UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Gregory B. Jaczko, Chairman Kristine L. Svinicki George Apostolakis William D. Magwood, IV William C. Ostendorff

In the Matter of

PACIFIC GAS AND ELECTRIC COMPANY

(Diablo Canyon Nuclear Power Plant, Units 1 and 2)

Docket Nos. 50-275-LR & 50-323-LR

CLI-11-11

MEMORANDUM AND ORDER

Today we address several matters associated with the Atomic Safety and Licensing Board's decision in LBP-10-15, which granted a request for hearing and petition to intervene filed by the San Luis Obispo Mothers for Peace (SLOMFP) concerning Pacific Gas and Electric Company's (PG&E) application to renew the operating licenses for Diablo Canyon Nuclear Power Plant Units 1 and 2 (Diablo Canyon) for an additional twenty years. For the reasons set forth below, we affirm in part, and reverse in part, the Board's decision.

I. BACKGROUND

In response to a notice of opportunity for hearing published in the *Federal Register*,² SLOMFP timely filed a request for hearing and petition for leave to intervene, submitting five

¹ LBP-10-15, 72 NRC ___ (Aug. 4, 2010) (slip op.).

² Notice of Acceptance for Docketing of the Application, Notice of Opportunity for Hearing for Facility Operating License Nos. DPR-80 and DPR-82 for an Additional 20-Year Period; Pacific Gas & Electric Company, Diablo Canyon Nuclear Power Plant, Units 1 and 2; and Order (continued ...)

proposed contentions.³ Because two of the contentions challenge certain NRC regulations, SLOMFP contemporaneously submitted a petition for waiver pursuant to 10 C.F.R. § 2.335(b).⁴

PG&E opposed the request for hearing in its entirety, arguing that SLOMFP failed to submit an admissible contention.⁵ The Staff argued that the Board should grant the request for hearing in part.⁶ Both PG&E and the Staff opposed SLOMFP's waiver petition.⁷

(... continued)

Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information (SUNSI) for Contention Preparation, 75 Fed. Reg. 3493, 3493 (Jan. 21, 2010).

³ Request for Hearing and Petition to Intervene by San Luis Obispo Mothers for Peace (Mar. 22, 2010) (Request for Hearing).

⁴ 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) (Mar. 22, 2010) (Waiver Petition). SLOMFP supported its petition with a declaration from its counsel. See Declaration by Diane Curran in Support of Petition for Waiver of 10 C.F.R. Part 51 Subpart A Appendix B and 10 C.F.R. § 51.53(c)(2) (Mar. 22, 2010) (Curran Declaration).

⁵ Applicant's Answer to Petition to Intervene and Response to Requests for Waivers (Apr. 16, 2010) (PG&E Answer).

⁶ NRC Staff's Answer to the San Luis Obispo Mothers for Peace Request for Hearing and Petition to Intervene (Apr. 16, 2010) (NRC Staff Answer).

⁷ NRC Staff's Response to the Petition for Waiver of Commission Regulations Filed by San Luis Obispo Mothers for Peace (Apr. 16, 2010) (NRC Staff Response to Waiver Petition); PG&E Answer at 3. SLOMFP filed a motion for leave to reply to the answers opposing the waiver petition. San Luis Obispo Mothers for Peace's Motion for Leave to Reply to Oppositions to Waiver Petition (Apr. 23, 2010); San Luis Obispo Mothers for Peace's Reply to Oppositions to Request for Hearing, Petition to Intervene and Waiver Petition Regarding Diablo Canyon License Renewal Application (Apr. 23, 2010) (SLOMFP Reply). PG&E and the Staff opposed the motion. NRC Staff's Response to San Luis Obispo Mothers for Peace's Motion for Leave to Reply to Oppositions to Waiver Petition (Apr. 29, 2010); Applicant's Response to Motion for Leave to Reply to Oppositions to Waiver Petition (May 3, 2010). The Board denied the motion, but requested additional briefing from SLOMFP. See Licensing Board Order (Denying Motion for Leave to File a Reply to Waiver Petition and Directing the Filing of a Brief) (May 4, 2010) at 1 (unpublished). See generally San Luis Obispo Mothers for Peace's Brief Regarding Waiver Standard (May 13, 2010).

Following a prehearing conference, the Board granted SLOMFP's hearing request.⁸ The full Board held that SLOMFP had demonstrated standing, and admitted two contentions.⁹ The Board also found that SLOMFP had made a prima facie case for a waiver with regard to a third contention, and therefore certified the matter to us in accordance with 10 C.F.R.

§ 2.335(d).¹⁰ A Board majority admitted a fourth contention; Judge Abramson dissented.¹¹

PG&E has timely filed an appeal pursuant to 10 C.F.R. § 2.311(d), arguing that the hearing request should have been wholly denied. ¹² The Staff has filed a petition for

⁸ LBP-10-15, 72 NRC (slip op. at 96).

⁹ *Id.* (slip op. at 95-96). The Board referred to us its ruling on one of these contentions and posed questions for our consideration, on the ground that the contention raises "novel legal or policy issues." *Id.* (slip op. at 69).

¹⁰ *Id.* (slip op. at 45, 96). The Board found that the contention otherwise satisfied our contention admissibility criteria, and admitted the contention subject to our ruling on the merits of the waiver petition.

¹¹ *Id.* (slip op. at 96); *id.* (slip op., Separate Opinion by Judge Abramson, Concurring in Part and Dissenting in Part, at 1-17) (Dissent). On April 12, 2011, PG&E informed the Board and the parties that it requested a delay in the "final processing" of its license renewal application, "such that the renewed operating licenses, if approved, would not be issued until after PG&E has completed [certain seismic studies] and submitted a report to the NRC addressing the results of those studies." Letter from David A. Repka, counsel for PG&E, to Administrative Judges (Apr. 12, 2011), at 1 (quoting Letter from John T. Conway, PG&E, to U.S. NRC (Apr. 10, 2011)). Staff revised its review schedule accordingly, noting that the SER would be supplemented, as necessary, considering any relevant new information from the seismic studies. The schedule for other milestones, including the draft and final Supplemental Environmental Impact Statement (SEIS), was deferred until a later date and will be based on a timeline coordinated with the expected completion of the seismic studies. Letter from Brian Holian, Director, Division of License Renewal, Office of Reactor Regulation, to PG&E (May 31, 2011). This will allow the Staff to address any new and significant information arising from PG&E's seismic studies in the SEIS. See *infra* note 177.

¹² Applicant's Notice of Appeal of LBP-10-15 (Aug. 16, 2010); Applicant's Brief in Support of Appeal from LBP-10-15 (Aug. 16, 2010) at 1 (PG&E Appeal). The Staff agrees in part, and disagrees in part, with the PG&E Appeal. See NRC Staff's Answer to Applicant's Appeal of Atomic Safety and Licensing Board Decision (LBP-10-15) (Aug. 26, 2010) at 1 (NRC Staff Answer to PG&E's Appeal). SLOMFP opposes the appeal. See San Luis Obispo Mothers for (continued ...)

interlocutory review challenging two admitted contentions.¹³ In response, PG&E observes that because it has appealed the Board's decision, "there should be no need for a Commission finding that the standards for interlocutory review have been met."¹⁴ On this point, we agree. Given that we have before us PG&E's appeal as of right, and that the Staff has filed a comprehensive answer to that appeal, we need not reach the question whether the Staff's petition is proper.

II. DISCUSSION

Section 2.311(d)(1) provides for appeals as of right on the question whether a request for hearing should have been wholly denied.¹⁵ In ruling on PG&E's appeal, we apply a deferential standard of review. That is, we will defer to the Board's rulings on contention admissibility absent an error of law or abuse of discretion.¹⁶ We discuss each contention in turn.

A. Contention TC-1

As originally submitted, the contention stated:

(... continued)

Peace's Response to Pacific Gas and Electric Company's Appeal from LBP-10-15 (Aug. 26, 2010) at 1 (SLOMFP Answer to PG&E Appeal).

¹³ See NRC Staff's Petition for Interlocutory Review of Atomic Safety and Licensing Board Decision (LBP-10-15) Admitting an Out of Scope Safety Contention and Improperly Recasting an Environmental Contention (Aug. 19, 2010).

¹⁴ Applicant's Answer in Support of the NRC Staff Petition for Interlocutory Review of LBP-10-15 (Aug. 30, 2010) at 2. See also San Luis Obispo Mothers for Peace's Response to NRC Staff's Petition for Interlocutory Review of LBP-10-15 Regarding Contentions TC-1 and EC-1 (Aug. 26, 2010) at 1.

¹⁵ 10 C.F.R. § 2.311(d)(1).

¹⁶ See, e.g., Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 336 (2009); AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 121 (2006). SLOMFP's demonstration of standing is not at issue on appeal.

The applicant, [PG&E], has failed to satisfy 10 C.F.R. § 54.29's requirement to demonstrate a reasonable assurance that it can and will "manag[e] the effects of aging" on equipment that is subject to the license renewal rule, i.e., safety equipment without moving parts. In particular, 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.¹⁷

Under section 54.29(a), an operating license may be renewed if we find, among other things, that "[a]ctions have been identified and have been or will be taken with respect to . . . managing the effects of aging during the period of extended operation on the functionality of [certain identified] structures and components." Referencing three NRC inspection reports from February and August 2009, and February 2010, SLOMFP asserted that "PG&E's aging management program is deficient because it does not discuss how it will avoid repeating the chronic and significant errors it is currently committing in the management of safety equipment at [Diablo Canyon]." SLOMFP claimed that the inspection reports "document an ongoing failure of PG&E to properly identify, evaluate, and resolve problems and manage safety equipment." SLOMFP noted that current personnel will be in place to manage aging equipment during the license renewal term. According to SLOMFP, the contention is material

¹⁷ Request for Hearing at 2.

¹⁸ 10 C.F.R. § 54.29(a)(1). The license renewal applicant must identify the structures and components subject to review in accordance with 10 C.F.R. §§ 54.4 and 54.21.

¹⁹ Request for Hearing at 3. Specifically, SLOMFP referenced the "semi-annual trend review" section of the inspection reports, each of which describes an "adverse trend in problem evaluation." *Id.* at 3-5. SLOMFP also cited five illustrative events from one of the inspection reports. *Id.* at 4-5.

²⁰ *Id.* at 3.

²¹ *Id.*

to the findings the NRC must make because "PG&E has demonstrated a consistent pattern of inadequate management of safety equipment."²²

As admitted and reframed by a majority of the Board, Contention TC-1 states:

The applicant, [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. § 54.29.²³

In its analysis, the Board majority itself formulated, and answered, what it determined to be the key legal question on which the admissibility of Contention TC-1 hinged: "whether NRC is prohibited from considering a licensee's current ongoing pattern of difficulties in managing its design basis programs and activities" when making the determination to renew the operating license under section 54.29(a).²⁴ Reviewing the regulatory history and language of sections 54.29 and 54.30, in addition to Commission precedent, the majority determined that nothing in the regulations prohibited consideration of past or current performance issues.²⁵ Additionally, the majority cited examples of situations in which we acknowledged that past or current

²² *Id.* at 5-6. Both PG&E and the Staff opposed the admission of Contention TC-1. PG&E Answer at 10; NRC Staff Answer at 15.

²³ LBP-10-15, 72 NRC ___ (slip op., Attachment A).

²⁴ *Id.* (slip op. at 79).

²⁵ *Id.* (slip op. at 80-89). The majority found the language of section 54.29(a) to support its view – in particular, the phrases "will be taken," and "will continue to be conducted," which the majority interpreted to require "*predictive* findings about what the NRC thinks the applicant will *actually do* in the future." *Id.* (slip op. at 81) (emphasis in original).

performance could inform the review of a license renewal application.²⁶ Ultimately, the majority crafted a "standard" for admitting a contention based on a license renewal applicant's past and current performance.²⁷ Applying this standard, the majority found SLOMFP's Contention TC-1 to be within the scope of the proceeding because it "focuses on the future," and relies on the inspection reports not as challenges to PG&E's current compliance, but as "'objective evidence" "that PG&E may not, in fact, adequately manage aging in the future . . . as required by [section] 54.29(a)."²⁸

The majority went on to select the findings from the inspection reports that established what it saw as the "key link" between the "pattern of management failures" and PG&E's ability to manage age-related degradation: "poor licensee management of plant design/licensing basis." The majority then reframed Contention TC-1 to focus on this "key link" by inserting the statement that "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

²⁶ See, e.g., id. (slip op. at 82) (citing Georgia Institute of Technology (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 120 (1995)); id. (slip op. at 84) (citing Final Rule, Nuclear Power Plant License Renewal, 56 Fed. Reg. 64,943, 64,952 n.1 (Dec. 13, 1991) (License Renewal Rule)).

²⁷ *Id.* (slip op. at 84). It held that "a narrow and specific contention that alleges facts, with supporting documentation, of a longstanding and continuing pattern of noncompliance or management difficulties, that are reasonably linked to whether the licensee will actually be able to adequately 'manage aging' in accordance with the current licensing basis during the [period of extended operation], can be an admissible contention under 10 C.F.R. § 54.29(a)." *Id.*

²⁸ *Id.* (slip op. at 90). The majority characterized the inspection reports as "highly credible 'objective evidence' (i.e. findings by the NRC itself that [Diablo Canyon] has a continuing adverse trend)" sufficient to rebut the general presumption that applicants will comply with NRC requirements. *Id.* (slip op. at 91). *See also id.* (slip op. at 83) (referencing *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000), and explaining that "the assumption of compliance is only an assumption, and is rebuttable").

²⁹ *Id.* (slip op. at 91).

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."³⁰

Judge Abramson dissented, stating that the majority's ruling: (1) improperly recast the contention "to address an issue not argued by SLOMFP"; (2) "misinterpreted [NRC] regulations and . . . precedent to enable a challenge to management"; and, based on these errors, (3) "admit[ted] a contention [that] does nothing more than provide 'notice' of issues [SLOMFP] intends to raise and deferring all the relevant threshold matters to [a] hearing on the merits," vitiating the "strict by design" principles of contention admissibility. According to Judge Abramson, the majority's findings are "based upon [the majority's] own detailed review of the inspection reports, and . . . unsupported by [SLOMFP's] pleadings."

On appeal, PG&E asserts that the Board erred in admitting the contention, arguing that Contention TC-1 is inadmissible because it is outside the scope of a license renewal proceeding and it fails "to demonstrate that the current adverse trend at issue gives rise to a genuine dispute regarding aging management." On both points, we agree with PG&E, and overturn the Board's ruling.

With regard to the scope of the proceeding, PG&E and the Staff argue that Contention TC-1 impermissibly raises issues that are "relevant to current plant operation" and "are being

³⁰ *Id.* (slip op. at 92) (emphasis added).

³¹ *Id.* (slip op., Dissent at 1-2).

³² *Id.* (slip op., Dissent at 3).

³³ PG&E Appeal at 2 (emphasis omitted).

addressed by the NRC's established and ongoing oversight activities."³⁴ PG&E argues that the Board majority "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."³⁵ Further, according to PG&E, there is "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."³⁶ Finally, PG&E challenges the Board's "standard" for judging current and past performance, describing it as "undefined and subjective . . . , with no basis in the license renewal rule or in the Commission's principles of license renewal."³⁷

We agree that Contention TC-1 falls outside the scope of this proceeding.³⁸ Claims of "management competence" generally relate to current operations, and Contention TC-1 is fundamentally similar to a contention that we recently rejected in the *Prairie Island* proceeding for raising current operational issues. In *Prairie Island*, we found that the Board erred in

³⁴ *Id.* at 4; NRC Staff Answer to PG&E Appeal at 3. PG&E does not dispute the Board's reading of the "predictive" nature of 10 C.F.R. § 54.29(a). PG&E Appeal at 5-6. The Staff disagrees that the Board correctly interpreted section 54.29(a) to require a "predictive" finding. NRC Staff Answer to PG&E Appeal at 3 n.11. Given that we reverse the Board's decision to admit Contention TC-1 on other grounds, we need not consider the question today.

³⁵ PG&E Appeal at 7. Thus, PG&E faults the Board majority's "willingness to consider current (or past) performance as evidence of future performance" as based on "an untenable leap in logic." *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ Our decision rests on the facts and circumstances of this case. We need not address the Board's establishment of a "standard" for contentions of this type in license renewal proceedings.

admitting a contention pertaining to the plant's "safety culture." Similar to Contention TC-1, the contention in *Prairie Island* was supported by citations to routine inspection findings made by the Staff as part of its regulatory oversight of the current operation of the plant.⁴⁰

We reversed the *Prairie Island* Board's decision to admit the contention on two grounds, one of which was that the contention improperly expanded the scope of the license renewal proceeding. We noted our unambiguous statement in the License Renewal Rule that "license renewal should not include a new, broad-scoped inquiry into compliance that is separate from and parallel to [our] ongoing compliance oversight activity." We explained that the rule was developed to exclude from review conceptual issues "such as operational history, quality assurance, quality control, *management competence*, and human factors," in favor of a safety-related review focusing on maintaining particular functions of certain physical systems, structures, and components. And we found that litigation of the "safety culture" contention in that proceeding would necessitate just such an analysis of the conceptual issues that we had excluded from review.

³⁹ Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC __ (Sept. 30, 2010) (slip op. at 2).

⁴⁰ See *id.* (slip op. at 3-5).

⁴¹ *Id.* (slip op. at 10) (quoting License Renewal Rule, 56 Fed. Reg. at 64,952).

⁴² *Id.* (slip op. at 10-11) (emphasis added). *See also Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC __ (slip op. at 4-8, 14-18) (June 17, 2010) (explaining the scope of license renewal safety review).

⁴³ Prairie Island, CLI-10-27, 72 NRC __ (slip op. at 11). See also Final Rule, Nuclear Power Plant License Renewal; Revisions, 60 Fed. Reg. 22,461, 22,485 (May 8, 1995).

Our reasoning in *Prairie Island* squarely applies here. Contention TC-1 improperly raises issues that are beyond the scope of a license renewal proceeding.⁴⁴ The matters identified in the inspection reports are subject to the Staff's regulatory oversight process for operating reactors. Litigation of the contention necessarily would involve review of the adequacy of PG&E's efforts to address the current operational issues identified in the reports. This is precisely the type of duplicative review that appropriately is excluded from a license renewal proceeding; we need not revisit our well-established, ongoing compliance oversight activities.

Perhaps more important, the contention fails to demonstrate the existence of a genuine dispute with the application. PG&E argues that SLOMFP "did not identify or address any particular aspect of the license renewal application, the integrated plant assessment, the aging management review, or an [aging management program]."⁴⁵ In short, PG&E asserts that SLOMFP did not offer any support "to establish a nexus between management of the design and licensing bases and the issues relevant to Part 54."⁴⁶ We agree. SLOMFP makes generalized assertions that current management personnel will be in place during the period of extended operation, and that aging issues are more "difficult to manage" than current issues. But SLOMFP offers no explanation how its assertions are directly relevant to PG&E's ability to manage the effects of aging during the renewal term.⁴⁷ SLOMFP provides no support – specific

⁴⁴ See 10 C.F.R. § 2.309(f)(1)(iii).

⁴⁵ PG&E Appeal at 12.

⁴⁶ *Id.*

⁴⁷ The majority's reliance on the *Georgia Tech* case is misplaced. *See* LBP-10-15, 72 NRC __ (slip op. at 82). *Georgia Tech* involved renewal of a research and test reactor license under Part 50, and Part 54 does not apply to research and test reactors. *See* 10 C.F.R. § 54.1 (continued ...)

facts, references, or expert opinion – for its proposition that continuity of plant personnel will lead to safety issues in the period of extended operation. Moreover, SLOMFP challenges no aspect of the license renewal application.

A statement made by SLOMFP's counsel at the prehearing conference highlights the lack of support in SLOMFP's petition. Counsel argued that Contention TC-1 focuses on the execution of PG&E's plans to manage aging, but counsel failed to identify problems with current management and explain how, in turn, those unidentified problems might undermine one or more of PG&E's proposed aging management programs:

Ms. Curran: Where a company has repeated problems with the execution, perhaps that's a problem with the program. I'm not sure what it is. At this point, we see the pattern. Perhaps it's a problem with the description of the program or some instruction in the program that's overlooked. Perhaps it's a problem with training. Perhaps – I don't know what causes this. It just keeps repeating itself. And that is – that is the question. If it's repeating itself now under these circumstances, will it not repeat itself under more – under the greater duress of the license renewal term?⁴⁸

(... continued)

(explaining that Part 54 "governs the issuance of renewed operating licenses and renewed combined licenses for nuclear power plants licensed pursuant to Sections 103 or 104b of the Atomic Energy Act of 1954, as amended, and Title II of the Energy Reorganization Act of 1974"); License Renewal Rule, 56 Fed. Reg. at 64,962 ("Nonpower reactors, including research and test reactors, . . . differ as a class from nuclear power plants; they are not covered by 10 CFR part 54."). Rather than the limited scope of review called for under Part 54, renewal of a license for a research reactor is essentially a fresh operating license review. See 10 C.F.R. §§ 50.33, 50.34. See generally NUREG-1537, Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors, Parts 1 and 2 (Feb. 1996) (ADAMS Accession Nos. ML042430055, ML042430048). In addition, in upholding the Georgia Tech Board's decision to admit a "management integrity" contention, the Commission relied upon specific supporting information, including references to a serious incident involving the shutdown of the reactor, the fact that the management responsible for the incident remained in place, a purported climate of reprisals for bringing forward safety issues, "and, significantly, [a referencel to at least one expert witness in support of the contention." Georgia Tech, CLI-95-12, 42 NRC at 118-22. Such specific, supported assertions are not present here. See SLOMFP Request for Hearing at 3; SLOMFP Reply Regarding Hearing Request at 2.

⁴⁸ Tr. at 55-56.

SLOMFP would have us guess as to the nature of the deficiencies in PG&E's plans to manage aging, and hypothesize as to how such purported deficiencies might affect the reasonable assurance finding in section 54.29(a). Instead, the Board majority itself improperly sought to establish a nexus between the license renewal application and some aspect of the referenced inspection reports.⁴⁹ And, as Judge Abramson suggested, the majority would have us wait until the hearing on the merits before these issues are explored in further detail.⁵⁰ But in the context of an adjudicatory proceeding, our contention admissibility rules require that contentions be raised with sufficient detail to put the parties on notice of the issues to be litigated.⁵¹ Contention TC-1 falls far short of this standard. Accordingly, we find that the Board erred in admitting Contention TC-1.

Finally, we do not take lightly claims questioning the ability of plant management to safely operate the facility. To the extent SLOMFP believes there are existing management competence questions at Diablo Canyon that merit immediate action, then its remedy is to direct the Staff's attention to those matters by filing a request for action in accordance with 10 C.F.R. § 2.206.⁵²

⁴⁹ See Crow Butte Resources, Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 552-53 (2009) (stating that "[o]ur contention pleading rules are designed to ensure . . . that only well-defined issues are admitted for hearing," and that "a board should not add material not raised by a petitioner in order to render a contention admissible"); Andrew Siemaszko, CLI-06-16, 63 NRC 708, 720-21 (2006) ("The [b]oard must not redraft an inadmissible contention to cure deficiencies and thereby render it admissible."). See also Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991).

⁵⁰ See LBP-10-15, 72 NRC __ (slip op., Dissent at 2).

⁵¹ See 10 C.F.R. § 2.309(f)(1)(v), (vi).

⁵² See Prairie Island, CLI-10-27, 72 NRC ___ (slip op. at 13).

B. Contention EC-1

As admitted by the Board, Contention EC-1 states:

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).⁵³

In its hearing request SLOMFP argued that the SAMA analysis in PG&E's Environmental Report is deficient because it fails to discuss the Shoreline Fault⁵⁴ – a recently identified fault located offshore of Diablo Canyon.⁵⁵ Considering that fire and seismic severe accident contributors identified in the SAMA analysis are "disproportionately dominant when compared to all external events," SLOMFP asserted that PG&E's SAMA analysis is incomplete without considering information concerning the Shoreline Fault.⁵⁶ Specifically, SLOMFP asserted that the Staff's ability to satisfy its NEPA obligations will be undermined if PG&E either fails to include seismic information from the Shoreline Fault in its SAMA analysis, or if PG&E, in

⁵³ LBP-10-15, 72 NRC __ (slip op., Attachment A). See also Request for Hearing at 8. Section 51.53(c)(3)(ii)(L) requires a license renewal applicant to provide a SAMA analysis "if the [S]taff has not previously considered severe accident mitigation alternatives" for the subject plant.

⁵⁴ Request for Hearing at 13.

⁵⁵ Diablo Canyon Power Plant, License Renewal Application, Appendix E, Environmental Report, at 5-4 (Environmental Report). PG&E notified the NRC Staff of the discovery of the fault on November 14, 2008. *Id. See also* Research Information Letter 09-001: Preliminary Deterministic Analysis of Seismic Hazard at Diablo Canyon Nuclear Power Plant from Newly Identified "Shoreline Fault" (Apr. 8, 2009) (ML090330523).

⁵⁶ Request for Hearing at 12-14 (quoting Environmental Report, Attachment F, at F-65).

omitting the information, fails to explain its absence and justify that the overall costs of obtaining it are "exorbitant." ⁵⁷

SLOMFP claimed that, while the Shoreline Fault is mentioned in the Environmental Report, the discussion is limited to a description of PG&E's and the Staff's preliminary deterministic analyses regarding the impact of the fault on the current operability of the plant, and fails to specify that the Shoreline Fault is the subject of ongoing studies being conducted by PG&E and the United States Geological Survey.⁵⁸ According to SLOMFP, PG&E's preliminary deterministic analyses are insufficient for the purposes of the SAMA analysis because they were conducted for the purpose of evaluating the impact of the fault on current operations, and a probabilistic risk assessment (PRA), rather than a deterministic analysis, is the "accepted and standard practice in SAMA analyses." Relying on 40 C.F.R. § 1502.22, a Council on Environmental Quality (CEQ) regulation, SLOMFP thus argued that a "probabilistic analysis of the risks posed by the Shoreline Fault is 'essential' to the SAMA, and must be included unless

⁵⁷ *Id.* at 13-16 (citing 40 C.F.R. § 1502.22).

⁵⁸ *Id.* at 13 (citing Environmental Report at 5-2, 5-4 to 5-5).

⁵⁹ *Id.* at 14 (quoting *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 340 (2006). At the prehearing conference, there appeared to be some confusion as to whether we have ruled that a probabilistic risk assessment is standard practice in SAMA analyses. *See* Tr. at 145, 192. To clear up any confusion, we have not considered the question whether a probabilistic risk assessment, as a general matter, is the only "accepted and standard practice in SAMA analyses." On a related note, the record also appears to reflect some confusion among the Board and the parties regarding the technical terminology associated with seismic probabilistic risk assessments and SAMA analyses, and the relationship between the two concepts. For example, at the prehearing conference the Board appeared to be using the terms "PRA" and "SAMA analysis" interchangeably. *See, e.g.*, Tr. at 137-38. We mention this to ensure that technical terminology is used in a precise and consistent manner.

the cost is exorbitant."⁶⁰ Further, SLOMFP questioned PG&E's ability to justify the exclusion of the information, suggesting that "the only cost of obtaining the information is the cost of waiting for completion of the Shoreline Fault study," which SLOMFP projected to "be available by 2013 at the latest."⁶¹ PG&E opposed the admission of Contention EC-1 in its entirety.⁶² The Staff opposed the contention in part, but did not object to its admission to the extent that the SAMA analysis prepared by PG&E does not include a discussion of the Shoreline Fault.⁶³

The Board admitted Contention EC-1 as a "contention of omission."⁶⁴ The Board acknowledged SLOMFP's arguments regarding the need for a probabilistic risk assessment of the Shoreline Fault and the Staff's identification of areas requiring additional information.⁶⁵ The Board explained, however, that at the contention admissibility stage, "[i]t is simply not appropriate for us to here decide what additional information (whether a [probabilistic risk assessment] or the items listed by the Staff), if any, is necessary to cure the [claimed] deficiency

⁶⁰ Request for Hearing at 14 (citing 40 C.F.R. § 1502.22, which pertains to inclusion in an EIS of incomplete or unavailable information relevant to "reasonably foreseeable significant adverse impacts").

⁶¹ *Id.* at 14-15. Given that Diablo Canyon's operating licenses are not due to expire until 2024 and 2025, SLOMFP asserted that PG&E has sufficient time to conduct a SAMA analysis that takes into account the information on the Shoreline Fault study. *Id.* at 15.

⁶² See PG&E Answer at 13-21.

⁶³ See NRC Staff Answer at 26-34.

⁶⁴ LBP-10-15, 72 NRC ___ (slip op. at 25).

⁶⁵ See *id.* (slip op. at 23). According to the Staff, there are three areas requiring additional information: "(1) The potential impact of the Shoreline Fault on the seismic core damage frequency (CDF) and off-site consequences; (2) If the revised CDF estimate and consequences are higher, how the use of the higher CDF affects the SAMA analysis; and (3) The Applicant's search for any equipment or structure failures not previously identified that relate specifically to mitigating the potential risk associated with the Shoreline Fault." NRC Staff Answer at 29.

and to satisfy 40 C.F.R. § 1502.22, NEPA, and 10 C.F.R. § 51.53(c)(3)(ii)(L)."⁶⁶ For the Board, it was enough that SLOMFP:

- (1) cited the section 51.53(c)(3)(ii)(L) requirement that PG&E provide a SAMA analysis;
- (2) cited 40 C.F.R. § 1502.22 for the proposition that "complete information" is required unless its omission is justified;
- (3) noted PG&E's statement that fire and seismic events are disproportionately dominant in its SAMA analysis;
- (4) noted there is no mention of the Shoreline Fault in PG&E's SAMA analysis;
- (5) referenced the preliminary nature of the deterministic assessment that had been conducted for the analysis of the current operability of the plant;
- (6) claimed that a probabilistic risk assessment, as opposed to a deterministic assessment, is the "preferred" approach for SAMA analyses; and
- (7) asserted that ongoing studies of the Shoreline Fault are slated to provide additional information about the fault by 2013.⁶⁷

Distinguishing its contention admissibility ruling from a merits decision, the Board explained that it "determine[d] only that SLOMFP has raised a material issue under NEPA, not whether its position is correct." Accordingly, the Board narrowed the contention to exclude SLOMFP's "adequacy" arguments. 69

On appeal, PG&E maintains that SLOMFP has not raised a genuine dispute with the SAMA analysis because it has not called into question either the validity of PG&E's assessment

⁶⁶ LBP-10-15, 72 NRC __ (slip op. at 24).

⁶⁷ See *id.* (slip op. at 19-25).

⁶⁸ *Id.* (slip op. at 21).

⁶⁹ *Id.* (slip op. at 25).

of seismic risk, or PG&E's evaluation of the uncertainty in its analysis.⁷⁰ Rather, PG&E asserts, the Board improperly credits the Staff's and SLOMFP's mistaken claim that there is an "omission" in the SAMA analysis.⁷¹ In PG&E's view, Contention EC-1 is an "adequacy" challenge, and so framed, must provide sufficient support "to show that PG&E's SAMA analysis does not bound the effects of the Shoreline Fault." PG&E also asserts that the Board erred in basing its admissibility determination on 40 C.F.R. § 1502.22 because the NRC, having not expressly adopted that CEQ regulation, is not bound by it.⁷³

The Staff does not oppose the admissibility of the narrowed version of the contention admitted by the Board.⁷⁴ In the Staff's view, the contention is material to the findings it must make under 10 C.F.R. § 51.53(c)(3)(ii)(L) because PG&E's Environmental Report omits a discussion of "how or whether PG&E's [Environmental Report] considered the effects of the Shoreline Fault in deriving the SAMA analysis." Moreover, the Staff asserts, "PG&E's bounding arguments go to the merits in scoping the SAMA, not on what was considered for

⁷⁰ PG&E Appeal at 15-18.

⁷¹ *Id.* at 15 & n.9. See *also id.* at 16 (stating that "[f]or contention admissibility purposes, 'preliminary' information is not the same as 'omitted' information").

⁷² *Id.* at 15.

⁷³ *Id.* at 18 & n.11. Furthermore, asserts PG&E, even if 40 C.F.R. § 1502.22 were binding on the NRC, it does not apply in this proceeding because SLOMFP has not shown that information about the Shoreline Fault is "essential to a reasoned choice among alternatives," or in other words, "essential" to the SAMA analysis. *Id.* at 18 (quoting 40 C.F.R. § 1502.22(a)) (emphasis omitted).

⁷⁴ NRC Staff Answer to PG&E Appeal at 5-6. The Staff disagrees with PG&E regarding the existence of an omission. See *id.* at 7 (stating that "where, as here, the Applicant has failed to include relevant information in a SAMA analysis, the Staff is of the view that such omissions must be subject to challenge for 10 C.F.R. § 51.53(c)(3)(ii)(L) to have any meaning").

⁷⁵ *Id.* at 5-6.

purposes of NEPA's hard-look consideration."⁷⁶ However, the Staff agrees with PG&E that 40 C.F.R. § 1502.22 is not binding on the NRC.⁷⁷

We decline to disturb the Board's decision to admit Contention EC-1. The Board's decision highlights its thorough, methodical application of the six contention admissibility factors under 10 C.F.R. § 2.309(f)(1). PG&E has not shown that the Board committed reversible error. However, as discussed below, we reformulate the contention to the extent it would make 40 C.F.R. § 1502.22 binding on the NRC.

PG&E cites two of our decisions in support of its argument that SLOMFP failed to raise a genuine dispute with the SAMA analysis. PG&E quotes a recent *Pilgrim* decision for the proposition that "the key consideration in determining materiality of a SAMA contention is whether it purports to show that an 'additional SAMA should have been identified as potentially cost-beneficial," and notes that SLOMFP did not "posit any new SAMA to be considered" or point to an already-identified SAMA that might become cost-beneficial after addressing the Shoreline Fault. But our decision in *Pilgrim* involved a request for additional briefing on a grant of summary disposition, which is a merits determination. Our statement regarding the "materiality" of the contention should be read in the context of the issue involved in that case, which was whether the intervenor raised a genuine material dispute for the purposes of

⁷⁶ *Id.* at 6.

⁷⁷ *Id.* at 7-8.

⁷⁸ PG&E Appeal at 16 (quoting *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009)) (emphasis omitted).

⁷⁹ *Id.* at 17.

⁸⁰ See Pilgrim, CLI-09-11, 69 NRC at 533.

surviving summary disposition – a more rigorous evidentiary showing than that required to establish an admissible contention.⁸¹

PG&E likewise reads our decision in *Catawba/McGuire* out of context. PG&E argues that the decision stands for the proposition that "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." But in *Catawba/McGuire*, our statement that "the [p]etitioners have done nothing to indicate the approximate relative cost and benefit of the SAMA," was in direct response to the portion of the contention at issue in that proceeding – there, unlike here, the petitioner had asserted that a particular mitigation alternative should have been included in the applicant's SAMA analysis.⁸³ It does not follow that in every proceeding in which a SAMA-related contention is filed, the contention must be

⁸¹ See Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2190 (Jan. 14, 2004) ("The contention standard does not contemplate a determination of the merits of a proffered contention."). See also Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989) ("[A]t the contention filing stage the factual support necessary to show that a genuine dispute exists need not be in affidavit or formal evidentiary form and need not be of the quality necessary to withstand a summary disposition motion.").

⁸² PG&E Appeal at 16 (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 11-12 (2002)).

⁸³ Catawba/McGuire, CLI-02-17, 56 NRC at 12. See also SLOMFP Answer to PG&E Appeal at 7. The contention at issue in Catawba/McGuire was a consolidated version of three proposed contentions. One of the bases for this consolidated contention related to the consideration of a particular mitigation alternative. Catawba/McGuire, CLI-02-17, 56 NRC at 5-6 & n.9. We found that portion of the contention inadmissible for lack of support. *Id.* at 11. As discussed below, the remaining portion of the contention, which challenged the failure of the applicant to consider information from a study in its SAMA analysis, was admitted. *Id.* at 6-11. See infra notes 86-91 and accompanying text.

supported in exactly the same way. The support required for a contention necessarily will depend on the issue sought to be litigated.⁸⁴

Much is made by PG&E as to whether the contention is properly characterized as one of "omission" or "adequacy." Contrary to PG&E's view, however, characterizing Contention EC-1 as a contention of "omission" or "adequacy" does not – in this case – answer the question whether the contention is admissible. SLOMFP provides support for its view that information on the Shoreline Fault should be included, thus, whether a contention of "omission" or of "adequacy," EC-1 is sufficiently supported for the purposes of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

As SLOMFP points out, its contention is comparable to one that we found admissible in Catawba/McGuire.⁸⁶ There, we affirmed the board's decision with regard to the portion of the admitted contention in which the petitioner asserted that the applicant failed to consider the results of a particular study in its SAMA analysis.⁸⁷ The petitioner had focused on the conclusions of the study, highlighting a discrepancy in the conclusions reached by the applicant.⁸⁸ Thus, we found that the contention "raise[d] a question about whether information from the . . . study should have been utilized or otherwise addressed in [the] SAMA analysis."⁸⁹ Moreover, we rejected the applicant's arguments that were focused on the superiority of its analyses over those in the study – arguments that we found the board appropriately had left for

⁸⁴ See 10 C.F.R. § 2.309(f)(1)(v), (vi).

⁸⁵ See PG&E Appeal at 15-16.

⁸⁶ See SLOMFP Answer to PG&E Appeal at 7; Catawba/McGuire, CLI-02-17, 56 NRC at 7.

⁸⁷ Catawba/McGuire, CLI-02-17, 56 NRC at 8.

⁸⁸ *Id.*

⁸⁹ *Id.*

the hearing on the merits.⁹⁰ We explained that "for an admissible contention the [p]etitioners did not have to prove outright that [the] SAMA analysis was deficient." For reasons similar to those stated in *Catawba/McGuire*, and for the reasons provided by this Board in its thorough contention admissibility analysis, we find that SLOMFP has raised a genuine dispute as to whether information from the Shoreline Fault should be addressed in PG&E's SAMA analysis. ⁹² As the Board noted, it might be that a bounding deterministic analysis would be sufficient. ⁹³ But for the purposes of contention admissibility, we do not consider the merits of SLOMFP's arguments.

However, the Board erred in its reformulation of Contention EC-1, to the extent that it would make 40 C.F.R. § 1502.22 binding on the NRC. We look to CEQ regulations for

⁹⁰ *Id.* at 9.

⁹¹ *Id.*

⁹² See LBP-10-15, 72 NRC ___ (slip op. at 19-25). Contrary to PG&E's suggestion, we do not read the Board's decision as requiring PG&E and the Staff to complete the ongoing Shoreline Fault studies before EC-1 may be resolved. See PG&E Appeal at 19. The Board expressly distinguished SLOMFP's assertion "that any examination [of the Shoreline Fault] would be insufficient until the results are available from . . . ongoing studies" as a matter that is not to be determined at this stage of the proceeding. LBP-10-15, 72 NRC ___ (slip op. at 25). Thus, we understand the Board's designation of EC-1 as a contention of omission as a means to limit its scope. The contention in Catawba/McGuire similarly was framed as a contention of omission, to distinguish between that petitioner's claim that the applicant's SAMA analysis should have discussed a particular study, and the petitioner's later claim that the discussion, once provided, was inadequate. See Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382 (2002). If SLOMFP intends to challenge the adequacy of any information that PG&E provides in a revision or supplement to its license renewal application regarding the Shoreline Fault, it must submit a new or amended contention. See id.

⁹³ See LBP-10-15, 72 NRC __ (slip op. at 21).

guidance, including section 1502.22.⁹⁴ But our longstanding policy is that the NRC, as an independent regulatory agency, "is not bound by those portions of CEQ's NEPA regulations" that, like section 1502.22, "have a substantive impact on the way in which the Commission performs its regulatory functions." Consistent with our ruling, we restate Contention EC-1 as follows:

PG&E's Severe Accident Mitigation Alternatives [(SAMA)] analysis fails to consider information regarding the Shoreline fault that is necessary for an understanding of seismic risks to the Diablo Canyon nuclear power plant. As a result, 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).

C. Contention EC-2

As narrowed by the Board, Contention EC-2 states:

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 [Diablo Canyon]. 96

The Board admitted Contention EC-2 on a conditional basis, pending our ruling on the merits of SLOMFP's petition for waiver of NRC regulations that otherwise would preclude consideration of

⁹⁴ See Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 235-36 & n.115 (2007) (citing section 1502.22, noting that "[t]he CEQ has . . . recognized that information may be unavoidably incomplete or unavailable, and that under those circumstances, a [final environmental impact statement] can overcome this deficiency if it states that fact, explains how the missing information is relevant, sets forth the existing information, and evaluates the environmental impacts to the best of the agency's ability"). See also Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-880, 26 NRC 449, 460-61 (1987).

⁹⁵ Final Rule, Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9352 (Mar. 12, 1984). *See also* 10 C.F.R. § 51.10(a).

⁹⁶ LBP-10-15, 72 NRC ___ (slip op., Attachment A).

the contention in this adjudicatory proceeding.97

The NRC's regulatory review process for license renewal divides the environmental review into two parts: those issues deemed appropriate for generic analysis, and those warranting a site-specific environmental impact assessment. Issues found not to require a plant-specific environmental analysis are designated "Category 1" issues. For "Category 1" issues, the NRC's Generic Environmental Impact Statement (GEIS) for license renewal provides a generic environmental analysis – generally applicable either to all plants, or to a distinct subcategory of plants. Because "Category 1" issues already have been reviewed on a generic basis, an applicant's Environmental Report need not provide a site-specific analysis of these issues. Pa selevant here, the potential environmental impact of storing spent fuel in pools for an additional twenty years – including the risk of spent fuel pool accidents – has been addressed generically in the GEIS, and is designated as a "Category 1" issue. The Staff concluded that the environmental impacts of spent fuel storage will be small for all plants. Consequently, Appendix B of Part 51, Subpart A, incorporates the GEIS conclusion that the impacts will be small, and section 51.53(c) provides that a license renewal applicant need not

⁹⁷ *Id.* (slip op. at 96). See also 10 C.F.R. § 2.335(a).

⁹⁸ See generally NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Final Report, Vol. 1 (May 1996) at 1-5 to 1-11 (ML040690705). The GEIS conclusions on the environmental impacts of "Category 1" issues are codified in Table B-1, 10 C.F.R. Part 51, Appendix B to Subpart A.

⁹⁹ See 10 C.F.R. § 51.53(c)(3)(i). License renewal applicants must provide a plant-specific analysis of those issues designated as "Category 2" issues. See 10 C.F.R. § 51.53(c)(3)(ii).

¹⁰⁰ GEIS at 6-85 to 6-86.

provide a site-specific analysis of the environmental impacts of spent fuel storage in its environmental report.

In its request for hearing, SLOMFP argued that PG&E must provide a site-specific analysis of the environmental impacts of spent fuel pool storage. Recognizing that a site-specific analysis is not required by regulation, SLOMFP contemporaneously sought a waiver of 10 C.F.R. Part 51, Subpart A, Appendix B, and 10 C.F.R. § 51.53(c)(2).

According to SLOMFP, the 2009 draft revision to the GEIS provides "new and significant" information that is relevant to the Diablo Canyon site. SLOMFP references the Draft Revised GEIS discussion of a 2001 technical study of the risk of spent fuel pool accidents

101 Request for Hearing at 19.

statement], respectively," rather than 10 C.F.R. § 51.53(c)(2). NRC Staff's Brief in Opposition to Waiver of 10 C.F.R. §§ 51.53(c)(2) and 10 C.F.R. Part 51, Subpart A, Appendix B as to Contention EC-2 (Sept. 24, 2010) at 11 n.43 (errata filed Sept. 28, 2010) (NRC Staff Initial Brief). SLOMFP agrees, and in its reply brief before us, adds to its request 10 C.F.R. §§ 51.53(c)(3) and 51.95(c). See San Luis Obispo Mothers for Peace's Reply Brief Regarding the NRC's Duty to Waive 10 C.F.R. § 51.53(c)(2) and 10 C.F.R. Part 51 Subpart A, Appendix B (Oct. 15, 2010) at 2-3 n.1 (SLOMFP Reply Brief). For the reasons stated below, we deny the request for waiver to the extent it also would include sections 51.53(c)(3) and 51.95(c).

¹⁰² See *id.* at 19; Waiver Petition at 1-2. In briefing the waiver issue, the Staff posits that "[p]resumably SLOMFP meant to challenge 10 C.F.R. §§ 51.53(c)(3) and 51.95(c), which apply the findings in Table B-1 to the [Environmental Report] and [supplemental environmental impact

¹⁰³ See Request for Hearing at 19; Waiver Petition at 1. See generally NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Draft Report for Comment, Vols. 1 and 2, Rev. 1 (July 2009) (ML091770049, ML091770048) (Draft Revised GEIS). The Draft Revised GEIS has been issued for public comment. See Proposed Rule, Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 74 Fed. Reg. 38,117 (July 31, 2009); 74 Fed. Reg. 51,222 (Oct. 7, 2009) (extending comment period). SLOMFP submitted comments on the Draft Revised GEIS. Letter from San Luis Obispo Mothers for Peace, to Secretary, U.S. NRC (Jan. 12, 2010) (ML100150092) (SLOMFP Comments).

at plants undergoing decommissioning.¹⁰⁴ This "Decommissioning Study" was completed after the issuance of the 1996 GEIS, and the Draft Revised GEIS references it as the "key document" with regard to the additional analyses of spent fuel pool accident risk that have been conducted since the GEIS was issued.¹⁰⁵ Describing the analysis in the Decommissioning Study, the Draft Revised GEIS notes that the study excluded Diablo Canyon (as well as two other plants) in its analysis of seismic initiating events for spent fuel pool accidents.¹⁰⁶ Although the Draft Revised GEIS ultimately concludes that "the environmental impacts stated in the 1996 GEIS bound the impact from [spent fuel pool] accidents"¹⁰⁷ – i.e., that the impacts of spent fuel storage are small – SLOMFP claims that this conclusion does not apply to Diablo Canyon because the seismic risk evaluation in the Decommissioning Study excludes Diablo Canyon.¹⁰⁸

In performing the site-specific analysis that SLOMFP claims is required, SLOMFP argues that PG&E should consider in its Environmental Report "a complete analysis of the potential for a pool fire at Diablo Canyon[,] . . . [with] a full spectrum of potential causes, including seismic contributors." In addition, SLOMFP argues that PG&E's Environmental

¹⁰⁴ See Request for Hearing at 16 (citing Draft Revised GEIS § E.3.7, at E-33 to E-34); NUREG-1738, Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants (Feb. 2001) (ML010430066) (Decommissioning Study).

¹⁰⁵ Draft Revised GEIS at E-33.

¹⁰⁶ *Id.* at E-33 n.(a).

¹⁰⁷ *Id.* at E-37.

¹⁰⁸ Request for Hearing at 17.

¹⁰⁹ *Id.* at 18.

Report should provide a complete analysis of the impacts of a spent fuel pool fire, as well as address alternatives for avoiding or mitigating those impacts. 110

SLOMFP asserts that it meets the requirements for a waiver under 10 C.F.R. § 2.335(b) because: (1) the Draft Revised GEIS "contains significant new information demonstrating that [Diablo Canyon] has unique seismic characteristics that resulted in its exclusion" from the Decommissioning Study; (2) "the NRC relied on analyses and mitigation measures that are site-specific" for its generic conclusion that the environmental impacts of spent fuel storage are small; and (3) the NRC's generic analysis lacks adequate support "because it fails to provide references to support its conclusion or to show that it has fully complied with its obligations to disclose all publicly releasable information on which it relies."

Therefore, SLOMFP argues, the purpose of the regulations that preclude the litigation of a site-specific analysis of the environmental impacts of spent fuel pool storage would not be served.

The Board concluded that SLOMFP made the requisite prima facie showing for waiver of the rules, such that the Board certified the matter to us for a determination whether, in the context of this proceeding, the application of the rules should be waived, or an exception

¹¹⁰ *Id.* at 19.

¹¹¹ Waiver Petition at 1-2. See also Curran Declaration ¶¶ 5, 7, 10, 12.

¹¹² Waiver Petition at 1. In her declaration, Ms. Curran also asserts that: (1) the Draft Revised GEIS "concedes, for the first time, that the NRC does not have an adequate technical basis for reaching any conclusions about the environmental impacts of an earthquake at [Diablo Canyon]"; (2) Diablo Canyon's exclusion from the Decommissioning Study is consistent with the conclusion in PG&E's SAMA analysis that seismic risk contributors are disproportionately dominant when compared to all external events; (3) "the economic consequences of a pool fire could be particularly high for California . . ."; and (4) the NRC Staff does not indicate in the Draft Revised GEIS that it considered seismic issues. See Curran Declaration ¶¶ 5-8, 10.

made.¹¹³ Applying the factors that we laid out in *Millstone* in 2005,¹¹⁴ the Board concluded that: (1) SLOMFP has raised a material question as to whether, in light of current available knowledge, the generic treatment of spent fuel pool impacts should be strictly applied in this case; (2) SLOMFP has made at least a prima facie showing that special circumstances exist at Diablo Canyon that render the generic conclusions inapplicable to Diablo Canyon with regard to seismically-induced spent fuel pool accidents; (3) the special circumstances that are the basis of the request are unique to Diablo Canyon; and (4) "EC-2 raises new and significant information that may constitute a 'significant' NEPA-related issue." The Board went on to consider the admissibility of Contention EC-2, and found that EC-2 satisfied our contention admissibility criteria. ¹¹⁶

¹¹³ LBP-10-15, 72 NRC __ (slip op. at 40); 10 C.F.R. § 2.335(d). The Board, on its own initiative, included the waiver of 10 C.F.R. § 51.23 in its certification. LBP-10-15, 72 NRC __ (slip op. at 40 n.50). As in other contexts, we discourage licensing boards from adding material to bolster a petitioner's or party's arguments or pleadings. See, e.g., Palo Verde, CLI-91-12, 34 NRC at 155-56 (contention admissibility); Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1, 4-5 (1986) (motion to reopen); Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-915, 29 NRC 427, 432 (1989) (motion to reopen). See also infra note 133.

¹¹⁴ Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559-60 (2005).

¹¹⁵ LBP-10-15, 72 NRC __ (slip op. at 41-44).

because the contention fails to meet the requirements of 10 C.F.R. § 2.309(f)(1), and, in any event, the Board committed procedural error by not awaiting our ruling on the merits of the waiver petition before ruling on the contention's admissibility. PG&E Appeal at 21-27 & n.16. PG&E references language in section 2.335(d) that the presiding officer "shall, before ruling on the petition, certify the matter directly to the Commission," to support its argument that the Board incorrectly ruled on the admissibility of EC-2 in conjunction with the waiver petition. *Id.* at 21 n.16. The Staff agrees with PG&E. See NRC Staff Answer to PG&E Appeal at 9-10 & n.46. In our view, however, the plain language of the provision as a whole supports an interpretation that the use of the term "petition" in this section refers to the waiver petition, not a petition to intervene, as PG&E would have it. *See generally* 10 C.F.R. § 2.335. *Cf.* 10 C.F.R. § 2.758(d) (continued ...)

Upon receipt of the Board's decision, the Secretary of the Commission invited the parties to brief the waiver issue. PG&E, SLOMFP, and the Staff timely filed initial and responsive briefs. 118

Section 2.335(b) provides an exception to the general rule that our regulations are not subject to challenge in adjudicatory proceedings. In accordance with this section, a party to an adjudicatory proceeding may petition for a waiver of "a specified Commission rule or regulation or any provision thereof." 119 "The sole ground for petition of waiver or exception is that special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation (or a provision of it) would not serve the purposes for which [it] was adopted." 120 In order to meet this standard, the party seeking a waiver must attach an affidavit that, among other things, "state[s] with particularity the special circumstances [claimed]

(... continued)

(2004) (stating, in a prior version of the rule, that "[i]f on the basis of the petition, affidavit and any response provided for in paragraph (b) of this section, the presiding officer determines that such a prima facie showing has been made, the presiding officer shall, *before ruling thereon*, certify the matter directly to the Commission") (emphasis added). We find no clear procedural error in the Board's ruling on the admissibility of Contention EC-2 in conjunction with its certification of the waiver matter.

¹¹⁷ Order (Aug. 31, 2010) (unpublished). See 10 C.F.R. § 2.335(d) (permitting the Commission to "direct further proceedings as it considers appropriate to aid its determination").

¹¹⁸ Applicant's Brief in Opposition to a Waiver for Contention EC-2 (Sept. 24, 2010) (PG&E Initial Brief); NRC Staff Initial Brief; San Luis Obispo Mothers for Peace's Brief Regarding the NRC's Duty to Waive 10 C.F.R. § 51.53(c)(2) and 10 C.F.R. Part 51 Subpart A, Appendix B, in Order to Allow Consideration of Environmental Impacts of Earthquakes on Spent Fuel Pool Storage at the Diablo Canyon Nuclear Power Plant (Sept. 24, 2010) (errata filed Sept. 27, 2010) (SLOMFP Initial Brief); Applicant's Reply Brief in Opposition to a Waiver for Contention EC-2 (Oct. 15, 2010); NRC Staff's Reply Brief in Opposition to Waiver of 10 C.F.R. § 51.53(c)(2) and 10 C.F.R. Part 51, Subpart A, Appendix B as to Contention EC-2 (Oct. 15, 2010); SLOMFP Reply Brief.

¹¹⁹ 10 C.F.R. § 2.335(b).

¹²⁰ *Id*.

to justify the waiver or exception requested."¹²¹ Upon consideration of the filings before the Board and before us, we find that SLOMFP's waiver petition and attached declaration lack the requisite detail and support to justify a waiver in this proceeding, and therefore decline to grant the waiver. SLOMFP's general claims that new information in the Decommissioning Study "undermines" the 1996 GEIS go to the heart of the rulemaking to update the GEIS, and will be considered by the Commission in that process.

In order to waive the generic assessment in our regulations to permit adjudication of issues involving the environmental impact of spent fuel pool accidents in this license renewal proceeding, we must conclude that (i) the rule's strict application would not serve the purpose for which it was adopted; (ii) SLOMFP has asserted "special circumstances" that were "not considered, either explicitly, or by necessary implication," in the rulemaking proceeding leading to the rule sought to be waived; (iii) those circumstances are unique to the facility, rather than "common to a large class of facilities"; and (iv) a waiver of the rule is necessary to reach a "significant" safety problem. Our analysis begins and ends with the first factor. We find that SLOMFP's waiver petition does not demonstrate that "strict application [of the rule] 'would not serve the purposes for which [it] was adopted."

¹²¹ *Id.*

¹²² *Millstone*, CLI-05-24, 62 NRC at 559-60 (and cases cited therein). The Board expressed concern with respect to the *Millstone* case, particularly whether the fourth factor, in which we required a showing of a significant *safety* problem in order to permit a waiver, could be applied in a case involving waiver of a NEPA regulation. *See* LBP-10-15, 72 NRC ___ (slip op. at 35-36, 38). (The *Millstone* case pertained to a waiver petition associated with 10 C.F.R. § 50.47, relevant to emergency planning – a safety issue, as opposed to one arising under NEPA.) Given that our decision turns on the first factor, we need not reach this issue today.

¹²³ *Millstone*, CLI-05-24, 62 NRC 551, 559-60 (quoting 10 C.F.R. § 2.335(b)) (second alteration in original). See *also* 10 C.F.R. § 2.335(b) ("The petition must be accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which (continued ...)

The Board states that the purpose of 10 C.F.R. Part 51 Subpart A, Appendix B and 10 C.F.R. § 51.53(c)(2) "is to allow the NRC to comply with NEPA by identifying and evaluating certain environmental impacts (in this instance, relating to the storage of spent fuel) that are generic to reactor license renewal proceedings, and then allowing the [license renewal a]pplicant and NRC to dispense with site-specific evaluations of such environmental impacts in situations covered by the generic analysis." We agree. But SLOMFP has failed to show that the generic finding in the 1996 GEIS regarding the environmental impacts of spent fuel pool storage, which is incorporated into 10 C.F.R. Part 51, should not apply to Diablo Canyon in this proceeding.

To support its waiver petition, SLOMFP relies on the Decommissioning Study, which excludes Diablo Canyon from its seismic risk assessment. But when read in context, the Decommissioning Study does not suggest that there is anything specific about Diablo Canyon such that the generic conclusion in the 1996 GEIS regarding the environmental impacts of spent

^{(...} continued)

the application of the rule or regulation (or provision of it) would not serve the purposes for which [it] was adopted.").

¹²⁴ LBP-10-15, 72 NRC __ (slip op. at 41).

¹²⁵ See Final Rule, Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 66,537, 66,538 (Dec. 18, 1996); Final Rule, Environmental Review for Renewal of Nuclear Power Plant Operating License, 61 Fed. Reg. 28,467, 28,467 (June 5, 1996); GEIS at 1-1.

¹²⁶ In considering the waiver petition and the admissibility of Contention EC-2, the Board relies on the assumption that both the Decommissioning Study and the Draft Revised GEIS exclude Diablo Canyon. See, e.g., LBP-10-15, 72 NRC __ (slip op. at 42) ("Each of these analyses [(the Decommissioning Study and the Draft Revised GEIS)] notes that its assessment of the seismic risks and associated environmental impacts of spent fuel storage excludes western nuclear reactors and refers specifically to the exclusion of [Diablo Canyon]"); id. at 43 (describing the "blunt exclusions of the 2009 Draft GEIS and [the Decommissioning Study]"). However, the Board is mistaken. It is only the Decommissioning Study that excludes Diablo Canyon from a particular aspect of its analysis; the Draft Revised GEIS merely notes this fact.

fuel pool storage does not apply.¹²⁷ The Decommissioning Study excludes Diablo Canyon from the seismic risk analysis because the Staff's sources for seismic hazard estimates – studies from the Electric Power Research Institute and Lawrence Livermore National Laboratory – focused on seismic risk in the central and eastern United States, and thus did not include seismic hazard estimates for plants west of the Rocky Mountains.¹²⁸ The Staff's use of seismic hazard estimates for the central and eastern United States in the Decommissioning Study simply means that PG&E will be required to provide a site-specific seismic analysis for Diablo Canyon if PG&E wishes to seek an exemption from certain decommissioning requirements *at the time the plant undergoes decommissioning*.¹²⁹ As the Staff and PG&E point out, the Decommissioning Study, viewed in the light most favorable to SLOMFP, is neutral with respect to the conclusions in the 1996 GEIS.¹³⁰ Therefore, the Decommissioning Study does not support SLOMFP's argument that PG&E should perform a site-specific analysis of the environmental impacts of spent fuel pool storage at Diablo Canyon.

SLOMFP's remaining claims likewise fail. SLOMFP's statement that the Staff did not consider in the Draft Revised GEIS the environmental impacts of a seismically generated event

Moreover, the Draft Revised GEIS reaffirms the conclusion of the 1996 GEIS, and relies on a number of studies and observations, including – but not limited to – the Decommissioning Study, to reach that conclusion. See Draft Revised GEIS at E-37. The rulemaking to update the GEIS currently is under way. The conclusions in the Draft Revised GEIS, therefore, are not yet final. However, the draft revision reflects that the Staff's analysis of the issue extends to multiple sources – well beyond consideration of only the 2001 Decommissioning Study.

¹²⁸ Decommissioning Study at A2B-2 (noting that the Staff used seismic hazard estimates that did not include plants west of the Rocky Mountains such as San Onofre, Diablo Canyon, and WNP2 (now Columbia Generating Station)).

¹²⁹ *Id.* at A2B-2 to A2B-5.

¹³⁰ See NRC Staff Initial Brief at 22-23; PG&E Initial Brief at 24.

is misdirected. The 1996 GEIS is the operative document here,¹³¹ and it includes a seismic assessment.¹³² SLOMFP does not challenge this assessment, or provide support for the proposition that this conclusion would not apply at Diablo Canyon.¹³³ Moreover, although SLOMFP cites PG&E's statement in its SAMA analysis that seismic initiating events are disproportionately dominant when compared to other external events, SLOMFP does not indicate how this supports its claim that the spent fuel pool analysis in the 1996 GEIS is insufficient with respect to Diablo Canyon.¹³⁴ And SLOMFP's claim that economic consequences from land contamination would be especially high in California lacks an explanation of how this fact, assuming it is true, undermines the conclusions in the GEIS.¹³⁵

¹³¹ Revisions to the GEIS are pending, as the matter is the subject of an ongoing rulemaking proceeding. *See supra* note 103. The proper forum for SLOMFP to raise issues associated with the proposed revised GEIS is in our rulemaking process, not this adjudication. Similarly, SLOMFP's claim that the NRC has failed to reference information supporting the GEIS finding is a matter that is appropriately raised in the rulemaking process, where the adequacy of the GEIS is under consideration. *See* Curran Declaration ¶ 12; SLOMFP Initial Brief at 17-18. Our conclusions with regard to the waiver petition are specific to this license renewal proceeding, and are separate from our consideration of revisions to the GEIS.

¹³² GEIS at 6-72, 6-75.

¹³³ In finding that SLOMFP had established a prima facie case for waiver, the Board opined that "[t]he existence of special seismic circumstances unique to [Diablo Canyon], and not considered in the [1996 or Draft Revised GEIS, or the Decommissioning Study], is underscored by the recent discovery of the Shoreline Fault that is the subject of Contention EC-1." LBP-10-15, 72 NRC __ (slip op. at 43-44) (noting that in response to questioning at oral argument the Staff acknowledged that "the Shoreline fault is not considered in either the 1996 GEIS or the 2009 Draft GEIS"). But SLOMFP did not raise this argument in its request for hearing or waiver petition. See generally Request for Hearing; Waiver Petition. A licensing board may not add support where it is lacking. See Palo Verde, CLI-91-12, 34 NRC at 155-56. In any event, whether the 1996 GEIS considered the Shoreline Fault does not, without more, suggest a deficiency in the GEIS generic finding as applied to Diablo Canyon.

¹³⁴ See Curran Declaration ¶ 7.

¹³⁵ See *id.* ¶ 8.

And finally, we find no merit to SLOMFP's claim that the GEIS conclusion cannot be applied generically because it was developed using site-specific information. It is within our discretion to resolve issues generically by rulemaking, ¹³⁶ and it is sound regulatory practice to base the generic conclusion on experience with, and commonalities across, a number of plants. SLOMFP offers no support for its claim that the use of site-specific information undermines the generic conclusion regarding the environmental impacts of spent fuel pool storage. ¹³⁷

Each of the four "*Millstone* factors" must be met in order for a waiver to be granted.¹³⁸

Therefore, SLOMFP's waiver petition, having failed to meet the "first *Millstone* factor," is denied.

In the absence of a waiver, Contention EC-2 is outside the scope of the proceeding.¹³⁹

In declining SLOMFP's waiver request, and in declining to permit litigation of Contention EC-2 in this license renewal proceeding, we remain mindful of the recent nuclear events in Japan. On March 11, 2011, Japan was struck by an earthquake and tsunami that caused damage at the Fukushima Daiichi Nuclear Power Station. In response to this tragic event, we have begun to take actions to verify the safety of nuclear facilities in the United States. We continue to monitor the situation in Japan, and are prepared to make any adjustments to safety

¹³⁶ See Balt. Gas & Electric Co. v. Natural Res. Def. Council, 462 U.S. 87, 101 (1983).

¹³⁷ See Waiver Request at 2; Curran Declaration ¶ 5.

¹³⁸ See text accompanying note 122; *Millstone*, CLI-05-24, 62 NRC at 560 ("The use of 'and' in this list of requirements is both intentional and significant. For a waiver request to be granted, *all four* factors must be met." (emphasis in original)).

¹³⁹ See 10 C.F.R. §§ 2.309(f)(1)(iii), 2.335(a). We therefore need not address the Board's ruling on the admissibility of Contention EC-2. Setting aside the question of scope, however, it appears that the contention shares the same deficiency as the waiver request – a lack of adequate support to demonstrate the existence of a genuine dispute on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(v), (vi). SLOMFP simply offers bare assertions in claiming that PG&E's incorporation of the GEIS finding fails to satisfy NEPA. Bare assertions are insufficient to support a contention. See Crow Butte, CLI-09-12, 69 NRC at 562, 573.

measures for NRC-licensed activities as may be deemed appropriate. We instructed the Staff to create a Task Force to review our processes and regulations to determine whether the agency should make additional improvements to our regulatory system and make recommendations to us for our policy direction. In the short term, the Task Force was directed to:

evaluate currently available technical and operational information from the events [that have occurred at the Fukushima Daiichi nuclear complex] in Japan to identify [potential or preliminary] near term/immediate operational or regulatory issues affecting domestic operating reactors of all designs, in areas such as protection against earthquake, tsunami, flooding, hurricanes; station blackout and a degraded ability to restore power; severe accident mitigation; emergency preparedness; and combustible gas control.¹⁴⁰

The Task Force completed its near-term effort and issued its report on July 12, 2011 for our consideration. We directed a number of actions in response to the Near-Term Report, including review and assessment, with stakeholder input, of the Task Force recommendations; provision of a draft charter for assessing the Task Force recommendations and conducting the agency's longer-term review; preparation of a notation vote paper that identifies recommended short-term actions; preparation of a notation vote paper that sets recommended priorities for the Task Force recommendations; and formal review of the Task Force recommendations by the

¹⁴⁰ SRM-COMGBJ-11-02 (Mar. 21, 2011), at 1 (ML110800456). See generally "Charter for the Nuclear Regulatory Commission Task Force to Conduct a Near-Term Evaluation of the Need for Agency Actions Following the Events in Japan" (Mar. 30, 2011) (ML11089A045) (Task Force Charter). We also directed the Task Force to "[d]evelop recommendations, as appropriate, for potential changes to NRC's regulatory requirements, programs, and processes, and recommend whether generic communications, orders, or other regulatory actions are needed." Task Force Charter at 1.

¹⁴¹ See "Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insights From the Fukushima Dai-ichi Accident" (July 12, 2011) (Near-Term Report) (transmitted to the Commission via SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan" (July 12, 2011) (ML11186A950 (package)).

Advisory Committee on Reactor Safeguards.¹⁴² NRC will develop lessons learned, as it has in the past – that is, the NRC will "evaluate all technical and policy issues related to the event to identify potential research, generic issues, changes to the reactor oversight process, rulemakings, and adjustments to the regulatory framework that should be conducted by NRC."¹⁴³ Accordingly, our comprehensive evaluation includes consideration of those facilities that may be subject to seismic activity or tsunamis, such as Diablo Canyon. Further, that evaluation will include consideration of lessons learned that may apply to spent fuel pools that are part of the U.S. nuclear fleet.

D. Contention EC-4

As originally proposed by SLOMFP, Contention EC-4 states:

The Environmental Report 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. 144

The Board admitted Contention EC-4 as proposed. 145

PG&E's Environmental Report incorporates the conclusion in the GEIS that the resultant core damage and radiological releases from a terrorist attack "would be no worse than those expected from internally initiated events." SLOMFP asserted that PG&E's Environmental

¹⁴² See "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan," Staff Requirements Memorandum SECY-11-0093 (Aug. 19, 2011) (ML112310021).

¹⁴³ SRM-COMGBJ-11-02, at 2.

¹⁴⁴ Request for Hearing at 22.

¹⁴⁵ See LBP-10-15, 72 NRC ___ (slip op., Attachment A).

¹⁴⁶ Environmental Report at 5-5, F-83 (quoting GEIS at 5-18). The GEIS states: "The regulatory requirements under 10 CFR part 73 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 (continued ...)

Report does not satisfy NEPA and 10 C.F.R. § 51.53(c)(3)(ii)(L) because the SAMA analysis does not discuss "the relative costs and benefits of measures to avoid or mitigate the effects of an attack." According to SLOMFP, it is insufficient for PG&E to rely on an analysis that considers mitigative measures for accidents, because the particular measures taken to mitigate accidents might differ from mitigative measures for attacks. SLOMFP argued that the contention is within the scope of the proceeding because:

(a) the Ninth Circuit's decision in *San Luis Obispo Mothers for Peace*¹⁴⁹ established that the impacts of attacks on the Diablo Canyon reactor are cognizable under NEPA, (b) an evaluation of mitigation measures is required by NEPA and NRC regulations, and (c) an evaluation of measures to mitigate attacks on nuclear reactors cannot be found in the License Renewal GEIS.¹⁵⁰

The Board characterized Contention EC-4 as an admissible contention of omission that challenges "the absence of consideration of terrorist-originated core-damaging events [in PG&E's] SAMA analysis." According to the Board, the omitted information includes an analysis of the impact of terrorist attacks (as an initiating event) on the core damage frequency, and cost benefit-analyses regarding measures to mitigate or avoid the consequences of a

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 and beyond design basis earthquakes at existing nuclear power plants is small and additionally, that the risks [from] other external events, are adequately addressed by a generic consideration of internally initiated severe accidents." GEIS at 5-18.

^{(...} continued)

¹⁴⁷ Request for Hearing at 23.

¹⁴⁸ See id.

¹⁴⁹ San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006).

¹⁵⁰ Request for Hearing at 23.

¹⁵¹ LBP-10-15, 72 NRC ___ (slip op. at 64).

terrorist attack.¹⁵² In admitting the contention, the Board found that contrary to PG&E's and the Staff's arguments, the Ninth Circuit's decision in *Mothers for Peace* applies to the analysis of Contention EC-4.¹⁵³

The Board then noted the difficulty of conducting the SAMA analysis without quantitative information on terrorist attacks. The Board hypothesized that qualitative, rather than quantitative, information is likely to be the only type of information available. ¹⁵⁴ In addition, the Board noted that much of the information on mitigative measures for the consequences of terrorist attacks is likely not to be available to the public, and possibly not accessible by members of the Staff who would conduct the SAMA analysis. ¹⁵⁵ Based on these concerns, the Board referred its ruling to us pursuant to 10 C.F.R. § 2.323(f)(1), suggesting that Contention EC-4 raises novel or legal policy issues that would benefit from our review. ¹⁵⁶

¹⁵² *Id.* (slip op. at 66).

¹⁵³ *Id.* (slip op. at 64-65 & n.73).

¹⁵⁴ *Id.* (slip op. at 68).

¹⁵⁵ *Id.* (slip op. at 67-68).

¹⁵⁶ *Id.* (slip op. at 69). The Board outlined three questions for us to address in conjunction with the referral: "(a) whether because of the quantitative nature of the cost-benefit analyses which are the end product of SAMA analyses, a quantitative, as opposed to qualitative, analysis of terrorist attacks and the alternatives for mitigation and prevention is necessary; (b) how staff should approach such an analysis when the data is, at best, sparse; and (c) the extent to which, and manner by which, SAMA analyses should consider matters and mechanisms already addressed by the NRC's Design Basis Threat programs." *Id.* Given that we consider the Board's referred contention admissibility ruling as part of PG&E's appeal, as a practical matter, we undertake review of the ruling pursuant to 10 C.F.R. § 2.341(f)(1). Because we find the contention inadmissible, however, we need not reach the questions posed by the Board.

On appeal, PG&E argues that the Board's admission of Contention EC-4 is directly contrary to our decision in the *Oyster Creek* license renewal case, ¹⁵⁷ as affirmed by the Third Circuit. ¹⁵⁸ PG&E states that it relied on the GEIS conclusions in its Environmental Report based on this precedent, and therefore is not required to address the issue further in its application. ¹⁵⁹ Alternatively, PG&E argues that Contention EC-4 fails for lack of support. Regarding the impact of a terrorist-initiated event on the core damage frequency, PG&E asserts that SLOMFP offers no support to challenge the conclusion in the GEIS that the impact would be different from that of an internally-initiated event. ¹⁶⁰ Regarding the need for the SAMA analysis to consider measures to avoid or mitigate the effects of an attack, PG&E asserts that SLOMFP "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." ¹⁶¹

We find that the Board erred in admitting Contention EC-4. As an initial matter, in *Oyster Creek*, a majority of the Commission held, among other things, that NEPA does not require the NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-

¹⁵⁷ AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124 (2007), aff'd, N.J. Dep't of Envtl. Protection v. NRC, 561 F.3d 132 (3d Cir. 2009).

¹⁵⁸ PG&E Appeal at 28-30 (citing our decision in *Oyster Creek*, and stating that "[t]he Commission's approach to terrorism in a license renewal application is clear: applicants should rely on the GEIS").

¹⁵⁹ *Id.* at 30 n.22.

¹⁶⁰ *Id.* at 29 & n.21.

¹⁶¹ *Id.* at 30.

licensed facilities.¹⁶² However, given that Diablo Canyon falls within the geographic boundary of the Ninth Circuit, on this issue we are bound by the Ninth Circuit's decision in *Mothers for Peace*, holding that the NRC may not exclude NEPA terrorism contentions categorically.¹⁶³ Even so, the *Mothers for Peace* decision does not dictate the result of this license renewal proceeding, which is governed by a different regulatory scheme than the dry cask storage proceeding that underlay the *Mothers for Peace* decision.

The GEIS specifically includes a discretionary analysis of the environmental impacts of a terrorist attack. In *Oyster Creek*, we held, as an alternative ground for excluding a "NEPA terrorism" contention, that the Staff's determination in the GEIS that the environmental impacts of a terrorist attack were bounded by those resulting from internally-initiated events, was sufficient to address the environmental impacts of terrorism.¹⁶⁴ To the extent that SLOMFP challenges that generic assessment, its remedy is a petition for rulemaking to modify our rules, or a petition for a waiver of the rules based on "special circumstances."¹⁶⁵

To the extent that SLOMFP here raises the issue of mitigating the environmental impacts of terrorist attacks in the context of the *site-specific* SAMA analysis, it has failed to support its claim. PG&E's Environmental Report discusses mitigation measures for terrorist

¹⁶² Oyster Creek, CLI-07-8, 65 NRC at 129. Chairman Jaczko dissented on this point. See id. at 135-37.

¹⁶³ See Diablo Canyon, CLI-08-1, 67 NRC at 4-5; Oyster Creek, CLI-07-8, 65 NRC at 128; System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-07-10, 65 NRC 144, 146 (2007).

¹⁶⁴ Oyster Creek, CLI-07-8, 65 NRC at 131-32 (2007).

¹⁶⁵ See 10 C.F.R. §§ 2.335, 2.802. Among its comments on the Draft Revised GEIS, SLOMFP asserts that the environmental impacts of a terrorist attack should be considered. SLOMFP Comments at 9.

attacks in the SAMA analysis. Significant here, PG&E explains that in complying with NRC security orders that were issued after the attacks on September 11, 2001, it has "implemented mitigation measures to generally deal with the situation in which large areas of the plant were lost due to fires and explosions, whatever the beyond-design basis initiator and without regard to cost." Therefore, for the purposes of evaluating these issues in the environmental context, the Environmental Report states that "even though the intentional aircraft attacks and sabotage-related events are outside the scope of the SAMA analysis, the site has already taken steps to mitigate severe accidents that might result from such initiators." SLOMFP neither acknowledges this discussion, nor challenges its sufficiency.

Rather, SLOMFP asserts that the GEIS is inadequate to satisfy NEPA because it does not include an evaluation of measures to mitigate attacks, while disregarding the contents of PG&E's application beyond the Environmental Report's reference to the GEIS conclusion regarding terrorist attack consequences. As stated above, the appropriate challenge to the adequacy of the GEIS is in the context of rulemaking, not this adjudication. SLOMFP directs the focus away from where it should be placed – on the applicant's Environmental Report. To

¹⁶⁶ Environmental Report at F-83.

¹⁶⁷ *Id.*

¹⁶⁸ See generally Request for Hearing at 22-24. Although SLOMFP cites the page in the Environmental Report on which this discussion appears, it is used only as an additional page reference for the GEIS consequences conclusion. *See id.* at 22-23.

¹⁶⁹ See *id.* at 23.

¹⁷⁰ See 10 C.F.R. § 2.309(f)(1)(vi), (f)(2).

SLOMFP is mistaken that a discussion of mitigation measures is absent from the Environmental Report, and thus fails to raise a genuine dispute.¹⁷¹

Even assuming that SLOMFP intended to challenge the discussion of mitigation measures in PG&E's Environmental Report, SLOMFP's unsupported statement that "[j]ust as mitigative measures are specific to the types of severe accidents to which a particular reactor design and site are vulnerable, they are also specific to the types of attacks to which the particular reactor design and site are vulnerable," falls short of the information required to show the existence of a genuine dispute. It is not obvious how SAMAs considered for internally initiated events would differ if the initiating event were an attack, nor is it evident how the reliance on mitigating measures implemented in response to our security requirements would be insufficient to inform the Staff's environmental review. It is SLOMFP's responsibility, as the petitioner, to put others on notice as to the issues it seeks to litigate in the proceeding. We should not have to guess the aspects of the SAMA analysis that SLOMFP is challenging.

Since the events of September 11, 2001, the NRC has undertaken a significant number of security-related actions – including, but not limited to, major rulemakings – to address terrorism threats (and their mitigation) at both active and inactive nuclear facilities.¹⁷⁵ Our

¹⁷¹ See id. § 2.309(f)(1)(vi).

¹⁷² Request for Hearing at 23.

¹⁷³ We recognize that measures implemented in response to our security requirements likely will involve non-public information. It does not appear from the record that SLOMFP has sought access to that information in this proceeding.

¹⁷⁴ See, e.g., Crow Butte, CLI-09-12, 69 NRC at 552-53; Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999).

¹⁷⁵ *E.g.*, Final Rule, Design Basis Threat, 72 Fed. Reg. 12,705 (Mar. 19, 2007); Final Rule, Power Reactor Security Requirements, 74 Fed. Reg. 13,926 (Mar. 27, 2009). SLOMFP took (continued ...)

review efforts are ongoing, cumulative, and forward-looking. The NRC's security program addresses not only current operations, but also extends into the license renewal term. And, as we have explained, both the GEIS for license renewal and PG&E's environmental report address the environmental impacts of terrorism. In addition, the Staff has advised us that the supplemental environmental impact statement (SEIS) associated with the Diablo Canyon license renewal application "will contain a site-specific analysis of the effects of terrorism." In the face of all of this, SLOMFP has not offered a well-supported contention raising specific NEPA questions that NRC (or PG&E) has overlooked and that call for a hearing. In short, as discussed above, we conclude that the Board erred in admitting Contention EC-4.

On April 14, 2011, SLOMFP filed in this proceeding a petition requesting, among other things, that we suspend "all decisions" regarding the issuance of license renewals, pending completion of several actions associated with the recent nuclear events in Japan. ¹⁷⁸ This was one of a series of substantively identical petitions filed in multiple dockets. We granted the

(... continued)

the opportunity to comment on the proposed design basis threat rule. See generally Comments by San Luis Obispo Mothers for Peace on NRC Proposed Rule Regarding Design Basis Threat for Protection of Nuclear Facilities Against Sabotage and Threat of Strategic Special Nuclear Material (Jan. 23, 2006) (ML060610344). See also, e.g., Final Rule, Consideration of Aircraft Impacts for New Nuclear Power Reactors, 74 Fed. Reg. 28,112 (June 12, 2009).

¹⁷⁶ Oyster Creek, CLI-07-8, 65 NRC at 130 n.28.

¹⁷⁷ NRC Staff Answer to PG&E Appeal at 17 n.87. The Staff currently expects to finalize its safety and environmental reviews, "to include issuance of the final [SEIS] and any necessary supplements to the [SER] or SEIS, between February 2014 and May 2014." Letter from Lloyd B. Subin, counsel for the NRC Staff, to the Administrative Judges (Sept. 15, 2011).

¹⁷⁸ See generally Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 14, 2011, corrected Apr. 18, 2011); Declaration of Dr. Arjun Makhijani in Support of Emergency Petition to Suspend All Pending Reactor Licensing Decisions and Related Rulemaking Decisions Pending Investigation of Lessons Learned from Fukushima Daiichi Nuclear Power Station Accident (Apr. 19, 2011).

requests for relief in part, and denied them in part.¹⁷⁹ In particular, we declined to suspend this or any other adjudication, or any final licensing decisions, finding no imminent risk to public health and safety, or to common defense and security. The agency continues to evaluate the implications of the events in Japan for U.S. facilities, as well as to consider actions that may be taken as a result of lessons learned in light of those events. Particularly with regard to license renewal, we stated that "[t]he NRC's ongoing regulatory and oversight processes provide reasonable assurance that each facility complies with its 'current licensing basis,' which can be adjusted by future Commission order or by modification to the facility's operating license outside the renewal proceeding (perhaps even in parallel with the ongoing license renewal review)." 180

III. CONCLUSION

For the Commission

For the reasons set forth above, we *affirm in part*, and *reverse in part*, the Board's decision in LBP-10-15. We *deny* the waiver petition.

IT IS SO ORDERED.

[NRC SEAL]

/RA/

Andrew L. Bates
Acting Secretary of the Commission

Dated at Rockville, Maryland, this <u>12th</u> day of October, 2011.

¹⁷⁹ See generally CLI-11-5, 74 NRC __ (Sept. 9, 2011) (slip op.).

¹⁸⁰ *Id.* (slip op. at 26).