." *Id.* at 6-85.

The GEIS's finding encompasses spent fuel accident risks and their mitigation alternatives. *See* GEIS, at xlviii, 6-72 to 6-76; 6-80 to 6-81; 6-86, 6-92; *Turkey Point*, CLI-01-17, 53 NRC at 21. The NRC spent years studying in great detail the risks and consequences of potential spent fuel pool accidents, and the GEIS analysis is rooted in these earlier studies. The NRC studies and decades of operational experience support the conclusion that onsite reactor spent fuel storage presents no undue risk to public health and safety. Because the GEIS analysis

of onsite spent fuel storage considers the risk of accidents, Contention EC-2 falls beyond the scope of individual license renewal proceedings.

In short, the current license renewal provisions in Part 51 cover environmental issues relating to onsite spent fuel storage generically. All such issues, including accident risk and mitigation, are outside the scope of license renewal proceedings.

2. *A waiver from the NRC's regulations is not warranted.*

As noted above, the Petitioners acknowledge that spent fuel is a Category 1 issue that cannot be challenged in an individual licensing proceeding without a waiver. As a general proposition, no rule or regulation of the Commission is subject to attack in any adjudicatory proceeding. 10 C.F.R. § 2.335(a). However, a party to an adjudicatory proceeding may petition that application of a specified Commission rule or regulation be waived or an exception made for a particular proceeding. *Id.* at 2.335(b). Here, the Petitioners have requested a waiver from 10 C.F.R. Part 51, Appendix B, and 10 C.F.R. § 51.53(c)(2).¹⁵

According to Commission regulations and case law, to grant a waiver the Licensing Board (and then the Commission) must conclude that:

- (i) The rule's strict application "would not serve the purposes for which [it] was adopted;"
- (ii) The person seeking the waiver has alleged "special circumstances" that were "not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived;"

¹⁵ 10 C.F.R. § 51.23(b) states that no discussion of any environmental impacts of spent fuel storage is required for a licensing action under Part 54. Thus, the Petitioners need two waivers to challenge the environmental impacts of spent fuel storage — one from the generic findings in Appendix B and one from § 51.23. While Petitioners seek a waiver from 10 C.F.R. § 51.53(c)(2), which cross-references § 51.23, as discussed below none of the "purposes" or "special circumstances" that they allege challenge the bases for the findings in section 51.23.

- (iii) Those circumstances are "unique" to the facility rather than "common to a large class of facilities;" and
- (iv) A waiver of the regulation is necessary to reach a "significant safety problem."

See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 560 (2005) (internal citations omitted). The use of "and" in this list of requirements is both intentional and significant. *Id*. For a waiver request to be granted, *all four* factors must be met. *Id*. Petitioners fail to satisfy any of the criteria, much less all four.

With respect to the first factor, the Petitioners assert that the purpose of Part 51, Appendix B, Table B-1, is "to codify and apply a generic determination, made in the 1996 License Renewal GEIS, that spent fuel may be safely stored at reactor sites ... without imposing any significant environmental risk." Curran Decl. at ¶4. We agree. Application of the rule here would serve the purposes for which the rule was adopted by precluding site-specific consideration of spent fuel storage issues in this licensing proceeding.¹⁶ Accordingly, the Waiver Request fails to satisfy the first factor.

The second waiver factor — special circumstances that were not considered in the rulemaking — also is not satisfied. The specific concern that proposed Contention EC-2 identifies (*i.e.*, risks of a spent fuel pool zirconium fire caused by an earthquake) was explicitly considered in the GEIS. Pet. at 17-18. There, the Commission concluded that "even under the worst probable cause of a loss of spent-fuel pool coolant (a severe seismic-generated accident

¹⁶ There are others means by the Petitioners can raise their concerns. In addition to the public comment process for the GEIS rulemaking, NRC regulations provide two other procedural mechanisms (10 C.F.R. §§ 2.206 and 2.802) by which Petitioners may pursue their concerns about the generic conclusions in the GEIS or the applicability of the GEIS to DCPP.

causing a catastrophic failure of the pool), the likelihood of a fuel-cladding fire is highly remote." GEIS at 6-72, 6-75, *citing* 55 Fed. Reg. 38474 (Sept. 18, 1990).

Moreover, the Commission stressed in the license renewal rulemaking that litigated issues must be "unique to the license renewal" period:

[T]he final rule amends § 2.758 [now § 2.335] to make clear that challenges to the ... rule could be made in the formal hearing so that certain other issues claimed to be necessary to ensure adequate protection *only during the renewal term* could be admitted in a formal hearing. ... *Issues that have relevance during the term of operation under the existing operating license as well as license renewal would not be admissible* under the new provision of § 2.758 [now § 2.335] because there is *no unique relevance of the issue to the renewal term*.

56 Fed. Reg. at 64961-62 (emphases added).

In their Waiver Request, the Petitioners have not linked their concerns with spent fuel storage to any age-related degradation or to any other issues unique to license renewal. Instead, they are challenging the current licensing basis for the spent fuel pools. As the GEIS explains, "[f]or pool storage, while life extension could possibly increase the likelihood of inadvertent criticality through dense-racking or spent-fuel handling accidents, NRC regulations are in place to satisfactorily address this problem." GEIS, at 6-80. The Commission's "regulatory requirements already in place provide adequate mitigation incentives for on-site storage of spent fuel." *Id.* at 6-86.

In arguing that there are "special circumstances," the Petitioners assert that the risk evaluation in NUREG-1738 "does not apply to Diablo Canyon" because NUREG-1738 does not address "spent fuel pool accidents outside the eastern and central United States." Pet at 17. On this basis, the Petitioners assert that the conclusion in the draft GEIS that zirconium fire initiation is less than reported in NUREG-1738 "has no meaningful application to Diablo

Canyon." *Id.* This, however, ignores the reasoning and actual conclusions in both the GEIS and the draft GEIS.

As the Commission explained in *Turkey Point*, the GEIS conclusions are based on a series of studies that considered spent fuel pool accidents and concluded that the risk of accidents is acceptably small. CLI-01-17, 54 NRC at 22, n.11. For example, NUREG-1353 concludes that "most of the spent fuel pool risk is derived from beyond design basis earthquakes, [but] this risk is no greater than the risk from core damage accidents due to seismic events beyond the safe-shutdown earthquake." NUREG-1353 at ES-4. Although the design basis earthquake at DCPP may be larger than at other sites, this does not mean that site is more vulnerable to an earthquake. As discussed above, the DCPP seismic design basis provides an acceptable level of protection and ensures that DCPP can withstand a design basis earthquake.

In the draft GEIS, the NRC concludes that "the environmental impacts from accidents at spent fuel pools (SFPs) (as quantified in NUREG-1738) can be comparable to those from reactor accidents at full power." NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Appendices, Draft Report for Comment" (July 2009) at 4-156. The NRC makes no exceptions or exclusions. As in NUREG-1353, the NRC used a "bounding" approach — the environmental impacts of spent fuel pool accidents are bounded by reactor accidents at full power — to characterize the environmental impacts of spent fuel pool accidents.¹⁷ The Petitioners have not articulated any reason why such an approach is inadequate

¹⁷ NUREG-1738 uses a "pool performance guideline" ("PPG") as an indicator of low risk at decommissioning facilities and concludes that the risk of a zirconium fire is low for *all plants* that meet the PPG. NUREG-1738 at ix. The recommended PPG value for events leading to uncovering the spent fuel was based on similarities in the consequences from a spent fuel pool zirconium fire to the consequences from a large early release event at an operating reactor. By maintaining the frequency of events leading to uncovering of the

for Diablo Canyon or under NEPA. Thus, contrary to the Petitioners' assertions (Pet. at 17), nothing in NUREG-1738 prevents the NRC from concluding, as it did in the GEIS (and draft GEIS), that the impacts of spent fuel storage are generic and small for all plants, including Diablo Canyon.¹⁸

The draft GEIS relied upon by Petitioners also reaches the same generic conclusion as the initial GEIS with respect to spent fuel storage accident mitigation. As the Commission recently explained, the draft GEIS describes the potential for any cost-effective SAMAs related to the spent fuel pool as "substantially less than for reactor accidents." *See Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11 (slip op. March 26, 2010) at 33 n. 125, *citing* Draft GEIS at E-42. On this basis, the draft GEIS concludes that no change is warranted to the existing GEIS conclusion that mitigation alternatives for spent fuel pool accidents need not be considered on a site-specific basis.¹⁹ *Id.* The Petitioners have failed to explain why site-specific consideration of mitigation is necessary and, accordingly, have failed

spent fuel at decommissioning facilities below the PPG, the risk from zirconium fires will be low. *Id*.

¹⁸ The Petitioners' reference to the geographic aspects of NUREG-1738 is unavailing. NUREG-1738 states that, with one exception, all Central and Eastern sites will meet the PPG simply by implementing the industry decommissioning commitments ("IDCs") and staff decommissioning assumptions ("SDAs"). NUREG-1738 at ix. For Western plants, including Diablo Canyon, compliance with the PPG is demonstrated on a plant-specific basis (*i.e.*, implementation of the IDCs and SDAs is not necessarily sufficient). *Id.* at 4-3. But, the mere fact that more than the IDCs and SDAs may be necessary to meet the PPG at Diablo Canyon does not prevent the NRC from generically concluding that the risk of a zirconium fire is low for all plants that meet the PPG.

¹⁹ The NRC has previously analyzed accident preventive and mitigative options intended to reduce the risks posed by the storage of spent fuel in spent fuel storage pools. NUREG/CR-5281, "Value/Impact Analysis of Accident Preventive and Mitigative Options for Spent Fuel Pools" (March 1989). The results of the analyses indicated that additional mitigation measures were in general not likely to be cost effective. *Id.* at iii, viii, 47.

to demonstrate any special circumstances that would warrant a waiver from the Commission's regulations in 10 C.F.R. Part 51, Appendix B.

With respect to the third criterion, the Petitioners have not demonstrated that any aspect of spent fuel storage is unique to Diablo Canyon. The Petitioners' claims to uniqueness include references to California being the highest-earning agricultural state and the location of DCPP relative to fertile farmland. Yet, many plants are located in agricultural areas, near large populations, or adjacent to important fisheries or industries. And, to the extent that Petitioners are arguing that the seismic setting of Diablo Canyon is a unique feature that warrants special consideration, the Petitioners fail to acknowledge that, as with all other spent fuel pools, the NRC has reviewed the design bases for the pools at Diablo Canyon and found the design bases to be adequate to protect public health and safety.²⁰ Finally, the Petitioners have not alleged that there are any unique age-related issues at Diablo Canyon that would warrant such a radical departure from the Commission's framework for license renewal.

For related reasons, the Waiver Request fails to satisfy the fourth waiver criterion. A waiver is not necessary here to reach a "significant safety problem." The Petitioners have not pointed to any age-related safety issue. Any safety-significant issues that may arise from future seismic evaluations will be addressed at that time. And, in addition to the generic analyses discussed above, the NRC has previously considered the risks associated with spent fuel pool storage, including the risks from severe accidents, in connection with a license amendment to

²⁰ The Court of Appeals for the DC Circuit previously addressed the issue of whether a generic rulemaking was appropriate for seismic-related issues at Diablo Canyon and San Onofre. *San Luis Obispo Mothers for Peace v. NRC*, 751 F.2d 1287, 1309 (D.C. Cir. 1984), *aff'd on reh'g*, 789 F.2d 26 (D.C. Cir.) (en banc), *cert. denied*, 479 U.S. 923 (1986). The Court reasoned that "[b]ecause seismology remains a difficult and inexact science" it could not conclude that the earthquake risk is "unique" to Diablo Canyon and San Onofre such that generic resolution was inappropriate. *Id*.

expand spent fuel pool storage capacity at Diablo Canyon. *See* Letter from C. Trammel, NRC, to J. D. Shiffer, PG&E, "Supplement to the Safety Evaluation and the Environmental Assessment — Diablo Canyon Rerack," dated October 15, 1987 (ADAMS Accession No. 8710220412). The NRC concluded that there were no significant radiological or non-radiological impacts associated with the proposed action and that the spent fuel pool would not have a significant impact on the environment.²¹ "Diablo Canyon Nuclear Power Plant; Supplement to Environmental Assessment and Finding of No Significant Impact," 52 Fed. Reg. 38977, 38978 (Oct. 20, 1987). The performance of the spent fuel pools during a postulated Hosgri earthquake was specifically addressed during an NRC hearing on the spent fuel pool amendment application. *See Pac. Gas. & Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-87-25, 26 NRC 168, 198-199 (1987). The Petitioners have presented no information here that would undermine these conclusions, which are consistent with the generic conclusions in the GEIS.

The Commission previously denied a petition for rulemaking related to spent fuel pool accidents and the conclusions in the GEIS. Two States filed rulemaking petitions (Massachusetts in 2006, and California in 2007) asking the NRC to reverse its 1996 GEIS, which found (among other things) that spent fuel pools at nuclear power plants do not create a significant environmental impact within the meaning of the NEPA. *New York v. NRC*, No. 08-3903, slip op. at 4 (2d Cir. Dec. 21, 2009). Massachusetts and California contended that the information in their rulemaking petitions showed a greater risk of fire from on-site storage of spent fuel than previously appreciated, and that therefore the environmental impact should no longer be discounted as small; they further contended that the risk should be evaluated plant-by-

²¹ The NRC also explained that beyond-design-basis accidents, such as criticality accidents and zircalloy cladding fires, are not reasonably foreseeable and therefore not required to be discussed under NEPA. 52 Fed. Reg. at 38978.

plant (rather than be considered generically). *Id.* at 6. The NRC consolidated and denied the rulemaking petitions in a 2008 decision. *Id.*; "Denial of Petitions for Rulemaking," 73 Fed. Reg. 46204 (Aug. 8, 2008). The Second Circuit upheld the NRC's decision, concluding that the NRC's decision to deny the rulemaking petitions was reasoned; it considered the relevant studies, and it took account of the relevant factors. *New York*, slip op. at 11-12. The Petitioners here have not provided anything new or different than what was previously considered, and rejected, by the NRC and the Second Circuit. There is no reason for the Licensing Board to provide the relief that the Commission previously declined in a decision that the agency successfully defended.

Because the Petitioners' Waiver Request does not satisfy any of the four threshold standards for a waiver, the Petitioners spent fuel storage concerns do not qualify for a waiver or exemption under Commission rules. And, even if the Board finds that one (or more) factors have been met, the waiver cannot be granted unless *all four* factors are satisfied. *Millstone*, CLI-05-24, 62 NRC at 560. Accordingly, proposed Contention EC-2 must be rejected.

Even if a waiver were granted, Contention EC-2 is inadmissible.

Apart from the waiver issue, Contention EC-2 does not satisfy the Commission's strict admissibility standards. First, the contention is a challenge to the CLB, specifically to the adequacy of DCPP's seismic design for the spent fuel pool. As discussed above, challenges to the CLB are outside the scope of the proceeding. Assessing the implications of new information (such as the Shoreline Fault) on the adequacy of the current seismic design basis for the DCPP spent fuel pools is a current operational issue.

Second, the Petitioners fail to offer factual or expert support to show that the risk of a spent fuel pool accident at Diablo Canyon is different from what was considered in the GEIS. The Petitioners' charge that a spent fuel pool accident at Diablo Canyon would have "high consequences" is unsupported conjecture and speculation. *See* Pet. at 17-19. While the Petitioners assert that the environmental review must encompass "alternative measures to avoid or mitigate those impacts," the Petitioners have not identified any proposed plant-specific mitigation alternatives.²² They have provided no expert or factual support regarding the costs or benefits of such measures.²³ A petitioner must approximate the relative cost and benefit of a proposed mitigation alternative in order to get an adjudicatory hearing. *See Duke Energy Corporation* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 11-12 (2002). A petitioner must at least present some notion of a difference in the results and provide at least some ballpark consequence and implementation costs. *Indian Point*, LBP-08-13, slip op. at 67-68. Although the Petitioners had access to the license application and Environmental Report, including the SAMA analysis, the Petition contains no references to specific portions of either and indicates no familiarity with the methods used to assess mitigation alternatives. NRC hearings are not appropriate for Petitioners who have done little in the way of research or analysis, provided no expert opinion, and rest merely

²² The reference in Part 51 to "severe accident mitigation alternatives" applies only to nuclear reactor accidents, not spent fuel storage accidents. *Turkey Point*, CLI-01-17, 54 NRC at 21. As the Commission explained, events leading to severe reactor accidents vary from plant to plant, thereby suggesting plant-specific consideration, whereas accidents involving spent fuel pools are amenable to generic consideration. *Id.* at 22. Regulatory requirements already in place provide adequate mitigation for spent fuel storage risks (including accidents). *Id.* at 21-22.

As noted above, the NRC has also previously considered the relative costs and benefits of spent fuel pool preventive and mitigative alternatives. *See* NUREG/CR-5281 at iii (concluding that various alternatives, including low-density re-racking, installation of water sprays, and installation of redundant cooling systems, were not likely to be cost effective based on the low likelihood of an accident and the high cost of the modifications).

on unsupported conclusions about the viability of unspecified SAMAs.²⁴ Having failed to provide sufficient expert or factual support for the contention, the Petitioners' proposed Contention EC-2 should be rejected.

For all of the above reasons, a waiver is not appropriate and proposed Contention EC-2 should be denied.

D. <u>Contention EC-3 impermissibly challenges the generic evaluation in the GEIS of spent</u> fuel storage risks, including sabotage, and does not justify a waiver.

In proposed Contention EC-3, the Petitioners argue that the ER is inadequate because it "does not evaluate the environmental impacts of an attack on the Diablo Canyon spent fuel pool during the operating license renewal term." Pet. at 20. Similar to Contention EC-2, the Petitioners argue that the draft GEIS contains new information that renders the applicable GEIS inadequate — only the accident initiator is different (rather than a seismic event, the initiator is an attack). *Id.* On this basis, the Petitioners again request a waiver from the NRC's regulations. The Petitioners also assert that the NRC, in the draft GEIS, is "relying on site-specific analyses and mitigation measures to reduce the environmental impacts of spent fuel pool attacks." *Id.* Assuming that the NRC did rely on site-specific measures for its evaluation of the impacts of attacks on the DCPP spent fuel pool and appropriate mitigation measures, the Petitioners request that the Commission "also waive its regulations to permit a site-specific evaluation of the environmental impacts of an attack on the Diablo Canyon spent fuel pool." *Id.*

Spent fuel storage is a Category 1 issue that cannot be litigated in an individual licensing proceeding. The impacts of terrorist attacks or other sabotage have also been

A contention "will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits,' but instead only 'bare assertions and speculation.'" *Fansteel*, CLI-03-13, 58 NRC at 203 (quoting *GPU Nuclear* (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 208 (2000)).

considered in the GEIS. Moreover, the Petitioners' Waiver Request fails to demonstrate that there are special circumstances that warrant a departure from Commission practice. Finally, even if a waiver were granted, the proposed contention fails to establish a genuine dispute with the application on a material issue.

1. Spent fuel storage is a Category 1 Issue.

As discussed above, spent fuel storage is a Category 1 issue that cannot be litigated in an individual licensing proceeding. Therefore, absent a waiver from the Commission, the environmental impacts of an attack on the spent fuel pool cannot be litigated here.

2. *A waiver from the NRC's regulations is not warranted.*

In light of the fact that spent fuel storage is a Category 1 issue, the Petitioners have requested a waiver from the GEIS and 10 C.F.R. § 51.53(c)(2). But, as with proposed Contention EC-2, the Waiver Request fails to satisfy the four criteria that the Commission requires to grant a waiver.

With respect to the first factor, the Petitioners assert that the purpose of Part 51, Appendix B, Table B-1, is "to codify and apply a generic determination, made in the 1996 License Renewal GEIS, that spent fuel may be safely stored at reactor sites ... without imposing any significant environmental risk." Curran Decl. at ¶4. We agree. Application of the rule here would serve the purposes for which the rule was adopted by precluding site-specific consideration of spent fuel storage issues in this licensing proceeding. Accordingly, the Waiver Request fails to satisfy the first factor.

Second, there are no special circumstances here that were not considered in the GEIS. Attacks on the spent fuel pool were specifically addressed in the GEIS. There, the Commission concluded that, if there were sabotage, the "resultant core damage and radiological releases would be no worse than those expected from internally initiated events." GEIS at 5-

18.²⁵ In proposed Contention EC-3, the Petitioners appear to be arguing that the "special circumstance" is that the NRC relied on site-specific analyses and mitigation measures to reduce the impacts of spent fuel attacks. Pet. at 20; Waiver Request at 2. According to the Petitioners' logic, if the NRC relied on site-specific measures to evaluate the impacts of an attack on spent fuel pools, then the NRC should waive its regulations to permit a site-specific challenge to the impacts of an attack on the spent fuel pool at Diablo Canyon. Pet. at 21. This logic, however, turns the purpose of the GEIS on its head. Obviously, the NRC gathered data from numerous plants in preparing the GEIS and relied, as it should, on site-specific data and mitigation plans in reaching its conclusions with respect to the impacts during the renewal period. *See, e.g., Turkey Point*, CLI-01-17, 54 NRC at 16 ("Indeed, the GEIS's conclusions rest on site-specific data on effluents obtained from all reactor facilities."). It is because of that site-specific information that the Commission is able to make a generic determination.

This very issue was also addressed by the Second Circuit in *New York v. NRC*. The States seeking review argued that the NRC's decision to deny the petition was arbitrary because the NRC relied on plant-specific mitigation and security to support a finding that spent fuel pools generically have low environmental impacts. *New York*, slip op. at 8. The States contended that the risk of a spent fuel pool fire must be a Category 2 rather than a Category 1 issue because the risk is affected by mitigation that varies from plant to plant. *Id.* at 10. The Court acknowledged that the NRC relied in part upon mitigation at nuclear power plants — including various coolant sprays and makeup water systems in case of pool drainage — to

²⁵ The draft GEIS referenced by the Petitioners reaches the same conclusion. *See* Draft GEIS at E-37 (concluding that the environmental impacts in the 1996 GEIS bound the impact from spent fuel pool accidents because the environmental impacts from accidents at spent fuel pools can be comparable to those from reactor accidents at full power and because subsequent analyses performed, and mitigative measures employed, since 2001 have further lowered the risk of spent fuel pool accidents).

conclude that the risk of an accidental or terrorist-caused fire in the pools is uniformly low. *Id.* But, the Court explained that the NRC mandated that these mitigation tactics be implemented at *all* nuclear power plants.²⁶ *Id.* at 10-11. An agency may take into account site-specific actions to mitigate an environmental impact when determining that an environmental impact is small, so long as the effectiveness of the mitigation is demonstrated by substantial evidence. *Id., citing Nat'l Audubon Soc'y v. Hoffman*, 132 F.3d 7, 17 (2d Cir. 1997). At bottom, the Court concluded that the NRC could rely on the numerous studies detailing the effectiveness of its required mitigation measures and did not need to perform plant-specific reviews. *Id.* at 11. Based on the above, there are no special circumstances that were not considered in the GEIS.

Third, the Petitioners have not demonstrated any risk associated with an attack on a spent fuel pool that is unique to Diablo Canyon. The Petitioners' claims to uniqueness include references to California being the highest-earning agricultural state and to the proximity of fertile farmland. Curran Aff. At ¶8. But, many plants are located in agricultural areas, near larger populations, or adjacent to important fisheries or industries. In fact, Diablo Canyon has an unusually large site that isolates the plant from offsite populations and activities.²⁷ The Petitioners have also not pointed to any unique aspects of the Diablo Canyon spent fuel pools that would undermine the conclusions in the GEIS. Nor have the Petitioners alleged that the

²⁶ The NRC decision states that the agency has "approved license amendments and issued safety evaluations to incorporate these [mitigation] strategies into the plant licensing bases of all operating nuclear power plants in the United States." 73 Fed. Reg. at 46209. The NRC also requires heightened security at all plants as part of its licensing process in the wake of the September 11, 2001 attacks. *See* 10 C.F.R. § 50.54(hh); "Power Reactor Security Requirements; Final Rule," 74 Fed. Reg. 13926 (Mar. 27, 2009).

²⁷ See Pac. Gas and Elec. Co. (Independent Spent Fuel Storage Installation), CLI-08-26, 68 NRC 509, 520 (2008) (concluding that, because the DCPP site is large, relatively unproductive, and is located in a sparsely populated region, the number of exposed individuals in the event of a successful terrorist attack on the ISFSI would be small and the costs of evacuation or relocation also would be small).

impacts of an attack on the spent fuel pools are aging-related. There is simply nothing unique about the risk of a terrorist attack at Diablo Canyon that warrants consideration in this license renewal proceeding.

Fourth, a waiver is not necessary here to address a "significant safety problem." As noted above, the safety of spent fuel storage at Diablo Canyon was resolved during the course of the NRC's review and approval of the spent fuel pool design. And, nuclear power plants have already implemented mitigation measures to reduce the impacts of an attack. After September 11, 2001, licensees were required to identify and later implement strategies that would maintain or restore cooling for the spent fuel pool. *See, e.g.*, "Design Basis Threat; Final Rule," 72 Fed. Reg. 12705, 12712 (March 19, 2007). The requirements in Section B.5.b of the February 2002 security order issued to all plants directed licensees to identify mitigative strategies (meaning measures to reduce potential consequences of large fires or explosions) that could be implemented with readily available resources. *Id.* The NRC subsequently inspected each plant, including DCPP, to review implementation of mitigation measures.²⁸ Any safety-significant issues that may arise from future evaluations of terrorist attacks will be addressed at that time.

Because the Petitioners' Waiver Request does not satisfy any of the four threshold standards for a waiver of the Commission's rules, the Licensing Board should deny the Petitioners' request to litigate the environmental impacts of an attack on the spent fuel pool.

See Letter to John S. Keenan, PG&E, from Alan B. Wang, NRC, "Diablo Canyon Power Plant, Unit Nos. 1 And 2 – Conforming License Amendments to Incorporate the Mitigation Strategies Required by Section B.5.b. of Commission Order EA-02-026," dated May 11, 2007 (ADAMS Accession No. ML071910037).

3. Even if a waiver were granted, Contention EC-3 is inadmissible.

As discussed above, the GEIS, which PG&E relies upon in its license renewal application, concludes that if there were sabotage, the "resultant core damage and radiological releases would be no worse than those expected from internally initiated events." GEIS at 5-18. The Petitioners have not provided any expert opinion or factual information that would create a genuine dispute with that conclusion. Nor do the Petitioners suggest any nexus between an attack and aging management. To the extent that the Petitioners contend that PG&E must perform an analysis of mitigation alternatives (Pet. at 21), as noted above licensees have already identified and implemented strategies that would maintain or restore cooling for the spent fuel pool in the event of a terrorist attack. 73 Fed. Reg. at 12712. The Petitioners have not provided examples of specific, additional mitigation alternatives or any information on the relative costs or benefits of such alternatives. *McGuire*, CLI-02-17, 56 NRC at 11-12 (denying contention that failed to approximate the relative cost and benefit of a challenged mitigation alternative). Proposed Contention EC-3 utterly fails to satisfy the Commission's strict admissibility requirements.

Regarding the information disclosure request embedded in this contention, the request is outside scope of this proceeding. Pet. at 21. The NRC will only be required to generate a list of documents relied upon for its analyses *if* a contention is admitted. There is no independent duty to disclose associated with a request for hearing. Indeed, at this stage, the adequacy of the ER, rather than the adequacy of the NRC's review, should be the focus of contentions. If Petitioners want to obtain documents from the NRC, they must request such documents using more appropriate processes (for example, under the Freedom of Information Act).

For the above reasons, a waiver is not appropriate and proposed Contention EC-3 is inadmissible.

E. <u>Contention EC-4 impermissibly challenges the generic evaluation in the GEIS of</u> <u>sabotage risks related to reactor operation, does not seek a waiver, and otherwise fails to</u> <u>support an admissible contention.</u>

This proposed contention asserts that the ER "fails to satisfy [NEPA] because it does not discuss the cost-effectiveness of measures to mitigate the environmental impacts of an attack on the Diablo Canyon reactor during the license renewal term." Pet. at 22. The Petitioners acknowledge that PG&E relied on the analysis of the impacts of attacks that is presented in the GEIS, but argue that the GEIS is "completely inadequate to satisfy NEPA ... because it does not include any analysis of the relative costs and benefits of measures to avoid or mitigate the effects of an attack." *Id.* According to the Petitioners, a discussion of mitigative measures is required by NEPA and by NRC regulations that require the analysis of SAMAs in license renewal decisions. 10 C.F.R. § 51.53(c)(3)(ii)(L).

As discussed below, proposed Contention EC-4 raises an issue that has been conclusively addressed in the GEIS for license renewal. The Petitioners have not requested a waiver from the NRC regulations or otherwise demonstrated that the conclusions in the GEIS are inapplicable to DCPP. Finally, the proposed contention fails to demonstrate a genuine dispute with the application or to provide the requisite expert or factual support.

This contention is, at its core, nothing more than a reprise of the NEPA terrorism issue raised in the Diablo Canyon Independent Spent Fuel Storage Installation ("ISFSI") licensing proceeding, this time in the context of the reactor. Pet. at 22, *citing San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1030 (9th Cir. 2006). The Petitioners do not, however, address the critical difference between the ISFSI proceeding and this license renewal proceeding. Unlike for the ISFSI, the NRC has in fact already evaluated the terrorist issue in the

license renewal GEIS. The NRC has determined from this generic review that the risk of sabotage or other terrorist attack is small and is provided for in the consideration of internal severe accidents:

The regulatory requirements under 10 CFR part 73 [*i.e.*, "Physical Protection of Plants and Materials"] provide reasonable assurance that the risk from sabotage is small. Although the threat of sabotage events cannot be accurately quantified, the commission believes that acts of sabotage are not reasonably expected. Nonetheless, if such events were to occur, the commission would expect that resultant core damage and radiological releases would be no worse than those expected from internally initiated events.

Based on the above, the commission concludes that the risk from sabotage is small and additionally, that the risks f[ro]m other external events[] are adequately addressed by a generic consideration of internally initiated severe accidents.

GEIS at 5-18.

The NRC expressly incorporated the GEIS's findings related to internal severe accidents into the NRC's environmental review regulations. *See* 10 C.F.R. Part 51, Appendix B, Table B-1. Generic analysis "is clearly an appropriate method of conducting the hard look required by NEPA." *Baltimore Gas and Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 101 (1983) (internal quotation marks omitted).

The Third Circuit Court of Appeals recently found the NRC's generic evaluation of terrorist attacks and sabotage in the GEIS to be adequate for a license renewal review. *NJDEP v. NRC*, 561 F.3d 132 (3d Cir. 2009) ("Oyster Creek"). In *Oyster Creek*, the NJDEP contended that the supplement to the GEIS for Oyster Creek should have contained, within its SAMAs analysis, a design basis threat ("DBT") analysis and an analysis of mitigation alternatives for core melt sequences likely to result from an aircraft attack. *Id.* at 135. The Third Circuit recognized that the NRC had already considered the environmental effects of a hypothetical terrorist attack on a nuclear plant and found that these effects would be no worse than those caused by a severe accident. *Id.* at 136-137. The Court also reasoned that NJDEP had not provided any evidence to challenge this conclusion and had not demonstrated that the NRC could undertake a more meaningful analysis of the specific risks associated with an aircraft attack on Oyster Creek. *Id.* at 137; *see also Limerick Ecology Action v. NRC*, 869 F.2d 719, 744 & n.31.

The Third Circuit's conclusions are directly applicable here. The NRC has considered the environmental effects of a hypothetical terrorist attack in the GEIS. The Petitioners are arguing that certain characteristics of Diablo Canyon make the risk of a terrorist attack more than "small" and that the environmental effects of a terrorist attack are somehow different from "those expected from internally initiated events." These arguments are, in effect, a challenge to the NRC's generic findings. The proper way to raise the issue would have been in a petition for rulemaking or a petition for a waiver. *See* 10 C.F.R. §§ 2.335, 2.802. Having failed to request a waiver, proposed Contention EC-4 amounts to an impermissible collateral attack on the licensing renewal regulations. 10 C.F.R. § 2.335.

More substantively, the Petitioners assert that the environmental review must encompass "the relative costs and benefits of measures to avoid or mitigate the effects of an attack." Pet. at 23. But the Petitioners have provided no expert opinion or factual information to support site-specific arguments or to call into question the costs or benefits of mitigation measures.²⁹ A petitioner must approximate the relative cost and benefit of a mitigation alternative in order to justify an adjudicatory hearing. *McGuire*, CLI-02-17, 56 NRC at 11-12.

²⁹ As noted above, in February 2002 the Commission issued an order to all plants directing them to identify mitigative strategies (meaning measures to reduce potential consequences of large fires or explosions) that could be implemented with readily available resources. *See, e.g.*, 72 Fed. Reg. at 12712.

A petitioner must present at least some notion of a difference in the results and provide at least some ballpark consequence and implementation costs. *Indian Point*, LBP-08-13, slip op. at 67-68. Here, the Petitioners never explained how or why an aircraft attack on Diablo Canyon would produce impacts that are different from severe accidents. Nor have the Petitioners demonstrated that the NRC could undertake a more meaningful analysis of the specific risks associated with a terrorist attack on DCPP. The burden is on the petitioner to demonstrate that the NRC could evaluate risks more meaningfully than it has already done. *See Limerick*, 869 F.2d at 744 n.31. The Petitioners have not met that burden here.

For the above reasons, proposed Contention EC-4 is inadmissible.

V. <u>CONCLUSION</u>

For all of the above reasons, Petitioners have not submitted an admissible contention or satisfied the criteria to grant a waiver from NRC regulations for proposed Contentions EC-2 and EC-3. Accordingly, the petition to intervene and request for hearing should be denied.

Respectfully submitted,

/s/ signed electronically by David A. Repka Tyson R. Smith Winston & Strawn LLP 1700 K Street, NW Washington, DC 20006

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Dated at Washington, District of Columbia this 16th day of April 2010

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of:

PACIFIC GAS AND ELECTRIC COMPANY Docket No. 50-275-LR Docket No. 50-323-LR

(Diablo Canyon Power Plant, Units 1 and 2)

CERTIFICATE OF SERVICE

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I hereby certify that copies of "APPLICANT'S ANSWER TO PETITION TO INTERVENE AND RESPONSE TO REQUESTS FOR WAIVERS" in the captioned proceeding have been served via the Electronic Information Exchange ("EIE") this 16th day of April 2010, which to the best of my knowledge resulted in transmittal of the foregoing to those on the EIE Service List for the captioned proceeding.

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