

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Paul S. Ryerson, Chairman
Dr. Gary S. Arnold
Nicholas G. Trikouros

In the Matter of

PACIFIC GAS & ELECTRIC COMPANY

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

Docket No. 50-275-LR

Docket No. 50-323-LR

ASLBP No. 10-900-01-LR-BD01

August 6, 2015

MEMORANDUM AND ORDER
(Denying Motions to File New Contentions)

This proceeding concerns an application by Pacific Gas & Electric Company (PG&E) to renew its operating licenses for two nuclear power reactors at the Diablo Canyon Nuclear Power Plant located near San Luis Obispo, California.¹

Before the Board are two motions by intervenor San Luis Obispo Mothers for Peace (SLOMFP) to file a total of four new contentions.² Because none of SLOMFP's four proffered contentions satisfies the requirements of 10 C.F.R. § 2.309(f)(1), we deny both motions.

¹ The background of this proceeding is set forth in prior decisions of the Board and of the Commission. See, e.g., LBP-10-15, 72 NRC 257, 273-75 (2010); CLI-11-11, 74 NRC 427, 429-31 (2011); LBP-15-6, 81 NRC 314, 316 (2015).

² San Luis Obispo Mothers for Peace's Motion to File New Contentions Regarding Adequacy of Environmental Report for Diablo Canyon License Renewal Application (Apr. 6, 2015) (Motion on Proposed Contentions A and B); San Luis Obispo Mothers for Peace's Motion to File New Contentions Regarding Adequacy of Severe Accident Mitigation Alternatives Analysis for Diablo Canyon License Renewal Application (Apr. 15, 2015) (Motion on Proposed Contentions C and D).

I. BACKGROUND

On January 21, 2010, the NRC published a Federal Register notice of an opportunity for a hearing on PG&E's license renewal application.³ SLOMFP filed a timely petition to intervene, which the Board granted.⁴

On February 25, 2015, PG&E submitted to the NRC an update to its Environmental Report.⁵ On April 6, 2015, SLOMFP filed a motion and supporting declaration seeking leave to file two new contentions (Contentions A and B) challenging the adequacy of PG&E's amended Environmental Report under the National Environmental Policy Act (NEPA) and the NRC's implementing regulations.⁶ PG&E and the NRC Staff each filed answers opposing the motion on May 1, 2015,⁷ and SLOMFP filed a reply on May 7, 2015.⁸

³ 75 Fed. Reg. 3493, 3493 (Jan. 21, 2010).

⁴ LBP-10-15, 72 NRC at 345. The Board did not, however, admit all of SLOMFP's proffered contentions, id. at 317, and subsequently the Commission limited the admissible contentions further. CLI-11-11, 74 NRC at 437, 452, 458. The only admitted contention at this time—Contention EC-1—is the subject of a pending motion for summary disposition. Pacific Gas and Electric Company's Motion for Summary Disposition on Contention EC-1 (July 31, 2015).

⁵ Letter from Barry S. Allen, Vice President, Nuclear Services, PG&E to NRC, PG&E Letter DCL-15-027, Update to the Diablo Canyon Power Plant License Renewal Application (LRA), Amendment 49 and LRA Appendix E, "Applicant's Environmental Report—Operating License Renewal Stage," Amendment 2 (Feb. 25, 2015) (ADAMS Package Accession No. ML15057A102) (Updated ER).

⁶ Motion on Proposed Contentions A and B; Declaration of Mark Cooper In Support of San Luis Obispo Mothers for Peace's Motion to File New Contentions Regarding Adequacy of Environmental Report for Diablo Canyon License Renewal Application (Apr. 6, 2015) (Cooper Decl.).

⁷ Pacific Gas and Electric Company's Answer Opposing Proposed Energy Alternatives Contentions (May 1, 2015) (PG&E Answer to Proposed Contentions A and B); NRC Staff Answer to San Luis Obispo Mothers for Peace's Motion to File New Contentions Regarding the Adequacy of the Updated Environmental Report for Diablo Canyon (May 1, 2015) (NRC Staff Answer to Proposed Contentions A and B).

⁸ San Luis Obispo Mothers for Peace's Reply to Oppositions to Motion to File New Contentions Regarding Adequacy of Environmental Report for Diablo Canyon License Renewal Application (May 7, 2015).

On March 11, 2015, PG&E submitted two documents to the NRC implementing recommendations of the Fukushima Near-Term Task Force, in response to the agency's March 2012 request for information. The first was a Seismic Hazard Screening Report for Diablo Canyon, which performed a seismic hazard reevaluation for Diablo Canyon and developed a plant specific ground motion response spectrum for screening purposes.⁹ The second was a Flood Hazard Reevaluation Report for Diablo Canyon, in which PG&E reevaluated external flooding mechanisms pursuant to present-day regulatory guidance and methodologies.¹⁰ On April 15, 2015, SLOMFP filed a motion and supporting declaration seeking leave to file two new contentions (Contentions C and D) challenging the adequacy of PG&E's Severe Accident Mitigation Alternatives (SAMA) Analysis—again under NEPA and the NRC's implementing regulations.¹¹ PG&E and the NRC Staff each filed answers opposing the motion on May 11, 2015,¹² and SLOMFP filed a reply on May 18, 2015.¹³

⁹ Letter from Barry S. Allen, Vice President, Nuclear Services, PG&E to NRC, PG&E Letter DCL-15-035, Response to NRC Request for Information Pursuant to 10 C.F.R. 50.54(f) Regarding the Seismic Aspects of Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident: Seismic Hazard and Screening Report (Mar. 11, 2015) (ADAMS Accession No. ML15070A607) (Seismic Hazard Screening Report).

¹⁰ Letter from Barry S. Allen, Vice President, Nuclear Services, PG&E to NRC, PG&E Letter DCL-15-034, Final Response to Request for Information Pursuant to 10 CFR 50.54(f) Regarding Recommendation 2.1 Flooding (Mar. 11, 2015) (ADAMS Package Accession No. ML15071A045) (Flooding Hazard Report).

¹¹ Motion on Proposed Contentions C and D; Declaration of Dr. David D. Jackson in Support of San Luis Obispo Mothers for Peace's Motion to File New Contention Regarding Adequacy of Severe Accident Mitigation Alternatives Analysis for Diablo Canyon License Renewal Application (Apr. 15, 2015).

¹² Pacific Gas and Electric Company's Answer Opposing Proposed SAMA Contentions (May 11, 2015) (PG&E Answer to Proposed Contentions C and D); NRC Staff Answer to San Luis Obispo Mothers for Peace's Motion to File New Contentions Regarding the Adequacy of the Severe Accident Mitigation Alternatives Analysis for Diablo Canyon (May 11, 2015).

¹³ San Luis Obispo Mothers for Peace's Reply to Applicant's and NRC Staff's Oppositions to Motion to File New Contentions Regarding Adequacy of Severe Accident Mitigation Alternatives Analysis for Diablo Canyon License Renewal Application (May 18, 2015).

The Board heard oral argument on both motions on July 9, 2015.¹⁴

II. ANALYSIS

A. Standing

Having previously satisfied the standing requirements of 10 C.F.R. § 2.309(d),¹⁵ SLOMFP need not do so again.¹⁶ SLOMFP's standing in this proceeding is established.

B. Timeliness

Motions for leave to file new contentions after the initial deadline,¹⁷ such as SLOMFP's, will not be entertained unless:

- (i) The information upon which the filing is based was not previously available;
- (ii) The information upon which the filing is based is materially different from information previously available; and
- (iii) The filing has been submitted in a timely fashion based on the availability of the subsequent information.¹⁸

In this case, "timely" has been defined by our Scheduling Order as meaning within thirty days of when new information first becomes available.¹⁹

¹⁴ Tr. at 796-906. On July 16, 2015, SLOMFP moved to correct a statement made by PG&E at oral argument. San Luis Obispo Mothers for Peace's Motion to Correct False Inference Raised by a Misleading Statement of Material Fact by Pacific Gas & Electric Co. (July 16, 2015). On August 3, 2015, the Board granted SLOMFP's motion subject to the clarification provided by PG&E in its answer to SLOMFP's motion. Licensing Board Order (Granting SLOMFP's Motion (Aug. 3, 2015) (unpublished); see also Pacific Gas and Electric Company's Answer to Motion to Correct False Inference (July 27, 2015).

¹⁵ LBP-10-15, 72 NRC at 276-77.

¹⁶ See 10 C.F.R. § 2.309(c)(4) ("If the party or participant has already satisfied the requirements of standing under paragraph (d) of this section in the same proceeding in which the new or amended contentions are filed, it does not need to do so again.").

¹⁷ The original deadline was March 22, 2010 which SLOMFP met in its initial petition to intervene. 75 Fed. Reg. at 3493.

¹⁸ 10 C.F.R. § 2.309(c)(1)(i)-(iii).

¹⁹ See Licensing Board Order (Second Revised Scheduling Order) (Mar. 26, 2014) at 1 (unpublished) (stating that a motion for a proposed contention "shall be deemed timely under 10 C.F.R. § 2.309(c)(1)(iii) if it is filed within thirty (30) days of the date when the new and material information on which it is based first became available . . .").

SLOMFP contends that its proposed contentions meet this standard. It asserts that each is based on new and materially different information—Contentions A and B on the amended Environmental Report and Contentions C and D on the Seismic Hazard Screening Report and the Flood Hazard Reevaluation Report—and that each motion was submitted within 30 days of the pertinent report’s first becoming available.²⁰

PG&E disputes the timeliness of Contentions A and B. It asserts that any new information is not materially different, and that SLOMFP could have raised these challenges earlier.²¹ In its answer, the NRC Staff declined to challenge the timeliness of Contention A or B.²² No party challenges the timeliness of Contention C or of Contention D.

Because the Board concludes that SLOMFP has failed to proffer any admissible contention, however, we need not rule on their timeliness.

C. Contentions

Each of SLOMFP’s proffered contentions either raises issues that are outside the scope of a license renewal proceeding or fails to satisfy one or more requirements of 10 C.F.R. §

²⁰ Motion on Proposed Contentions A and B at 13-15; Motion on Proposed Contentions C and D at 19.

²¹ PG&E Answer to Proposed Contentions A and B at 7, 23.

²² At oral argument the Staff purported to change its mind as to Contention B. Compare NRC Staff Answer to Proposed Contentions A and B at 5 with tr. at 877 (“Contention B, you know, although we do not challenge it, it does appear to be out as . . . it is not based on changes to the environmental report. It is, essentially, based on the changes to the original report.”). As the Commission has stated—and as the Staff frequently has occasion to remind Licensing Boards—“new arguments may not be raised for the first time in a reply brief.” Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004). A fortiori we do not consider a new argument first raised by the NRC Staff after briefing has been completed.

2.309(f)(1).²³ These requirements are “strict by design.”²⁴ They implement the Commission’s determination that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.”²⁵

Contention A (Inadequate Consideration of Energy Alternatives) states:

Chapter 7 of PG&E’s Amended Environmental Report is inadequate to satisfy NEPA and 10 CFR § 51.53(c)(2) because it does not evaluate a reasonable array of energy alternatives that either currently are commercially viable or will become so in the near term (i.e., within the next ten years). PG&E’s energy alternatives analysis is based on arbitrary and unreasonable assumptions about the necessary characteristics of replacement energy, the viability and availability of alternative energy sources, and what constitute reasonable combinations of energy sources.²⁶

SLOMFP offers five arguments in support of its claim that PG&E’s energy alternatives analysis in the amended Environmental Report is inadequate for its “arbitrary and unreasonable assumptions” about replacement energy.

²³ Insofar as relevant, 10 C.F.R. § 2.309(f)(1) requires that, for each proffered contention, a petition must:

(i) Provide a specific statement of the issue of law or fact to be raised . . . ; (ii) Provide a brief explanation of the basis for the contention; (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding; (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding; (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position . . . ; (vi) . . . provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application

²⁴ Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), pet. for reconsideration denied, CLI-02-01, 55 NRC 1 (2002).

²⁵ 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

²⁶ Motion on Proposed Contentions A and B at 2 (emphasis in the original).

First, SLOMFP contends that the analysis is arbitrarily restricted by the "outdated" "concept that baseload capacity is required to satisfy energy needs."²⁷ According to SLOMFP, reliance on baseload power "is increasingly seen as a 'dinosaur' that is too inflexible because neither supply nor demand can be managed."²⁸

Second, SLOMFP claims that PG&E's analysis of alternatives unreasonably rejects the prospect that, by the time the plant's current operating licenses begin to expire nine years from now (in November 2024 and August 2025), renewable technology, energy efficiency, and operational capabilities will have advanced sufficiently and be available to replace the Diablo Canyon Plant's 2,285 MW of baseload power generation.²⁹ SLOMFP challenges PG&E's conclusion that it would be "imprudent" to rely upon the assumption that, within a decade, these alternatives will be commercially practicable and sufficient to replace Diablo Canyon.³⁰

Third, although PG&E claims to have examined a reasonable "combination alternative" of natural gas, wind, solar, and geothermal power generation, SLOMFP asserts that PG&E's analysis is unreasonable "because it ignores the dramatic developments in virtually every one of the individual technologies (solar, wind, battery storage, information and control technologies) that would allow a much more flexible approach," and permit a carbon-free combination alternative.³¹ As a result, SLOMFP asserts, PG&E's combination analysis overly relies on natural gas, which allegedly "distorts the environmental impact assessment."³²

²⁷ Id. at 3.

²⁸ Id. at 5.

²⁹ Id. at 4.

³⁰ Id.

³¹ Id. at 4-5; see tr. at 850-51 ("What we are looking for is a combination of renewables, efficiency, and demand side management. . . . [W]hat we're saying is you can do this with renewables that—they don't have the carbon impacts. . . .").

³² Motion on Proposed Contentions A and B at 5.

Fourth, SLOMFP contends that PG&E “selectively and incorrectly rejects the estimation of potential capacity available from alternative resources.”³³ SLOMFP challenges PG&E’s conclusion that there is “substantial uncertainty” in the potential for certain alternatives ten years hence, claiming that PG&E’s analysis “does not reflect the speed of development or the very large quantity of potential resources available to replace the Diablo Canyon capacity upon the termination of its current license.”³⁴

Finally, SLOMFP claims that PG&E fails to account for “the deteriorating economics of aging reactors and the improving economics of the alternatives.”³⁵ It asserts that “invoking uncertainty about the latter without acknowledging the uncertainty about the former distorts the analysis.”³⁶

SLOMFP’s claims, however, either run afoul of binding Commission precedents or otherwise fail to demonstrate the admissibility of Contention A under the standards set forth in 10 C.F.R. § 2.309(f)(1).

The Commission appears not to agree with SLOMFP that the concept of baseload power is “outdated” or a “dinosaur.” As recently as 2012, the Commission held in Seabrook and Davis-Besse that only alternatives that supply baseload power—defined as “energy intended to continuously produce electricity at or near full capacity, with high availability”—constitute reasonable alternatives to renewing the licenses for a nuclear power plant.³⁷

³³ Id.

³⁴ Id. at 6.

³⁵ Id.

³⁶ Id.

³⁷ NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-05, 75 NRC 301, 339 n. 223, 342 (2012); see FirstEnergy Nuclear Operating Co. (Davis-Besse Nuclear Power Station, Unit 1), CLI-12-08, 75 NRC 393, 397 (2012). At oral argument, SLOMFP asserted that the Board is not bound by the Commission’s 2012 decisions in Seabrook and Davis-Besse. Tr. at 840-41. SLOMFP suggested that the Commission’s endorsement—the very next year—of the 2013 License Renewal GEIS “explicitly acknowledged the tremendous change going on in the

Moreover, in Seabrook, the Commission confirmed that a renewal applicant's ER need only discuss alternatives that "will bring about the ends of the proposed action."³⁸ PG&E's stated purpose is to supply baseload power.³⁹ Commission precedent dictates we give substantial weight to the preference of the applicant in determining the "ends" of the proposed action.⁴⁰ Thus, as the Commission explained in Seabrook, to be admissible, a contention on energy alternatives in a license renewal proceeding must set forth alleged facts or expert opinion sufficient to raise a genuine dispute "as to whether the best information available today suggests that commercially viable alternative technology (or combination of technologies) is available now, or will become so in the near future, to supply baseload power."⁴¹

In other words, for Contention A to be admissible, SLOMFP must present a plausible, adequately supported argument that alternatives PG&E failed to consider could supply sufficient baseload power to replace Diablo Canyon's generating capacity at the time its operating licenses expire in 2024 and 2025. It has failed to do so.

First, the assertion in the supporting declaration of Dr. Mark Cooper that energy efficiency measures could "replace" baseload power does not raise a genuine dispute. Energy efficiency measures do not generate baseload power, but rather potentially obviate the need for it. Nonetheless, although PG&E recognized that demand-side management and energy

energy field," and, in effect, overruled the Commission's previous decisions. The Board disagrees. Indeed, the GEIS itself reiterated that "the NRC cannot make decisions based on anticipated or speculative changes." Office of Nuclear Reactor Regulation, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG-1437, at 1-31 (Rev. 1 June 2013) (ADAMS Accession No. ML13106A241).

³⁸ Seabrook, CLI-12-05, 75 NRC at 339 (internal quotations omitted).

³⁹ PG&E Answer to Proposed Contentions A and B at 5.

⁴⁰ Seabrook, CLI-12-05, 75 NRC at 339 (internal quotations omitted).

⁴¹ Id. at 342 (emphasis added).

efficiency programs are not a “source of generation,” they were indeed considered in the updated Environmental Report and deemed a reasonable alternative.⁴²

Second, Dr. Cooper’s optimism with regard to the potential for distributed generation (that is, widespread generation of electricity from facilities smaller than 50 MW in net generating capacity) is mistakenly premised entirely upon the updated Environmental Report itself. Although the Environmental Report recognizes that by 2024 such sources might approach the power output of Diablo Canyon,⁴³ it also recognizes that, according to the California Energy Commission, at least half of the distributed generation in PG&E’s service territory is expected to come from photovoltaic systems.⁴⁴ The updated Environmental Report concluded that photovoltaic power’s intermittency makes distributed generation unsuitable for baseload applications without sufficient energy storage systems, which are not yet available.⁴⁵ Dr. Cooper provides not evidence to the contrary. Consequently, SLOMFP fails to plausibly demonstrate that distributed generation, alone or in combination with other alternatives, could supply sufficient baseload power by 2024 or 2025.

Third, Dr. Cooper likewise relies solely on the facts in the updated ER itself for his assertions regarding the availability of geothermal power. Although the ER cites a United States Geological Survey suggesting the potential for additional geothermal power development in California,⁴⁶ mere potential for future development is quite different from commercial viability as a source of baseload power. Dr. Cooper provides insufficient evidence that geothermal

⁴² See Updated ER at 7.2-6; see also tr. at 852.

⁴³ Id. at 7.2-11.

⁴⁴ Id.

⁴⁵ Id.

⁴⁶ Id. at 7.2-12.

power, alone or even in combination with other alternatives, would be available to replace the baseload power supplied by Diablo Canyon by 2024 or 2025.

Fourth, SLOMFP fails to raise a genuine dispute with respect to its claim that PG&E's analysis of a "combination alternative" is arbitrary and unreasonable because it relies too heavily on natural gas. Although Dr. Cooper's declaration shows an increase in wind and solar generation,⁴⁷ as well as declining costs and increased use of battery technology,⁴⁸ he provides no evidence that these technologies will be commercially available and practicable to replace the baseload power provided by Diablo Canyon by 2024 or 2025. As the Commission held in Davis-Besse, evidence of developments in wind, solar, and energy storage technologies is, by itself, insufficient to demonstrate that they plausibly could satisfy baseload demand in any combination in the near term.⁴⁹

Finally, insofar as SLOMFP argues that PG&E should have weighed the costs and benefits of license renewal against the alternatives, such an analysis is outside the scope of this proceeding. As the Commission stated when it adopted the Part 51 regulations, the "determination of the economic viability of continuing the operation of a nuclear power plant is an issue that should be left to appropriate State regulatory and utility officials."⁵⁰ The NRC has no role in deciding whether a nuclear power plant should continue to operate based on economic considerations. In any event, SLOMFP's position in this regard also lacks adequate factual support. Although Dr. Cooper discusses cost reductions in technologies such as battery

⁴⁷ Cooper Decl. at 15-16.

⁴⁸ Id. at 7-19.

⁴⁹ CLI-12-08, 75 NRC at 400-01.

⁵⁰ 61 Fed. Reg. 28,467, 28,471 (June 5, 1996).

storage,⁵¹ he does not connect the reduced costs of any particular technology to its availability to supply baseload power by 2024 or 2025.

Contention A is not admitted.

Contention B (Failure to Conduct Cost-Benefit Analysis of Energy Alternatives) states:

The Environmental Report is inadequate to satisfy NEPA and 10 C.F.R. § 51.53(c)(2) because it presents a distorted and inaccurate comparison between the environmental impacts of continued operation of Diablo Canyon nuclear power plant and the environmental impacts of energy alternatives. PG&E arbitrarily excludes from its comparisons of environmental impacts (Tables 8-1 and Table 8-2) energy alternatives with small impacts, and misrepresents some of the impacts of renewing Diablo [sic] Canyon's license as small. As a result, PG&E fails to consider evidence that the adverse environmental impacts of renewing the Diablo Canyon operating license are 'so great, compared with the set of alternatives, that preserving the option of license renewal for future decisionmakers would be unreasonable.'⁵²

As SLOMFP recognizes, for Contention B to be admissible, it must satisfy an exceptionally strict standard.⁵³ License renewal applicants are not required to consider the relative costs and benefits of alternatives to the proposed action "except insofar as such costs and benefits are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation."⁵⁴ As the Commission has explained, the necessary determination is merely whether the adverse environmental impacts of license renewal are "so great, compared with the set of alternatives, that preserving the option of license renewal for future decisionmakers would be unreasonable."⁵⁵

SLOMFP attempts to satisfy this strict standard in three ways. First, SLOMFP asserts that PG&E "arbitrarily evaluated an energy alternative—the 'combination alternative'—that has

⁵¹ Cooper Decl. at 18-19.

⁵² Motion on Proposed Contentions A and B at 8 (quoting 61 Fed. Reg. at 28,468).

⁵³ Motion on Proposed Contentions A and B at 8-9.

⁵⁴ 10 C.F.R. § 51.53(c)(2).

⁵⁵ 61 Fed. Reg. at 28,468.

more significant impacts than other reasonable alternatives because it relies heavily on natural gas.”⁵⁶ Second, SLOMFP claims that PG&E incorrectly limited its analysis of environmental impacts to the twenty-year license renewal term and failed to account for the allegedly high adverse environmental impacts of storing and disposing of radioactive waste after the license renewal term.⁵⁷ Third, SLOMFP alleges that PG&E’s analysis is misleading insofar as its assessment of the potential consequences of accidents is allegedly premised on “probabilistic risk estimates that are fraught with uncertainty.”⁵⁸ None of SLOMFP’s arguments is persuasive.

First, as explained supra in connection with Contention A, SLOMFP fails to document with adequate support a plausible case that, by the time PG&E’s current licenses expire, Diablo Canyon might be replaced by any combination of alternative power sources which supply baseload power without natural gas. Accordingly, SLOMFP fails a fortiori to show that any such combination would be so preferable as to make preserving the option of license renewal unreasonable

Second, notwithstanding SLOMFP’s suggestion that PG&E ought to have considered waste storage and disposal issues after termination of its requested license extension, NRC regulations do not require it to do so. On the contrary, 10 C.F.R. § 51.53(c)(2) provides, without qualification, that applicants for license renewal need not discuss the impacts of continued storage.⁵⁹ Likewise, Table B-1 of 10 C.F.R. Part 51 defines high-level waste disposal as a

⁵⁶ Motion on Proposed Contentions A and B at 9.

⁵⁷ Id. at 9-10.

⁵⁸ Id. at 12.

⁵⁹ See also 10 C.F.R. § 51.23(b) (“The environmental reports described in § . . . 51.53 . . . are not required to discuss the environmental impacts of spent nuclear fuel storage in a reactor facility storage pool or an ISFSI [Independent Spent Fuel Storage Installation] for the period following the term of the reactor operating license . . . The impact determinations in NUREG-2157 regarding continued storage shall be deemed incorporated into the environmental impact statements . . .”).

Category 1 issue that applicants need not address in their environmental reports.⁶⁰ SLOMFP's arguments to the contrary are therefore beyond the scope of this proceeding and improperly challenge NRC regulations without petitioning for a waiver.⁶¹

Third, SLOMFP's arguments with respect to the potential consequences of severe accidents are likewise barred because they are beyond the scope of this proceeding and improperly challenge the Commission's regulations. Table B-1 of 10 C.F.R. Part 51 specifies that the "probability weighted consequences" of "societal and economic impacts from severe accidents are small for all plants."⁶² The Commission's generic determination precludes litigation of the societal and economic impacts of a severe accident in this proceeding, absent a waiver.

Contention B is not admitted.

Contention C (Inadequate Consideration of Seismic Risk in SAMA Analysis) states:

PG&E's SAMA Analysis (Appendix F of PG&E's Amended ER) is inadequate to satisfy [NEPA] or NRC implementing regulation 10 C.F.R. § 51.53(c)(ii)(L) because PG&E's evaluation of potential mitigation measures is not based on a sufficiently rigorous or up-to-date analysis of seismic risks. As a result, PG&E's evaluation of the comparative costs and benefits of measures to prevent or mitigate the effects of a severe earthquake does not sufficiently credit the cost-effectiveness of mitigation measures.

While PG&E claims that the 'results and insights' of its 2014 'interim' probabilistic risk analysis ('PRA') (labeled 'DCO3') are 'reasonable for the purposes of a SAMA analysis', by PG&E's own admission, DCO3 is only an 'interim' PRA. In addition, it is not sufficiently rigorous or updated to support the SAMA analysis.

Nor does PG&E's promise to 'update' the DCO3 with the 'results' of its 2015 seismic hazards analysis cure the inadequacy of DCO3 to support PG&E's SAMA Analysis, because PG&E's 2015 seismic hazards analysis is also insufficiently rigorous and relies on outdated or unjustified methods and assumptions. Given the inadequacies of PG&E's seismic hazards analysis, to merely cite its 'results' in a revised SAMA Analysis would not be sufficient to ensure the adequacy of the SAMA Analysis to evaluate potential mitigation measures for severe seismic

⁶⁰ 10 C.F.R. Part 51, Subpt. A, App. B Table B-1.

⁶¹ See 10 C.F.R. §§ 2.309(f)(1)(iii), 2.335.

⁶² 10 C.F.R. Part 51, Subpt. A, App. B Table B-1.

accidents. Instead, PG&E must cure the significant defects in the underlying data and analyses.⁶³

Contention C asserts that PG&E's SAMA analysis does not account for the revised seismic hazard addressed in PG&E's March 2015 response to the NRC's March 2012 request for information pursuant to 10 C.F.R. § 50.54(f) and, even if it did, alleges the SAMA analysis would still be inadequate because of claimed deficiencies in PG&E's 2015 seismic analysis.⁶⁴

The purpose of SAMA analyses is to identify safety enhancements that would be cost beneficial to adopt.⁶⁵ The potential cost of adverse events (discounted by the likelihood of occurrence) must be weighed against the cost of safety enhancements that might prevent them or mitigate their consequences.⁶⁶ Although a SAMA analysis considers safety issues, it is in actuality an environmental review that must be judged under NEPA's "rule of reason" and not under the safety requirements of the Atomic Energy Act.⁶⁷

The Commission has emphasized that "NRC adjudicatory hearings are not EIS editing sessions."⁶⁸ The ultimate concern "is whether any additional SAMA should have been identified as potentially cost beneficial, not whether further analysis may refine the details in the SAMA

⁶³ Motion on Proposed Contentions C and D at 2-3 (internal citations omitted). On July 31, 2015, SLOMFP moved to amend Contention C. San Luis Obispo Mothers for Peace's Motion to File Amended Contention C (Inadequate Consideration of Seismic Risk in SAMA Analysis as Supplemented by SHU-SAMA Evaluation) (July 31, 2015). The Board will address the admissibility of SLOMFP's proffered amended contention at the appropriate time.

⁶⁴ See id. at 2-15.

⁶⁵ See Entergy Nuclear Generation Co. & Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 290-91 (2010), pet. for reconsideration denied, CLI-10-15, 71 NRC 479 (2010).

⁶⁶ Id.

⁶⁷ Entergy Nuclear Generation Co. & Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-12-15, 75 NRC 704, 706-07 (2012).

⁶⁸ Entergy Nuclear Generation Co. & Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-09-11, 69 NRC 529, 533 (2009) (internal quotations omitted).

NEPA analysis.”⁶⁹ In determining whether a SAMA contention such as Contention C is admissible, “the ‘proper question is not whether there are plausible alternative choices for use in the analysis, but whether the analysis that was done is reasonable under NEPA.’”⁷⁰ As the Commission has stated: “Unless a petitioner sets forth a supported contention pointing to an apparent error or deficiency that may have significantly skewed the environmental conclusions, there is no genuine material dispute for hearing.”⁷¹ Applying the Commission’s standards, as we must, the Board cannot conclude that Contention C merits an evidentiary hearing.

First, PG&E’s 2015 seismic reevaluation, which was submitted in response to the NRC Staff’s request pursuant to section 50.54(f), is being reviewed by the NRC in a Part 50 process specifically designed to consider the adequacy of the Diablo Canyon plant’s current licensing basis. Insofar as Contention C alleges deficiencies in that seismic reevaluation per se, this Part 54 license renewal proceeding is not a proper forum for litigation of section 50.54(f) licensing basis issues with no connection to any SAMA.

Second, although SLOMFP favors the analytical approach suggested by its expert, Dr. Jackson, it fails to show that the approach taken by PG&E is not plausibly reasonable. As the Commission has explained, “[i]t will always be possible to envision and propose some alternate approach, some additional detail to include, some refinement.”⁷² That, without more, is insufficient. Indeed, although Dr. Jackson’s views were not ultimately adopted by PG&E, it happens that they were in fact considered and discussed during development of the 2015

⁶⁹ Id.

⁷⁰ Davis-Besse, CLI-12-08, 75 NRC at 406 (alterations in original) (citing Seabrook, CLI-12-05, 75 NRC at 323).

⁷¹ Id. at 407 (emphasis in original).

⁷² Pilgrim, CLI-12-15, 75 NRC at 714.

seismic analysis.⁷³ SLOMFP's desire for PG&E to embrace Dr. Jackson's views over the opinions of others does not establish a genuine dispute as to whether PG&E's choice was unreasonable.

Finally, and most importantly, Contention C never addresses the potential impact of any particular seismic model change on the cost-benefit evaluation of the SAMAs that PG&E considered. SLOMFP fails to raise a genuine dispute with respect to the material SAMA issue—that is, whether any particular safety enhancement would “be cost-effective to implement.”⁷⁴ Without some plausible demonstration of why a different methodology would materially affect the conclusions of the SAMA analysis, and make it unreasonable, SLOMFP does not raise an admissible issue.⁷⁵

Contention C is not admitted.

Contention D (Inadequate Discussion of Flooding Risks in SAMA Analysis) states:

PG&E's SAMA Analysis (Appendix F of PG&E's Amended ER) is inadequate to satisfy NEPA or NRC implementing regulation 10 C.F.R. § 51.53(c)(3)(ii)(L) because PG&E's evaluation of potential severe accident mitigation measures is not based on a sufficiently rigorous or up-to-date analysis of flooding risks. As a result, PG&E's evaluation of the comparative costs and benefits of measures to prevent or mitigate the effects of a severe earthquake does not sufficiently credit the cost-effectiveness of mitigation measures. In particular, PG&E failed to consider information about the risk of flooding of DCNPP safety equipment caused by local intense precipitation ('LIP') flooding events, as presented in PG&E's post-Fukushima flooding analysis.⁷⁶

⁷³ See PG&E, Seismic Source Characterization for the Diablo Canyon Power Plant, San Luis Obispo County, California, Rev. A., App. D: Workshop Summaries, at D29-30 (March 2015), available at: <http://www.pge.com/en/safety/systemworks/dcpp/sshac/index.page>.

⁷⁴ Pilgrim, CLI-10-11, 71 NRC at 291.

⁷⁵ Entergy Nuclear Generation Co. & Entergy Nuclear Operations, Inc., CLI-12-1, 75 NRC 39, 57-58 (2012). Additionally, at the time SLOMFP moved to admit Contention C, it was premature insofar as it alleged deficiencies in the 2015 seismic analysis that had not yet even been incorporated in PG&E's SAMA analysis. At that time, any complaints that SLOMFP might have had about a future, updated SAMA analysis were necessarily speculative.

⁷⁶ Motion on Proposed Contentions C and D at 16 (citation omitted).

As more fully set forth in SLOMFP's motion,⁷⁷ Contention D contends that PG&E's SAMA analysis also "is not based on a sufficiently rigorous or up-to-date analysis of flooding risks"⁷⁸ and, "contains no information about the risk of [local intense precipitation ("LIP")] flooding events" and mitigation measures.⁷⁹ SLOMFP further contends that the SAMA analysis should have considered the information in PG&E's March 2015 Flood Hazard Reevaluation Report.⁸⁰

Once again, the Board looks to the Commission's direction: "Unless a petitioner sets forth a supported contention pointing to an apparent error or deficiency that may have significantly skewed the environmental conclusions, there is no genuine material dispute for hearing."⁸¹ Applying this standard, we must determine that Contention D is inadmissible because it does not raise a material dispute with PG&E's SAMA analysis.

First, the risk of external flooding events is, in fact, addressed in PG&E's SAMA analysis—something that SLOMFP fails to acknowledge or address.⁸²

Second, insofar as Contention D alleges deficiencies in the March 2015 Flooding Hazards Report that PG&E submitted in response to the NRC Staff's request under section 50.54(f), SLOMFP again raises matters that are being addressed through current oversight processes. These are matters beyond the scope of this license renewal proceeding.

⁷⁷ Id. at 16-18.

⁷⁸ Id. at 16.

⁷⁹ Id. at 17.

⁸⁰ Id. at 16-17.

⁸¹ Davis-Besse, CLI-12-08, 75 NRC at 407 (emphasis in original).

⁸² See Updated ER, Appendix E at F-66-67 and F-89-93 (ADAMS Accession Nos. ML15056A756 and ML15056A759).

Third, SLOMFP again fails to demonstrate a “dispute that could lead to a different conclusion on potential cost-beneficial SAMAs.”⁸³ It does not explain how incorporating additional information might lead to the identification of additional cost-beneficial SAMAs. On the contrary, SLOMFP ignores the fact that the Flooding Hazards Report it relies upon, states that the maximum LIP is an event with a return period of approximately 129 million years.⁸⁴ As PG&E points out, this “can be fairly characterized as an unlikely event,”⁸⁵ and one that would not be expected to greatly influence a probabilistic risk assessment.

Contention D is not admitted.

⁸³ Pilgrim, CLI-09-11, 69 NRC at 533.

⁸⁴ Flooding Hazard Report at 3-3.

⁸⁵ PG&E Answer to Proposed Contentions C and D at 14.

III. ORDER

For the reasons stated, SLOMFP's motions to file new contentions are denied.

In accordance with 10 C.F.R. § 2.341, any appeal to the Commission from this Memorandum and Order must be taken within twenty-five (25) days after it is served.

THE ATOMIC SAFETY
AND LICENSING BOARD

/RA/

Paul S. Ryerson, Chair
ADMINISTRATIVE JUDGE

/RA/

Dr. Gary S. Arnold
ADMINISTRATIVE JUDGE

/RA/

Nicholas G. Trikouros
ADMINISTRATIVE JUDGE

Rockville, Maryland
August 6, 2015

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
PACIFIC GAS & ELECTRIC COMPANY) Docket Nos. 50-275-LR and 50-323-LR
)
(Diablo Canyon Nuclear Power Plant,)
Units 1 and 2))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **MEMORANDUM AND ORDER (Denying Motions to File New Contentions)** have been served upon the following persons by the Electronic Information Exchange.

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

Paul S. Ryerson, Chair
Administrative Judge
E-mail: paul.ryerson@nrc.gov

Nicholas G. Trikouros
Administrative Judge
E-mail: nicholas.trikouros@nrc.gov

Gary S. Arnold
Administrative Judge
E-mail: gary.arnold@nrc.gov

Alana Wase, Law Clerk
E-mail: alana.wase@nrc.gov

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

Edward L. Williamson, Esq.
E-mail: edward.williamson@nrc.gov
Beth Mizuno, Esq.
E-mail: beth.mizuno@nrc.gov
Susan Uttal, Esq.
E-mail: susan.uttal@nrc.gov
Catherine Kanatas, Esq.
E-mail: catherine.kanatas@nrc.gov
Joseph Lindell, Esq.
E-mail: joseph.lindell@nrc.gov
Daniel Straus, Esq.
E-mail: daniel.strauss@nrc.gov
John Tibbetts, Paralegal
E-mail: john.tibbetts@nrc.gov

OGC Mail Center
E-mail: OGCMailCenter@nrc.gov

U.S. Nuclear Regulatory Commission
Office of Commission Appellate Adjudication
Mail Stop: O-16C1
Washington, DC 20555-0001
OCA Mail Center
E-mail: ocaamail@nrc.gov

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

Diablo Canyon Nuclear Power Plant - Docket Nos. 50-275-LR and 50-323-LR
MEMORANDUM AND ORDER (Denying Motions to File New Contentions)

Counsel for Pacific Gas and
 Electric Company
 Winston & Strawn, LLP
 101 California Street
 San Francisco, CA 94111-5802
 David A. Repka, Esq.
 E-mail: drepka@winston.com
 Tyson Smith, Esq.
 E-mail: trsmith@winston.com
 Carlos Sisco, Senior Paralegal
 E-mail: csisco@winston.com

San Luis Obispo Mothers for Peace
 1123 Flora Road
 Arroyo Grande, CA 93420
 Jill ZamEk, Esq.
jzk@charter.net

Counsel for San Luis Obispo Mothers
 For Peace
 Harmon, Curran, Spielberg, and Eisenberg
 1726 M Street, N.W., Suite 600
 Washington, DC 20036
 Diane Curran, Esq.
dcurran@harmoncurran.com

Ayres Law Group, LLP
 1707 L Street NW, Suite 850
 Washington, DC 20036
 Richard E. Ayres, Esq.
 E-mail: ayresr@ayreslawgroup.com
 John Bernetich, Esq.
 E-mail: bernetichj@ayreslawgroup.com
 Jessica L. Olson, Esq.
 E-mail: olsonj@ayreslawgroup.com

[Original signed by Brian Newell]
 Office of the Secretary of the Commission

Dated at Rockville, Maryland
 this 6th day of August 2015