August 16, 2010

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of:	)	
	)	
PACIFIC GAS AND ELECTRIC	)	Docket No. 50-275-LR
COMPANY	)	Docket No. 50-323-LR
	)	
(Diablo Canyon Power Plant, Units 1 and 2)	)	

APPLICANT'S NOTICE OF APPEAL OF LBP-10-15

Pursuant to 10 C.F.R. §§ 2.311(a) and (c), the Pacific Gas and Electric Company ("PG&E") files, together with an attached supporting Brief, this Notice of Appeal of the Atomic Safety and Licensing Board's August 4, 2010, Memorandum and Order, which granted the request for hearing of San Luis Obispo Mothers for Peace ("SLOMFP") in connection with PG&E's application for renewal of the operating licenses for Diablo Canyon Nuclear Power Plant Units 1 and 2.

Respectfully submitted,

/s/ signed electronically by

David A. Repka
Tyson R. Smith
Winston & Strawn LLP
1700 K Street, NW
Washington, DC 20006

Jennifer Post
Pacific Gas and Electric Company
77 Beale St., B30A
San Francisco, CA 94105

COUNSEL FOR THE PACIFIC GAS
AND ELECTRIC COMPANY

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

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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 BRIEF IN SUPPORT OF APPEAL FROM LBP-10-15

David A. Repka
Tyson R. Smith
Winston & Strawn LLP
1700 K Street, NW
Washington, DC 20006

Jennifer Post
Pacific Gas and Electric Company
77 Beale St., B30A
San Francisco, CA 94105

COUNSEL FOR THE PACIFIC GAS AND ELECTRIC COMPANY

August 16, 2010

TABLE OF CONTENTS

Page

TABLE OF AUTHORITIES

Page

JUDICIAL DECISIONS

ADMINISTRATIVE DECISIONS

Commission and Appeal Board

STATUTES AND REGULATIONS

FEDERAL REGISTER NOTICES

MISCELLANEOUS

August 16, 2010

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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 BRIEF IN SUPPORT OF APPEAL FROM LBP-10-15

I. INTRODUCTION

Pursuant to 10 C.F.R. §§ 2.311(a) and (c), the Pacific Gas and Electric Company ("PG&E") hereby appeals the Atomic Safety and Licensing Board ("Board") decision (LBP-10-15), dated August 4, 2010. That decision concerns PG&E's application for renewal of the operating licenses for Diablo Canyon Power Plant, Units 1 and 2 ("DCPP"). The Board found that San Luis Obispo Mothers for Peace ("SLOMFP") had standing and had proffered at least one admissible contention. For the reasons discussed below, PG&E appeals the Board's finding on contention admissibility and concludes that the request for hearing should be wholly denied.

On November 23, 2009, PG&E submitted an application to renew the operating licenses for DCPP. The Nuclear Regulatory Commission ("NRC") published the "Notice of Hearing and Opportunity to Petition for Leave to Intervene" on January 21, 2010. 75 Fed. Reg. 3493. Petitioner timely filed a petition to intervene on March 22, 2010. *See* "Request For Hearing and Petition to Intervene" ("Petition" or "Pet."). The Board issued its decision (LBP-10-15) with respect to the hearing request on August 4, 2010. The Board found three proposed contentions (TC-1, EC-1, and EC-4) to be admissible. The Board found that the Petitioner made a prima facie showing that a waiver of NRC regulations should be granted with respect to

Contention EC-2 and that, if a waiver were granted, that contention would be admissible. The Board also referred questions related to one contention (EC-4) to the Commission.

II. GROUNDS FOR REVERSAL OF THE DECISION

A. Contention TC-1 improperly permits consideration of operational issues that are outside the scope of license renewal.

The Board, with Judge Abramson dissenting, admitted Contention TC-1, which it revised and "narrowed" as follows:

> [PG&E] has failed to satisfy 10 C.F.R. § 54.29's requirement to demonstrate a reasonable assurance that it can and will "manage the effects of aging" in accordance with the current licensing basis. PG&E has failed to show how it will address and rectify an ongoing adverse trend with respect to recognition, understanding, and management of the Diablo Canyon Nuclear Power Plant's design/licensing basis which undermines PG&E's ability to demonstrate that it will adequately manage aging in accordance with this same licensing basis as required by 10 C.F.R. § 54.29.

LBP-10-15 at 92. The Board majority emphasized that this revised contention addresses a specific category of recent "management failures" — that is, a current adverse performance trend at DCPP with respect to the recognition, understanding, and management of the plant design/licensing basis. *Id*. at 92, n.94. This contention, however, whether as originally proposed or as recast by the Board, should not have been admitted for two reasons: (1) the contention raises a *current operational issue* that is beyond the scope of an NRC license renewal review, and (2) the contention, in any event, lacks a basis to demonstrate that the current adverse trend at issue gives rise to a genuine dispute regarding *aging management*.

1. A current operating issue is outside the scope of license renewal.

Proposed Contention TC-1 was based only upon three specific NRC Inspection Reports. *See* Pet. at 3.[1] According to the Petition, the inspection reports "document an ongoing

[1] The three inspection reports are: DCPP Integrated Inspection Report ("IIR") 08-05 (February 6, 2008); IIR 09-03 (August 5, 2009); and IIR 09-05 (February 3, 2010).

failure of PG&E to properly identify, evaluate, and resolve problems and manage safety equipment." *Id.* at 3. The proposed contention, however, did not make any attempt to link the inspection reports to an aging mechanism, aging effect, or aging management program ("AMP") within the scope of Part 54. *See id.* at 3-5. Instead, the contention raised a current operational performance and compliance matter that is outside the scope of a license renewal review under 10 C.F.R. Part 54. *See* 10 C.F.R. § 2.309(f)(1)(iv).

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 Fla. 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 plant operating issues. *See id.* at 7, 9-10. This limited scope is based upon a principle established by the Commission in the Part 54 rulemaking — that the NRC's ongoing regulatory processes are adequate to ensure compliance with the Current Licensing Basis ("CLB"). 60 Fed. Reg. 22461, 22463-64 (May 8, 1995). Specifically, in the initial 1991 license renewal rulemaking:

> . . . the Commission concluded that issues material to the renewal of a nuclear power plant operating license are to be confined to those issues that the Commission determines are uniquely relevant to protecting the public health and safety and preserving common defense and security during the period of extended operation. Other issues would, by definition, have relevance to the safety and security of the public during current plant operation. Given the Commission's ongoing obligation to oversee the safety and security of operating reactors, *issues that are relevant to current plant operation will be addressed by the existing regulatory process within the present license term rather than deferred until the time of license renewal*.

Id. (emphasis added).[2] In revising the rule in 1995, the Commission restated the "first principle" of license renewal as follows:

---

[2] Indeed, in the 1991 rulemaking the Commission made clear that "the licensees' programs for ensuring safe operation and the Commission's regulatory oversight have been

> . . . with the possible exception of the detrimental effects of aging on the functionality of certain plant, systems, structures, and components in the period of extended operation and possibly a few other issues related to safety only during extended operation, *the regulatory process is adequate to ensure that the licensing bases of all currently operating plants provides and maintains an acceptable level of safety so that operation will not be inimical to public health and safety or common defense and security*.

60 Fed. Reg. at 22464 (emphasis added). 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) (citing *Turkey Point*, CLI-01-17, 54 NRC at 9).

Here, the Petitioner broadly challenged PG&E's ability to "identify, evaluate, and resolve" issues identified in the inspection reports. Pet. at 3-5. But, in fact, the inspection reports evidence precisely what the Commission expected — issues and trends relevant to current plant operation have been identified and are being addressed by the NRC's established and ongoing oversight activities. The contention did not address aging management in any explicit way, and implicitly challenged the adequacy of PG&E's Corrective Action Program to resolve the current issues. However, the Corrective Action Program is a part of the Quality Assurance Program (*see* 10 C.F.R. Part 50, Appendix B, Criterion XVI) and challenges to the Quality Assurance Program are clearly beyond the scope of license renewal. *See AmerGen*

> effective in identifying and correcting plant-specific non-compliances with the licensing bases," and 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.*" "Nuclear Power Plant License Renewal; Final Rule," 56 Fed. Reg. 64943, 64952 (Dec. 13, 1991) (emphasis added). The Commission also specifically rejected a comment that operational history and quality assurance/quality control should be reviewed as part of license renewal. Instead, those matters "would be dealt with as they arose." *Id.* at 64959.

Energy Co., LLC (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 253 (2006) ("[A] licensee's quality assurance program is excluded from license renewal review."). The scope of license renewal does not include issues 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, for example, 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).

Notwithstanding the first principle of license renewal, the Board reasoned that, under 10 C.F.R. § 54.29(a), the "NRC must decide whether the applicant has demonstrated that actions 'will be taken,' with respect to 'managing the effects of aging during the period of extended operation,' such that there is 'reasonable assurance' that activities that would be authorized by the renewed license will 'continue to be conducted in accordance with the CLB.'" LBP-10-15 at 79. The Board further framed the issue: "the question we must answer is whether NRC is barred from considering a past and continuing performance problem relating to a poor understanding and operational implementation of the CLB when it assesses and predicts a licensee's future performance under 10 C.F.R. § 54.29(a)." *Id*. Accepting this as the relevant question, the answer must be that such an assessment is beyond the scope of an NRC license renewal review. Under Part 54 and the Commission's precedent discussed above, the NRC clearly relies upon its current oversight processes to assure that current performance deficiencies or adverse trends are corrected, and to assure that licensed activities during the period of extended operation *will be* conducted safely and in accordance with the CLB.

The Board emphasized that the finding required under 10 C.F.R. § 54.29(a) is a predictive finding — that aging management activities have been or will be taken. *Id*. at 81.

This is an accurate characterization of the regulation. However, the predictive nature of the finding required by Section 54.29(a) does not change the scope of NRC's license renewal review as articulated by the Commission. The Section 54.29(a) finding must be based on a review of the application to assure that the applicant has conducted an integrated plant assessment to define the required scope of equipment, has conducted an aging management review to identify aging effects applicable to that equipment, and has described programs to manage aging to assure functionality in the future. *See* 10 C.F.R. § 54.21(a). It is the AMPs — to be implemented in the future — that must form the basis for the predictive finding required by 10 C.F.R. § 54.29(a). The relevant inquiry under Part 54 is not whether those programs will be implemented (that is for ongoing NRC oversight); rather, the relevant inquiry is whether the scope and substance of the AMPs described in the application will be sufficient to address applicable aging effects.[3]

This principle is explicitly confirmed in 10 C.F.R. § 54.30. In particular, Section 54.30(b) fully supports the proposition that current operating and compliance issues (including "adverse trends" identified in periodic performance assessments) are not an issue for the license renewal review and hearing. The Board disagreed, concluding that "[n]othing in 10 C.F.R. § 54.30 bars TC-1 as narrowed." LBP-10-15 at 87. The Board concluded:

> In short, 10 C.F.R. § 54.30(a) says that the licensee is obliged to correct current non-compliances now, and § 54.30(b) says that whether or not the licensee complies with its obligation to correct current noncompliances now is not within the scope of license renewal review. That is all.

Id. The Board would contrast Contention TC-1 with a situation barred by Section 50.30(b), because TC-1 is not about whether non-compliances are corrected, but instead "focuses on future compliance, *i.e.*, whether PG&E has demonstrated, as required by 10 C.F.R. § 54.29(a), that it

[3] For program implementation, the Commission relies upon something better than a predictive finding made now: it relies on a future, real-time assessment of compliance.

can and will adequately manage aging in accordance with the CLB during the [period of extended operation]." *Id*. This, however, is a distinction without a difference, and is a distinction that would render the first principle of license renewal — and 10 C.F.R. § 54.30(b) — a nullity. Any current compliance issue (*e.g.*, quality assurance, technical qualifications, safety culture, human performance) could be raised as the Board suggests, ultimately bringing into the scope of a license renewal review the nature, extent, and corrective actions for that current issue. The Commission excluded these current operational issues precisely because they must be addressed in the current operating term.

The Board's willingness to consider current (or past) performance as evidence of future performance is based on an untenable leap in logic. The Board in effect assumes that a current adverse trend in plant performance will continue unabated (or resurface) many years later in the period of extended operation. There is, however, no basis to assume that present performance is indicative of future program implementation, precisely because the Commission is relying on its regulatory processes to prevent such a result. The Board attempts to narrow the opening it has created by allowing an issue to be considered only where "the noncompliances are indicative of an adverse trend and are linked to (rather than independent of) the renewal, are persistent and non-trivial, and are associated with a contention that is not 'broad-scoped' but instead focused on a narrow and specific aging issue." *Id*. at 84 (emphasis in original). But this creates an undefined and subjective standard, with no basis in the license renewal rule or in the Commission's principles of license renewal. Given that there will ordinarily be a separation in time between performance at the time of license renewal and the period of extended operation, Part 54 relies upon regulatory oversight processes to assure program implementation and compliance with the CLB during the period of extended operation. The Board states that "[t]he

regulation does not say — submit an adequate AMP. The regulation says that the applicant must demonstrate that the 'effects of aging will be adequately managed.'" LBP-10-15 at 81. However, the Board again draws a distinction that does not exist. The Board ignores that it is precisely by means of an adequate aging management review and AMPs that the applicant demonstrates that aging *will be* adequately managed.[4]

The Board concluded that its interpretation conforms to the first principle of license renewal because "there are exceptions." LBP-10-15 at 88. However, it is not clear what exception the Board had in mind. The Board cites the 1995 rulemaking where the Commission identified the focus of license renewal as the design basis aspects of the CLB that can be impacted by aging. The citation is not helpful in explaining the Board's rationale or justifying its conclusion. That citation actually underscores that programmatic aspects of the CLB are not subject to aging, and that the license renewal review instead focuses on "functionality" of equipment (in contrast to program implementation). *See* 60 Fed. Reg. at 22475.[5]

Similarly, the Board noted that the "phrase 'age-related degradation unique to license renewal,' or 'ARDUTLR,' was deleted from the regulation in 1995." LBP-10-15 at 88 (emphasis in original), *citing* 60 Fed. Reg. at 22464. This fact, while true, is again unhelpful to the Board's rationale. The Commission eliminated the ARDUTLR term as a basis to define the scope of aging and equipment subject to the license renewal review because the use of the term

---

4 The Board denigrates a review of aging management plans as achieving compliance with Section 54.29(a) "via a Xerox machine." LBP-10-15 at 90. The characterization is grossly inaccurate for a process that involves substantial time and resources.

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." *Id*.

in the previous license renewal rule "caused significant uncertainty and difficulty in implementing the rule." 60 Fed. Reg. at 22464. Specifically, the difficulty in clearly establishing "uniqueness" caused problems in determining the scope of systems, structures, and components subject to the rule. *Id*. Therefore, the Commission chose to focus the rule, and the review, on the continued functionality of specific equipment. *Id.* The change was "viewed as a modification *consistent* with the first principle of license renewal established in the previous rule." *Id*. (emphasis added). Indeed, the Commission further stated in 1995 that it:

> . . . continues to believe that aging management of certain important systems, structures, and components during the period of extended operations should be the focus of a renewal proceeding and that issues concerning operation during the currently authorized term of operation should be addressed as part of the current license rather than deferred until license renewal (which would not occur if the licensee chooses not to renew its operating license).

Id. at 22481. In other words, elimination of the ARDUTLR term did not bring current plant performance into the scope of review and hearing.

The Board also relied upon the Generic Aging Lessons Learned Report ("GALL Report") for its conclusion that past performance is relevant to the 10 C.F.R. § 54.29(a) finding. LBP-10-15 at 89. Under the GALL Report approach, an AMP is to be based upon ten elements. The Board relied on the tenth element — operating experience — and cited the GALL Report as follows:

> Operating experience involving the aging management program, including past corrective actions resulting in program enhancements or additional programs, should provide objective evidence to support a determination that the effects of aging will be adequately managed so that the structure and component intended functions will be maintained during the period of extended operation.

Id., *citing* GALL Report at 3 (emphasis added by Board). The Board reads this to recognize that "past actions and performance provide 'objective evidence' as to future performance and can be

used in the 10 C.F.R. § 54.29 determination." *Id* (emphasis in original). This, however, is too broad a reading of the GALL Report. The language cited does not state that operating experience must be considered to determine whether AMPs will be implemented in the future. Rather, the focus of the review of operating experience, as part of an aging management review, is to assure that past experience with *aging mechanisms, aging effects, and aging management* (including past program enhancements or new programs) are considered and incorporated appropriately into AMPs for equipment within the scope of Part 54. *See* Gall Report at 3. The GALL Report does not invite an open inquiry into current operational performance — particularly an inquiry disconnected from any specific aging issue or program.

Finally, the Board majority relied on the Commission's decision in *Ga. Inst. of Tech*. (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111 (1995). LBP-10-15 at 82. The Board cited with approval the proposition in that case that "past performance must bear on the licensing action currently under review." *Id*. However, as the Board itself recognized — in rejecting Judge Abramson's reliance on that decision — *Georgia Tech* was a case involving license renewal for a research reactor, and was not based upon Part 54. LBP-10-15 at 86, n.92.[6] The broad proposition taken from a case not directly applicable to this one cannot stand against the specific rules in Part 54 and the Commission's explicit principles of license renewal.[7]

---

[6] *See* 10 C.F.R. § 54.3 (defining a nuclear power plant as a facility of a type described in section 50.21(b) or 50.22, neither of which includes a research reactor under § 50.21(c)).

[7] In his separate opinion, Judge Abramson correctly pointed out that even in the *Georgia Tech* decision, the statement regarding past performance relied upon by the majority was significantly qualified. LBP-10-15, Separate Opinion of Judge Abramson, at 6-7. The Commission contemplated a threshold before past performance could be considered. The "adverse trend" noted in the inspection reports cited in support of the contention does not meet any meaningful threshold. Indeed, the NRC has routinely rejected contentions that in effect argue that a licensee will not in the future meet requirements. *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 207 (2007).

Contention TC-1 raises a matter of current regulatory significance, but not one that currently undermines the NRC's reasonable assurance that DCPP is being operated safely. The adverse trend identified in the inspection reports is being addressed as a present-day regulatory matter, through the NRC's reactor oversight processes. In accordance with the first principle of license renewal, and 10 C.F.R. §§ 54.29(a) and 54.30(b), the contention does not raise an issue material to a license renewal finding and should not have been admitted.

2. The contention lacks sufficient basis for linking the current adverse trend to aging management.

Even if the current operating issue identified by the Board is not beyond the scope of a license renewal review, Contention TC-1 still should not be admitted. The contention, including the inspection reports referenced therein, provided nothing to show a link between the current adverse performance trend and an aging mechanism, an aging effect, or the adequacy of a specific AMP within the scope of the license renewal rule. Accordingly, even if the current trend is potentially relevant to a finding under Section 54.29(a), the contention at issue here (TC-1) fails to demonstrate a genuine dispute on a material issue.

The Board in several instances recognized the need for a link between a current performance issue and an AMP. For example:

> Having concluded that, under narrow and specific circumstances that have a link to the applicant's ability to implement the AMP and/or to manage aging in accordance with the CLB during the [period of extended operation ("PEO")], the 10 C.F.R. § 54.29(a) determination <u>can</u> be informed by the applicant's past performance, *e.g.*, by an ongoing pattern of difficulty or violations in managing activities and compliance that have a link to the applicant's ability to implement the AMP and/or to manage aging during the PEO, we now must decide whether TC-1, as narrowed by this Board, fits within this limited scope. We conclude that it does and that, properly limited, TC-1 is within the scope of license renewal review.

Id. at 89-90 (emphasis in original). The Board, recognizing the need for a link to an aging management issue, erred in finding a link sufficient to admit Contention TC-1.

In proposed Contention TC-1 the Petitioner referenced the three NRC Staff inspection reports cited above, quoting a variety of issues discussed in those reports. As noted by Judge Abramson in his separate opinion, the Petitioner did not draw any coherent connection between the reports to a theme of difficulties with respect to "recognition, understanding, and management" of the design basis or CLB. That theme was culled from the inspection reports by the majority and inserted into the recast contention. LBP-10-15, Separate Opinion by Judge Abramson, at 3-4. But, even more pointedly, the Petitioner did not identify or address any particular aspect of the license renewal application, the integrated plant assessment, the aging management review, or an AMP. The Petitioner did not offer any expert — or even any aspect of the inspection reports — to establish a nexus between management of the design and licensing bases and the issues relevant to Part 54. Therefore, by the very standard adopted by the majority, the contention should not have been admitted.

The Board attempted to find the link:

> As we see it, the key link between the alleged "ongoing pattern of management failures" and the ability, or not, of PG&E to manage age related degradation of relevant systems, structures, and components, relates to "poor licensee management of plant design/licensing basis." IIR 09-03 at 21. NRC's findings that PG&E has violated 10 C.F.R. § 50.59 illustrate, according to the report, "the failure of the licensee to recognize a condition outside of the plant design basis." *Id*. at 22. Likewise, the failure of PG&E to maintain adequate capacity of the emergency diesel generators illustrates the "failure of the licensee to understand and apply the plant design and licensing basis." *Id*. The NRC IIR findings of PG&E's (alleged) failure to understand its licensing/design basis are cited by SLOMFP, Petition at 4-5, and are part of its allegation that there is an "ongoing failure of PG&E to properly identify, evaluate and resolve problems and manage safety equipment." *Id*. at 3. These problems fit precisely within the Commission's statement that "allegations that the implementation of a licensee's proposed actions to address age-related degradation unique to license renewal has or will cause noncompliance with the plant's current <u>licensing basis</u> during the period of extended operation . . . <u>would be valid subjects for contention</u>." 56 Fed. Reg. at 64,952 n. 1 (emphasis added).

LBP-10-15 at 91 (emphasis in original). However, the Board's conclusion lacks any basis (much less a basis from the Petition) and misreads the intent of the 1991 rulemaking.

Understanding and applying a plant's design and licensing basis is an important operational issue. For example, applying 10 C.F.R. § 50.59 is a key element of plant configuration management. Likewise, identifying and resolving problems is an important component of a Quality Assurance Program. PG&E must address adverse trends in these areas during the current license term or face an appropriate regulatory response through the NRC oversight and enforcement programs. But nowhere does the Board convincingly demonstrate that the issues in the inspection reports cited by the Petitioner relate to the scope of PG&E's aging management reviews and AMPs. The Board is simply incorrect in its claim that these problems "fit precisely" within the Commission's statement in the 1991 rulemaking (56 Fed. Reg. at 64952 n.1) that actions to address age-related degradation that have or will cause noncompliance with the CLB during the period of extended operation would be valid subjects for contentions. LBP-10-15 at 91. Nothing in the contention addresses PG&E's plans to address age-related degradation or asserts how those plans would lead to a noncompliance during the period of extended operation.[8]

In the 1991 Statement of Considerations referenced by the Board, the Commission more broadly wrote:

> In summary, the inspection program as discussed in NRC Inspection Manual Chapter (IMC) 2500, Reactor Inspection Programs, and IMC-2515, Light-Water Reactor Inspection Program – Operations Phase, and as implemented, provides reasonable assurance that conditions adverse to quality and safe operation are identified and corrected and that *a formal review of compliance by a plant with its licensing basis is not needed as part of the review of that plant's renewal application*.

[8] *See also* LBP-10-15, Separate Opinion of Judge Abramson, at 11-13.

56 Fed. Reg. at 64952 (emphasis added). On the same page, the Commission explained that a compilation of the CLB (*i.e.*, an ultimate recognition and understanding of the licensing basis) is not required for license renewal. *Id*. Similarly, the current adverse trend at DCPP in regard to design and licensing basis issues has not been linked to AMPs; must be addressed as a current regulatory issue; and is not a valid subject for a license renewal contention. The Board decision admitting the contention should be reversed.

B. Contention EC-1 fails to demonstrate a genuine dispute with the application on a material issue.

The Petitioner alleges in proposed Contention EC-1 that PG&E's Severe Accident Mitigation Alternatives ("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. In particular, the Petitioner argues that PG&E's SAMA analysis in the Environmental Report ("ER") does not take into consideration a geologic feature, identified by PG&E and the U.S. Geological Survey ("USGS"), known as the Shoreline Fault. *Id*. at 9.

The Board found that the Petitioner stated an adequate basis for the contention by (1) citing 40 C.F.R. § 1502.22 and (2) asserting that PG&E had not acknowledged the absence of information on the Shoreline Fault or demonstrated that the costs necessary to obtain such information would be exorbitant. LBP-10-15 at 19-20. The Board found sufficient the Petitioner's statements that the NRC's deterministic assessment that the Shoreline Fault is bounded by the Hosgri Fault is "preliminary" and subject to further probabilistic analysis; that seismic contributors are "disproportionately dominant" according to the SAMA risk analysis for

DCPP; and that probabilistic risk assessment is the NRC's standard approach in SAMA analyses. *Id*. at 21-22. Ultimately, the Board rewrote Contention EC-1 as follows:

> PG&E's Severe Accident Mitigation Alternatives ("SAMA") analysis fails to satisfy 40 C.F.R. § 1502.22 because it fails to consider information regarding the Shoreline fault that is necessary for an understanding of seismic risks to the Diablo Canyon nuclear power plant. Further, that omission is not justified by PG&E because it has failed to demonstrate that the information is too costly to obtain. As a result of the foregoing failures, PG&E's SAMA analysis does not satisfy the requirements of the National Environmental Policy Act ("NEPA") for consideration of alternatives or NRC implementing regulation 10 C.F.R. § 51.53(c)(3)(ii)(L).

Id. at 25-26. The Board erred in admitting this contention because the Petitioner failed to establish a genuine dispute with the application, failed to provide a legal basis for the contention, and, in any event, failed to show that explicit consideration of the Shoreline Fault is essential to PG&E's SAMA analysis.

1. The contention does not establish a genuine dispute with PG&E's SAMA analysis.

The Board mistakenly presumed that the Petitioner's charge of an "omission" — a failure to include the risk of the Shoreline Fault in the SAMA analysis — was correct.[9] PG&E's SAMA analysis in the application addresses seismic risk (in great detail) and evaluates the implications of uncertainty. In contrast, the Petitioner failed to offer any support to show that PG&E's SAMA analysis does not bound the effects of the Shoreline Fault.

---

[9] The NRC Staff did not oppose admission of a portion of Contention EC-1 as a contention of omission. NRC Staff Answer at 28. Like the Board, the NRC Staff mistakenly assumes that there is an omission in the SAMA analysis. The NRC Staff may certainly request additional information from PG&E regarding consideration of the Shoreline Fault in the SAMA analysis (and they have, in fact, done so already). However, the question alone does not demonstrate that there was, in fact, an omission. The three items that the NRC Staff believes would cure the alleged omission relate to the substantive scope and adequacy of the SAMA analysis, not its absence. An omission should not be presumed — the Petitioner must affirmatively provide a basis for a challenge to the application.

According to the Commission, the key consideration in determining the materiality of a SAMA contention is whether it purports to show that an "additional SAMA should have been identified as potentially cost-beneficial." *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009) (emphasis added). In order to be granted an adjudicatory hearing, a petitioner must approximate the relative cost and benefit of a challenged SAMA or provide at least some ballpark consequence and implementation costs should the SAMA be performed. *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). "The question is not whether . . . the SAMA analysis can be refined further" (*see Pilgrim*, CLI-10-11, slip op. at 37), but rather whether the Petitioner has demonstrated that potentially cost-beneficial SAMAs have been overlooked.

As noted in PG&E's answer to the proposed contention (at 14-15), the ER specifically addresses the seismic risks associated with the Shoreline Fault relative to the seismic design basis and previously-known seismic risks, such as the Hosgri fault. *See* ER at 5-5 ("Although the presence of the potential Shoreline Fault offshore of DCPP is new information, based on the PG&E and NRC assessments of the potential Shoreline Fault, it is not significant information since the design and licensing basis evaluations of the DCPP structures, systems, and components are not expected to be adversely affected."). The Petitioner did not challenge this qualitative assessment other than to complain that it is "preliminary" in nature. Pet. at 11; LBP-10-15 at 21-22. For contention admissibility purposes, "preliminary" information is not the same as "omitted" information. It was the Petitioner's burden to present sufficient information to establish a genuine dispute with the conclusion in the ER.

As discussed in PG&E's answer (at 15-17), the ER also contains a detailed discussion of SAMAs that address seismic risk. PG&E specifically evaluated SAMAs to quantify the risk benefit. The SAMAs that addressed seismic risk were either not cost-beneficial or were screened out based on PRA insights. ER, Table F.6-1, at F-242 *et seq*. The Petitioner did not directly challenge the results of the SAMA analysis or provide any information regarding the potential consequences associated with an increase in seismic risks or the costs and benefits of an upgrade in DCPP's response to seismic events. The Petitioner did not offer any expert or documentary support or posit any new SAMA to be considered. *See Pilgrim*, CLI-09-11, slip op. at 6-7. And, the Petitioner did not point to a single SAMA already identified by PG&E that might be cost beneficial in the event that the Shoreline Fault was explicitly addressed in the SAMA analysis.[10]

PG&E's SAMA analysis also included a 95th percentile sensitivity analysis to address uncertainty in PRA parameters. *Id*. at F-145. As the SAMA analysis shows, even if the seismic risk more than doubles, the change would be bounded by the sensitivity results. While the Board states that the Petitioner "need not submit a sensitivity analysis" (LBP-10-14 at 21), the Commission has consistently held that, to be admissible, a SAMA contention must present some information to call into question the conclusions in the SAMA analysis. *See, e.g.*,

---

[10] Similar contentions have been rejected in other license renewal proceedings for similar reasons. In *Indian Point*, proposed Contention 14 asserted that the SAMA analysis was insufficient because it failed to include 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 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 resulting from any mitigation. *Id*.

Catawba, CLI-02-17, 56 NRC at 10. There was no such information in Contention EC-1. SLOMFP did not present any basis to challenge a conclusion that the Shoreline Fault is encompassed by the bounding sensitivity analysis.

2. CEQ regulations do not apply to this license renewal proceeding.

The Board found that 40 C.F.R. § 1502.22 provides a legal basis for the contention. LBP-10-14 at 19-25. However, as an independent regulatory agency, the NRC does not consider itself legally bound by CEQ regulations. *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-876, 26 NRC 277, 284 n.5 (1987); *Private Fuel Storage* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 n.22 (2002). And, there is no NRC regulation in 10 C.F.R. Part 51 that corresponds to 40 C.F.R. § 1502.22.[11] Therefore, 40 C.F.R. § 1502.22 alone cannot provide a basis for a SAMA contention.

3. Even if 40 C.F.R. § 1502.22 were applicable, consideration of the Shoreline Fault is not "essential" to a choice among alternatives.

Even if 40 C.F.R. § 1502.22 were applicable to NRC licensing proceedings, the regulation 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 addressed the seismic risks associated with the Shoreline Fault relative to the seismic design basis and previously-known seismic risks. *See* ER at 5-5 (finding that, while new, information on the Shoreline Fault is not significant information). PG&E also carefully and exhaustively considered potential SAMAs, including those related to

[11] At least one court held that CEQ guidelines are not binding on the NRC if not expressly adopted. *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 725, 743 (3rd Cir. 1989).

seismic risk.[12] As noted above, the ER included a sensitivity analysis showing that significantly increasing the seismic risk would not alter the results of the SAMA analysis. ER at F-146. The Petitioner presented no basis for concluding that the SAMA analysis would change if the Shoreline Fault were explicitly considered in the probabilistic analysis (*i.e.*, that consideration of the Shoreline Fault is "essential") or if ongoing seismic studies were completed. The Petitioner's assertion that the Shoreline Fault is "essential" to a choice among alternatives therefore lacks any expert or documentary support.[13]

The Board's reasoning appears to hinge on the fact that studies are ongoing (*i.e.*, that there is only "preliminary" information) and assumes that those studies will reveal something significant to the analysis.[14] LBP-10-15 at 25. But, merely asserting that some future analysis will be essential to the SAMA analysis cannot satisfy the Commission's strict admissibility criteria. By its nature, scientific research 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

---

12 *See S. Or. 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 section 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).

13 *See Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1172-73 (10th Cir. 1999) (finding no violation of section 1502.22(a) or NEPA where CEC failed to show how additional, site-specific lynx data was "essential" to reasoned decision making).

14 The Board is wrong to automatically equate "preliminary" to "non-conservative." Future planned studies of the Shoreline Fault are expected to reduce uncertainty and thereby eliminate conservatisms used in the initial deterministic analysis. At bottom, it is the Petitioner's affirmative burden to dispute — in conjunction with an adequately supported basis — the SAMA analysis.

decisionmaking." *Town of Winthrop v. FAA*, 535 F.3d 1, 11 (1st Cir. 2008); *see also*, *Pilgrim*, CLI-10-11, slip op. at 37. Consistent with NEPA, the NRC should review and evaluate the ER based on information currently available. In the absence of any demonstration that explicit quantitative consideration of the Shoreline Fault is essential to the SAMA analysis or might lead to a cost-beneficial SAMA, section 1502.22 cannot form the basis for an admissible contention.

C. Even if a waiver is granted, the Board erred by admitting Contention EC-2.

The Board considered the admissibility of Contention EC-2 in conjunction with a request for a waiver from NRC regulations prohibiting litigation of the issue. PG&E and the NRC Staff opposed both the waiver petition and admission of the contention. The Board found as a threshold matter that the Petitioner made a *prima facie* showing that a waiver should be granted. Then, assuming that a waiver ultimately would be granted by the Commission, the Board went on to conclude that Contention EC-2 should be admitted, as narrowed:

> PG&E's Environmental Report is inadequate to satisfy NEPA because it does not address the airborne environmental impacts of a spent fuel pool accident caused by an earthquake adversely affecting DCNPP.

LBP-10-15 at 51.

1. The waiver issue is not addressed in this appeal.

The Board concluded that "SLOMFP has made a prima facie case that there are special circumstances at DCNPP with regard to the environmental impacts and risks of earthquake-induced spent fuel pool accidents so as to warrant the waiver of those portions of 10 C.F.R. Subpart A, Appendix B and 10 C.F.R. §§ 51.53(c)(2) and 51.23 classifying such spent fuel impacts as Category 1." LBP-10-15 at 45. Under 10 C.F.R. § 2.335, the Board's recommendation of a waiver is automatically certified to the Commission and is not a subject of

this appeal. PG&E agrees with the Board that further briefing on the merits of the waiver petition would be appropriate.[15] LBP-10-15 at 45 n.58.

2. The Board ignored information incorporated by reference from the GEIS in evaluating the admissibility of Contention EC-2.

Having decided that the Petitioner made the required prima facie showing that a waiver from NRC regulations should be granted, the Board then considered the admissibility of Contention EC-2.[16] LBP-10-15 at 45. The Board, however, made a threshold error during its assessment of admissibility. PG&E's application incorporated the conclusions in the Generic Environmental Impact Statement for License Renewal ("GEIS") by reference. A grant of a waiver does not eliminate those analyses. Instead, *a waiver would permit a Petitioner to offer a contention challenging those conclusions*. The Petitioner failed to demonstrate a genuine dispute with the spent fuel pool impacts analysis in the GEIS (incorporated into the ER).

The Petitioner presented no information to challenge the conclusion in the GEIS (incorporated into the ER) that a severe seismically generated accident causing a catastrophic failure of the pool is remote and therefore need not be considered further. *See* GEIS at 6-72, 6-75. The Petitioner also did not dispute the findings of the GEIS (incorporated into the ER) that the environmental impacts of spent fuel storage are small. *Id*. at 6-86. The Petitioner simply failed to offer any expert or documentary support to contradict the conclusions in the GEIS and

---

15 For example, the Board applied a standard in assessing the waiver petition that differs from the "substantial showing" that has been required in other cases. *TVA* (Watts Bar Unit 2), LBP-10-12, __ NRC __ (slip op. June 29, 2010) at 3 n.9; *CP&L* (Shearon Harris Nuclear Power Plant), LBP-85-5, 21 NRC 410, 443 n.16 (1985).

16 According to 10 C.F.R. § 2.335(c), the Board must — "before ruling on the petition" — certify the matter to the Commission. However, the Board incorrectly considered the admissibility of Contention EC-2 in conjunction with the waiver request. If the Commission ultimately decides to grant the waiver, then the Commission should hold the contention in abeyance pending preparation of any newly-required analysis.

ER. This failure to establish a genuine dispute with the ER or present a basis for the contention requires that the contention be rejected. *See* 10 C.F.R. § 2.309(f)(1)(ii), (vi).

According to the Board, Contention EC-2 presents a contention of omission — that is, that the ER omitted "an analysis of the potential for and consequences of a SFP fire at DCNPP that includes site-specific information on SFP fires caused by earthquakes." LBP-10-15 at 50. The Board, however, never analyzed whether the Petitioner had properly disputed the conclusion in the GEIS that impacts are small or that the probability of a spent fuel pool fire following a severe seismic event is remote. The Board does suggest that the Petitioner's reference to the conclusions in the Draft GEIS presents new information.[17] LBP-10-15 at 50 n.66. But, the thrust of the Petitioner's waiver argument was that the Draft GEIS "excludes" Diablo Canyon from its analysis, not that the impacts are necessarily different. Accordingly, even if the Draft GEIS excluded Diablo Canyon (which PG&E does not concede), the Petitioner would still need to specifically challenge the conclusion in the ER that the Shoreline Fault is not new and significant information (*compare* ER at 5-5), that the impacts of spent fuel storage at DCPP are small, and that the chance of spent fuel pool fire is remote.

A similar flaw exists with respect to consideration of mitigation alternatives. The GEIS concludes (at 6-86) that "[t]he need for the consideration of mitigation alternatives within the context of renewal of a power reactor license has been considered, and the Commission concludes that its regulatory requirements already in place provide adequate mitigation incentives for on-site storage of spent fuel." The ER incorporates these conclusions by

---

[17] As the Commission noted recently, the NRC currently is in the process of revising the GEIS, but "[t]he proposed GEIS revision does not change the Category 1 finding for onsite spent fuel storage." *Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-14, __ NRC __ (slip op. June 17, 2010) at 35 n.146; *see also* "Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses; Proposed Rule," 74 Fed. Reg. 38,117 (July 31, 2009).

reference. The Petitioner asserted that the environmental review must encompass "alternatives for avoiding or mitigating" the impacts of spent fuel storage (Pet. at 19), but did not propose any new plant-specific mitigation alternatives or challenge the adequacy of the mitigation measures already in place. A petitioner must approximate the relative cost and benefit of a proposed mitigation alternative to get an adjudicatory hearing. *McGuire*, CLI-02-17, 56 NRC at 11-12.

Like the Petitioner, the Board discounted or ignored prior analyses of spent fuel pool mitigation measures. *See* LBP-10-15 at 49 ("Further, it seems clear that the measures available to mitigate against an earthquake-induced meltdown of spent fuel in a spent fuel pool are likely to vary significantly from the mitigation measures available for reactor core damaging events (severe accidents)."). The NRC has previously analyzed accident preventive and mitigative options intended to reduce the risks posed by spent fuel pools. *See, e.g.*, NUREG/CR-5281, "Value/Impact Analysis of Accident Preventive and Mitigative Options for Spent Fuel Pools" (March 1989); 10 C.F.R. § 50.54(hh) (requiring strategies to main or restore spent fuel pool cooling capabilities). The results of the analyses indicated that additional mitigation measures were in general not likely to be cost effective. NUREG/CR-5281 at iii, viii, 47. The NRC has also previously considered spent fuel pool storage risks at DCPP, including both alternatives and severe accidents, in connection with a license amendment to expand pool storage capacity.[18] *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 Oct. 15, 1987 (ADAMS Accession No. 8710220412). The Petitioner addressed none of this. Because

[18] The NRC explained that beyond-design-basis accidents, such as criticality accidents and zirc fires, are not reasonably foreseeable and therefore not required to be discussed under NEPA. "Diablo Canyon Nuclear Power Plant; Supplement to Environmental Assessment and Finding of No Significant Impact," 52 Fed. Reg. 38977, 38978 (Oct. 20, 1987).

the Petitioner failed to provide adequate support for a challenge to the discussion of spent fuel pool impacts or mitigation measures in the ER, the Board erred in admitting Contention EC-2.

3. The Board erred in finding that a "bounding" analysis is unacceptable under NEPA.

The Board's conclusion that EC-2 is material to the NEPA analysis is also based on an incorrect reading of the requirements of NEPA. PG&E asserted that the environmental impacts of a spent fuel pool accident are no worse than those of the severe (reactor core) accidents already considered in the NEPA analysis, and therefore the "environmental impacts" have been considered. PG&E Answer at 33-34; LBP-10-15 at 45. However, the Board rejected the argument that the "impact" of a spent fuel pool accident caused by an earthquake at DCPP can be disregarded under NEPA because that "impact" will be "the same as," "no worse than," or "bounded by" the impact of a spent fuel pool accident caused by any other factor. *Id*. The Board concluded that this "does not eliminate the necessity for assessment of the likelihood of such incidents and their concomitant effect upon the overall likelihood of a radiation release of that magnitude." *Id*. In the Board's reading of NEPA, the environmental analysis must "either include consideration of the likelihood and consequences of such an event or indicate through reasonable analyses satisfactory under Ninth Circuit guidelines that the event is remote and speculative as the term is used in NEPA analyses." *Id*. The Board found that NEPA requires "at least implicitly, considerations of the probability of a particular consequence occurring."[19] *Id*.

[19] The NRC has previously considered the need to consider "beyond design basis" or "severe" accidents at DCPP, including those stemming from beyond-design-basis seismic events, and found that such events are — by definition — remote and speculative and therefore need not be addressed under NEPA. *SLOMFP v. NRC*, 751 F.2d 1287, 1299, 1301 (D.C. Cir. 1984), *aff'd on reh'g*, 789 F.2d 26 (D.C. Cir. 1986) (en banc), *cert. denied*, 479 U.S. 923 (1986). Thus, it is simply not true that exhaustive consideration of a beyond design basis earthquake — probability, consequences, and mitigation — is necessary to satisfy NEPA.

Significantly, the Board cited no Commission or judicial authority for their radical departure from long-established NEPA precedent.

NEPA gives agencies a range of tools for ensuring that the impacts of an action are taken into account; NEPA does not demand that every impact be precisely evaluated or perfection of detail. *Envtl. Def. Fund v. TVA*, 492 F.2d 466, 468 n.1 (6th Cir. 1974). For example, NEPA permits agencies to prepare generic analyses, such as the GEIS, to reduce or eliminate duplicative analyses. These analyses inherently involve generalizing or consolidating (rather than segregating) impacts. An analogous tool is the use of "bounding analyses," which refers to a description of impacts that is based on conservative assumptions regarding environmental impacts (*i.e.*, describing the upper limits of environmental consequences). While actual impacts might be less than those in the bounding analysis, the objectives of NEPA — public disclosure of the range of impacts that might be expected to result from a proposed action — are served by the conservative approach of a bounding analysis. The key consideration is that the NRC not *underestimate* the environmental impacts of a project and therefore authorize an activity without considering the full range of possible impacts.

The use of bounding analyses by the NRC was specifically accepted by the Court of Appeals for the DC Circuit in *NRDC v. NRC*:

> An agency can [consider environmental impacts] by having the appropriate decisionmakers consider all that is known and unknown about the risks before deciding whether to take an action. Or, it can organize its decisionmaking process in such a manner that the appropriate decisionmakers consider only the upper bound of reasonably foreseeable environmental costs. If, after considering that level of environmental damage, the decisionmakers conclude that the proposed action is worth its societal costs, full account will have been taken of the action's environmental impact. Similarly, if the upper bounds of environmental risks are disclosed in an EIS, Congress, the public, and any interested agency can effectively assess for themselves whether the agency has proposed an action that is not worth its environmental costs. Either method

> of considering and disclosing uncertainties surrounding an environmental effect is acceptable under NEPA

685 F.2d 459, 486 (D.C. Cir. 1982), *rev'd on other grounds*, *Balt. Gas & Elec. Co. v. NRDC*, 462 U.S. 87 (1983). The Supreme Court also held that it was not unreasonable for the Commission to counteract the uncertainties with respect to environmental impacts by an overestimate of environmental impacts. *See BG&E*, 462 U.S. at 103.[20]

As both PG&E and the NRC Staff pointed out, the GEIS contains precisely the type of bounding analysis found acceptable under NEPA. The GEIS concluded, based on NUREG-1353, that the environmental impacts of spent fuel pool accidents are bounded by reactor accidents at full power. *Turkey Point*, CLI-01-17, 54 NRC at 22 n.11. The GEIS also concluded that "even under the worst probable cause of a loss of spent-fuel pool coolant (a severe seismically generated accident causing a catastrophic failure of the pool), the likelihood of a fuel cladding fire is remote." GEIS at 6-72, 6-75. This approach also comports with an approach that the Board implied would be acceptable (*i.e.*, that a proper analysis could demonstrate that an event is "remote and speculative"). *See* LBP-10-15 at 49. At bottom, the Board applied a novel and unsupported interpretation of NEPA. For these reasons, the Board erred in finding Contention EC-2 to be an admissible challenge to the generic assessment in the GEIS.

4. Contention EC-2 is a SAMA contention.

The Board also erred in concluding that Contention EC-2 is not a SAMA contention. *See* LBP-10-15 at 48 (recognizing that SAMA contentions involving spent fuel

---

[20] *See Hodges v. Abraham*, 300 F.3d 432, 447 (4th Cir. 2002), *cert. denied*, 537 U.S. 1105 (2003) (DOE took the requisite "hard look" when it concluded that potential impacts for storage of plutonium were not significantly different than "or are bounded" by the impacts disclosed in prior EIS); *S.C. v. O'Leary*, 953 F. Supp. 699, 708 (E.D. S.C. 1996) (DOE permissibly examined worst-case scenarios in a "bounding" analysis through which the EIS by implication considers lesser impacts when looking at greater impacts.).

pools are inadmissible under *Turkey Point*). First, the title of the contention specifically challenges the SAMA analysis. Second, SLOMFP's other use of the term SAMA in the contention (Pet. at 17) is not "incidental." LBP-10-15 at 47. SLOMFP specifically cites the analysis of seismic initiators in the SAMA analysis. The focus on probabilistic seismic analyses would be significant only in the context of a SAMA contention. *See also* Waiver Request at ¶¶ 5-7 (arguing that spent fuel pool mitigation measures relied upon in the GEIS cannot be applied to DCPP). And, most importantly, the contention is, as a whole, focused on the risk of spent fuel pool accidents following a severe seismic event and related mitigation measures.

Despite the GEIS conclusion (at 6-86) that additional spent fuel pool mitigation measures are unnecessary, the Board effectively imposed a requirement that PG&E evaluate the risk of the Shoreline Fault relative to the spent fuel pool, including an assessment of probability, consequences, and mitigation — all on the basis of a waiver request supported only by an affidavit of counsel. Those three components (probability, consequences, and mitigation) form the core of the SAMA analysis methodology. Thus, whether or not the Board labels Contention EC-2 a "SAMA contention," the contention raises matters that are analytically identical to a SAMA analysis. As such, the contention is barred by Commission precedent holding that SAMA analyses only apply to reactors. LBP-10-15 at 48.

D. The Board decision to admit Contention EC-4 is contrary to established Commission precedent.

Contention EC-4 asserts that a discussion of mitigation measures to address terrorist attacks is required by NEPA and by NRC regulations that require the discussion of SAMAs. Pet. at 22-23. The contention argues that, while the GEIS concludes that radiological releases from sabotage would be "no worse than" those resulting from internally initiated events, the GEIS does not contain a specific cost-benefit analysis for measures intended to avoid or

mitigate the effects of such an attack. *Id*. The Board, in finding Contention EC-4 admissible, concluded that the GEIS statements regarding radiological releases from sabotage "regard only the consequences aspects of a SAMA analysis, and address neither the impact of additional initiating events (terrorist attacks) upon the Core Damage Frequency, nor the cost-benefit analyses regarding mitigative (preventative as well as palliative) alternatives." LBP-10-15 at 66. The Board's conclusion is directly contrary to clear Commission precedent on the scope of analysis required to satisfy NEPA.

This contention reprises the NEPA terrorism issue from the DCPP Independent Spent Fuel Storage Installation ("ISFSI") licensing proceeding in the context of the reactor. Pet. at 22, *citing SLOMFP v. NRC*, 449 F.3d 1016, 1030 (9th Cir. 2006). There is, however, a crucial difference in the 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 that the risk of sabotage or other terrorist attack is small and bounded by consideration of internally initiated events. GEIS at 5-18. This conclusion forms the basis for settled Commission precedent rejecting NEPA-terrorism contentions in license renewal proceedings.

In *Oyster Creek*, the Commission addressed a contention asserting that NEPA requires the NRC to consider a terrorist attack, including by more elaborate examination of SAMAs, an inquiry into the consequences of an aircraft attack, the vulnerability of the spent fuel pool to terrorist attack and to "design basis" threats, and long-term compensatory measures to defend against terrorism. *Amergen Energy Co.* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 128 (2007). The Commission first noted that terrorism contentions are, by their very nature, directly related to security and thus unrelated to the detrimental effects of aging. *Id*. at 129, *citing McGuire*, CLI-02-26, 56 NRC at 364. Consequently, the Commission

held that terrorism contentions are beyond the scope of a license renewal proceeding. *Id*. The Commission further explained that, in any event, there would be no basis for admitting a terrorism contention in a license renewal proceeding. *Id*. The Commission pointed out that the license renewal GEIS already includes a "a discretionary analysis of terrorist acts in connection with license renewal, and concluded that the core damage and radiological release from such acts would be no worse than the damage and release to be expected from internally initiated events."[21] CLI-07-8, at 31.

The Third Circuit found the NRC's generic evaluation of terrorist attacks and sabotage in the GEIS to be adequate under NEPA. *NJDEP v. NRC*, 561 F.3d 132 (3d Cir. 2009). The Third Circuit recognized that the NRC had already considered the environmental effects of a terrorist attack 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 the petitioner 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*, 869 F.2d at 744 & n.31. Both the Commission decision in CLI-07-8 and the Third Circuit's conclusions are directly applicable here. The Commission's approach to terrorism in a license renewal application is clear: applicants should rely on the

[21] The Board also incorrectly rejected the link described in the GEIS between internally-initiated events and terrorist-initiated events. *See* LBP-10-15 at 64 (finding that the SAMA analysis omits consideration of terrorist attacks). The NRC has determined that an analysis of internally-initiated events is an effective surrogate for terrorist-initiated events. According to the logic of the GEIS (undisputed by Petitioner), the loss of function of a valve has the same effect on plant operation whether the valve failed due to corrosion or failed due to a terrorist attack. SLOMFP has not pointed to any specific initiating event that would be different in the event of a terrorist attack.

GEIS. PG&E did nothing more or less than what the Commission previously found acceptable in Oyster Creek.[22]

Moreover, to the extent that Contention EC-4 alleges 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), the Petitioner has provided no expert opinion or factual information to support site-specific arguments or to call into question the costs or benefits of any (unexplained) mitigation measures beyond those already considered.[23] The Petitioner never explained how or why an aircraft attack on Diablo Canyon would produce impacts that are different from severe accidents. The burden is on the petitioner to demonstrate that the NRC could evaluate risks more meaningfully than it has already done. *See Limerick Ecology*, 869 F.2d at 744 n.31. The Petitioner did not meet that burden here. The Board therefore erred in finding Contention EC-4 admissible.

III. CONCLUSION

For the above reasons, the Commission should reverse the Board's decision regarding the admissibility of contentions in LBP-10-15. The Petition should be denied.

---

[22] Because PG&E has followed well-established Commission precedent, it would be unfair to impose the burden and expense of a hearing on an issue that PG&E was not required, by regulation, to address in its application. If the Commission ultimately decides that all or a portion of Contention EC-4 is admissible, then the Commission should hold the contention in abeyance pending preparation of any newly-required analysis.

[23] In February 2002 the Commission ordered all plants to identify spent fuel pool mitigative strategies. *See, e.g.*, "Design Basis Threat; Final Rule," 72 Fed. Reg. 12705, 12712 (March 19, 2007). The NRC 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." *See* "Denial of Petitions for Rulemaking," 73 Fed. Reg. 46204, 46209 (Aug. 8, 2008); 10 C.F.R. § 50.54(hh) (requiring strategies to main or restore spent fuel pool cooling capabilities); "Power Reactor Security Requirements; Final Rule," 74 Fed. Reg. 13926 (Mar. 27, 2009).

Respectfully submitted,

/s/ signed electronically by

David A. Repka
Tyson R. Smith
Winston & Strawn LLP
1700 K Street, NW
Washington, DC 20006

COUNSEL FOR THE PACIFIC GAS AND ELECTRIC COMPANY

Jennifer Post
Pacific Gas and Electric Company
77 Beale St., B30A
San Francisco, CA 94105

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

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

I hereby certify that copies of "APPLICANT'S NOTICE OF APPEAL OF LBP-10-15" and "APPLICANT'S BRIEF IN SUPPORT OF APPEAL FROM LBP-10-15" in the captioned proceeding have been served via the Electronic Information Exchange ("EIE") this 16th day of August 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.

Office of Commission Appellate Adjudication
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: ocaamail@nrc.gov

Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Alex S. Karlin, Chair
Nicholas G. Trikouros
Paul B. Abramson

E-mail: Alex.Karlin@nrc.gov
E-mail: Nicholas.Trikouros@nrc.gov
E-mail: Paul.Abramson@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the Secretary of the Commission
Mail Stop O-16C1
Washington, DC 20555-0001
Hearing Docket
E-mail: hearingdocket@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop O-15D21
Washington, DC 20555-0001

Susan Uttal, Esq.
Lloyd Subin, Esq.
Maxwell Smith, Esq.
Catherine Kanatas, Esq.

E-mail: Susan.Utall@nrc.gov
E-mail: Lloyd.Subin@nrc.gov
E-mail: Maxwell.Smith@nrc.gov
E-mail: catherine.kanatas@nrc.gov
OGC Mail Center : OGCMailCenter@nrc.gov

Diane Curran
Harmon, Curran, Spielberg, & Eisenberg, L.L.P.
1726 M St., NW, Suite 600
Washington, DC 20036

E-mail: dcurran@harmoncurran.com

Respectfully submitted,

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

COUNSEL FOR THE PACIFIC GAS AND ELECTRIC COMPANY