September 27, 2010

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

In the matter of
Pacific Gas and Electric Company — Docket Nos. 50-275-LR
Diablo Canyon Nuclear Power Plant — 50-323-LR
Units 1 and 2

SAN LUIS OBISPO MOTHERS FOR PEACE'S
ERRATA TO BRIEF REGARDING THE NRC'S DUTY
TO WAIVE 10 C.F.R. § 51.53(c)(2) ETC.

San Luis Obispo Mothers for Peace ("SLOMFP") hereby submits errata to its 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, Etc. (September 24, 2010). A corrected copy of the brief is also attached.

Page	Line	Correction
1	6	delete "the" after "proceeding for the"
1	9	insert ")" after "August 4, 2010)
5	21	delete "that" after "concluded that"
12	11	change "re" to "are" after "NEPA"
15	18	delete "*Id.* at"
16	19	delete "now" after "on which the NRC"

Respectfully submitted,

Electronically signed by
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September 24, 2010

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Corrected September 27, 2010
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I. INTRODUCTION

Pursuant to the Commission's Order of August 31, 2010, San Luis Obispo Mothers for Peace ("SLOMFP") hereby briefs the question of whether the Commission should waive 10 C.F.R. § 51.53(c)(2) and 10 C.F.R. Part 51, Subpart A, Appendix B, which would otherwise preclude consideration by the U.S. Nuclear Regulatory Commission ("NRC" or "Commission") of the environmental impacts of spent fuel storage in the license renewal proceeding for the Diablo Canyon nuclear power plant ("DCNPP"). In LBP-10-15, Memorandum and Order (Ruling on Standing, Contention Admissibility, Waiver Petition, and Selection of Hearing Procedures) (August 4, 2010)), the Atomic Safety and Licensing Board ("ASLB") found that SLOMFP had made a *prima facie* case that the regulations should be waived in this proceeding, in order to permit litigation of SLOMFP's claim in Contention EC-2 that Pacific Gas and Electric Company's ("PG&E's") Environmental Report is inadequate to satisfy the National Environmental Policy Act ("NEPA") because it does not address the airborne environmental impacts of a spent fuel pool accident caused by an earthquake adversely affecting DCNPP.

SLOMFP respectfully submits that under NEPA, as interpreted in 10 C.F.R. § 51.92(a)(2) and *Marsh v. Oregon Natural Resources Council,* 489 U.S. 360, 371-72 (1989), the Commission has a nondiscretionary duty to consider new and significant DCNPP-specific information that bears on the conclusion of the NRC's currently applicable generic environmental impact statement ("GEIS") that the environmental impacts of high-density pool storage of spent fuel are insignificant. *See* Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG-1437 (May 1996) ("1996 License Renewal GEIS").

Here, information presented in a draft revision to the 1996 GEIS (Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG-1437, Vol. 2 Rev. 1, Draft Report for Comment (July 2009) ("2009 Draft Revised GEIS")) shows that in two important respects, the NRC's view of the environmental impacts of high-density pool storage of spent fuels has changed dramatically since it issued the 1996 GEIS fourteen years ago. First, while the NRC continues to adhere to its general conclusion in the 1996 License Renewal GEIS that the risk of a spent fuel pool accident is low, it has completely changed the technical basis for that conclusion. The "key" document on which the NRC now relies is NUREG-1738, *Final Technical Study of Spent Fuel Pool Accident Risk and Decommissioning Nuclear Power Plants* (January 2001), which contradicts several of the crucial assumptions underlying the conclusion of the 1996 License Renewal GEIS. Second, the 2009 Draft Revised License Renewal GEIS repeats the conclusion of NUREG-1738 that the NRC Staff's generalized finding that spent fuel pool accident risks are low cannot be applied to reactors located in the western United States.

Thus, the NRC itself has identified new and significant information which must be considered in both the Environmental Report and a supplemental Environmental Impact Statement ("EIS") for DNCPP before the reactor's license may be renewed. 10 C.F.R. §

51.92(a)(2). Because Contention EC-2 reasonably faults the Environmental Report for failing to consider this new and significant information, the contention should be admitted.

II. FACTUAL AND PROCEDURAL BACKGROUND

A. Environmental Impact Statements and Other Analyses Applicable to Spent Fuel Storage at DCNPP

1. Waste Confidence Rulemaking

In 1990, the NRC examined the environmental impacts of storing spent fuel at reactor sites for an additional 30 years pending the opening of a final repository. Review and Final Revision of Waste Confidence Decision, 55 Fed. Reg. 38,474 (September 18, 1990). Although the NRC did not prepare an EIS in support of the rulemaking, the rulemaking notice discussed the documents on which the NRC relied for its conclusion that high-density pool storage of spent fuel posed no significant environmental risk. Citing several reports, the Commission said that it had spent "several years studying in detail the catastrophic loss of reactor spent fuel pool water possibly resulting in a fuel fire in a dry pool." 55 Fed. Reg. at 38,481.[1]

According to the Commission, "[t]he analyses reported in these studies indicate that the dominant accident sequence which contributes to risk in a spent fuel pool is gross structural failure of the pool due to seismic events." *Id.* The Commission concluded that the risk of such an event was extremely small, however, because such a severe loss of cooling water "is likely to result only from an earthquake well beyond the conservatively estimated earthquake for which reactors are designed," *i.e.* earthquakes that are "extremely rare." *Id.* This conclusion appeared

[1] These studies were: NUREG/CR-4982, Severe Accidents in Spent Fuel Pools in Support of Generic Issue 82 (1987); NUREG/CR-5176, Seismic Failure and Cask Drop Analysis of the Spent Fuel Pools at Two Representative Nuclear Power Plants (1989); NUREG/CR-5281, Value/Impact Analysis of Accident Preventative and Mitigative Options for Spent Fuel Pools; NUREG-1353, Regulatory Analysis for the Resolution of Generic Issue 82, Beyond Design-basis Accidents in Spent Fuel Pools (1989).

to be based in part on the assumption that "a fire could occur only with a relatively sudden and substantial loss of coolant." *Id.* The NRC made no mention, however, of a 1979 report by Sandia National Laboratories which had found that partial loss of water from a pool posed a more serious risk than complete and instantaneous drainage. NUREG/CR-0649, *Spent Fuel Heatup Following Loss of Water During Storage* (March 1979).

Moreover, the Commission failed to note the observation in NUREG-1353 that: "some laboratory studies have provided evidence of the possibility of fire propagation between assemblies in an air cooled environment." NUREG-1353 at ES-1. Nor did the NRC respond to the recommendation of NUREG-1353 that the NRC undertake a "re-examination" of the risks of spent fuel pool accidents. NUREG-1353 at ES-1.

Based on its conclusion that the environmental impacts of high-density spent fuel pool storage are small, the NRC promulgated 10 C.F.R. § 51.23(b), which excuses licensees and the NRC from addressing the environmental impacts of spent fuel pool storage after the term of a reactor operating license has expired.

2. 1996 License Renewal GEIS

In 1996, the NRC issued the License Renewal GEIS, in which it asserted that the environmental impacts of spent fuel storage can be determined generically and are small. *Id.* at 6-83. The GEIS contained no new analysis of the potential for spent fuel pool accidents, other than the analyses that had been cited in the 1990 Waste Confidence rulemaking. *Id.*

Based on its conclusion that spent fuel storage impacts are vanishingly small, the NRC promulgated regulations which classified spent fuel accidents as "Category 1" impacts which are insignificant. 10 C.F.R. Part 51, Subpart A, Appendix B. As stated in Table B-1 of Appendix B:

> The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on a site with small environmental effects through

dry or pool storage at all plants if a permanent repository or monitored retrievable storage area is not available.

The NRC also promulgated a regulation which excused license renewal applicants from addressing spent fuel storage impacts in their environmental reports. 10 C.F.R. § 51.53(c)(2).

3. Post-GEIS studies

During the decade that followed the issuance of the 1996 License Renewal GEIS, the NRC and the National Academy of Sciences ("NAS") issued reports which followed up on the concerns raised in NUREG/CR-0649 and NUREG-1353 that the NRC had not done a conservative enough analysis of spent fuel pool accident risks. These reports presented analyses and conclusions that directly contradicted the NRC's previous conclusion that high-density spent fuel pools posed no environmental risks.

a. NUREG-1738

In NUREG-1738, the NRC Staff contradicted the 1996 License Renewal GEIS by concluding that regardless of the age of the fuel in a pool, the fuel will burn shortly after the tops of the fuel assemblies are uncovered. *Id.* at 2-1 – 2-2. As summarized in the report, adiabatic heatup of the fuel, caused by disruption of the passive cooling process, may cause a radioactive release within 24 hours after the fuel assemblies are uncovered, even for fuel aged five years. *Id.* at 2-2.

NUREG-1738 acknowledged that if a pool fire were to occur, it "could result in high consequences in terms of property damage and land contamination." *Id.* at A6-26. Although NUREG-1738 concluded that latent fatalities would be relatively low, it based that conclusion on the presumption that the people in the area of a nuclear plant will be evacuated and relocated after a pool fire. *Id.* at A4C-4.

NUREG-1738 concluded that the likelihood of a zirconium fire in a post-decommissioning spent fuel pool was low. However, this conclusion was not extended to reactor sites in the western United States. These sites "would need to be considered on a site-specific basis because of important differences in seismically induced failure potential of the SFPs [spent fuel pools]." *Id.* at ix. *See also id.* at 3-7, 3-36, 4-3.

b. NAS Report

In a subsequent study which focused on the vulnerability of fuel pools to attack, an NAS committee (which included former NRC official Robert Bernerno) reviewed NUREG-1738 and other more recent studies that followed on the work done in NUREG-1738. NAS Committee on the Safety and Security of Commercial Spent Nuclear Fuel Storage, *Safety and Security of Commercial Spent Nuclear Fuel Storage* at 53-54 (NAS Press: 2006) ("NAS Report"). While a significant portion of the report was classified, the unclassified portion of the report reported the committee's general conclusions that:

> For some scenarios, the fuel could be air cooled within a relatively short time after its removal from the reactor. If a loss-of-coolant event took place before the fuel could be air cooled, however, a zirconium cladding fire could be initiated if no mitigative actions were taken. Such fires could release some of the fuel's radioactive material inventory to the environment in the form of aerosols.
>
> For a partial-loss-of-pool-coolant event, the analysis indicates that the potential for zirconium cladding fires would exist for an even greater time (compared to the complete-loss-of-pool-coolant event) after the spent fuel was discharged from the reactor because air circulation can be blocked by water at the bottom of the pool. Thermal coupling between circulation can be blocked by water at the bottom of the pool. However, this heat transfer model has been modeled simplistically in the MELCOR runs performed by Sandia.
>
> If the water level is above the top of the fuel racks, decay heat in the fuel could cause the pool water to boil. Once water levels fall below a certain level in the fuel assembly, the exposed portion of the fuel cladding might heat up sufficiently to ignite if no mitigative actions were taken. This could result in the release of a substantial fraction of the cesium inventory to the environment in the form of aerosols.

Id. at 53-54 (footnote omitted). Thus, like NUREG-1738, the NAS Report fundamentally contradicted the conclusion of the 1996 License Renewal GEIS that a spent fuel pool fire was virtually impossible.

4. NRC decision denying rulemaking petition

In 2006, based on the new and significant information presented in NUREG-1738 and the NAS Report, the Massachusetts Attorney General petitioned the NRC to revisit the 1996 GEIS's conclusion that spent fuel storage impacts are insignificant. A majority of the Commissioners denied the petition, concluding that the NRC's generic findings in the 1996 License Renewal GEIS "remain valid." The Attorney General of Commonwealth of Massachusetts, the Attorney General of California; Denial of Petitions for Rulemaking, 73 Fed. Reg. 46,204, 46,208 (August 8, 2008).[2]

In denying the rulemaking petition, however, the NRC acknowledged that the technical basis for its generic findings in the 1996 License Renewal GEIS had changed. For instance, rather than continuing to believe that a total loss of water is the most severe accident case, the NRC affirmed NUREG-1738's conclusion that a partial loss of water is more severe:

> Air cooling is less effective under the special, limited condition where the water level in the SFP [spent fuel pool] drops to a point where water and steam cooling is not sufficient to prevent the fuel from overheating and initiating a zirconium fire, but the water level is high enough to block the full natural circulation of air flow through the assemblies.

73 Fed. Reg. at 46,208. The NRC also found, however, that spent fuel pool fire accident scenarios were conducive to mitigation because there "may be" a significant period of time between an initiating event and fuel uncovery. *Id.* Therefore the Commission had required implementation of "mitigation strategies" at all operating reactors. *Id.* Based on NUREG-1738,

[2] Commissioners Jaczko would have partially granted the petition by addressing the Attorney General's concerns in the anticipated rulemaking for revision of the 1996 License Renewal GEIS. 73 Fed. Reg. at 46,211-12.

additional analyses conducted by Sandia National Laboratories, and these mitigation strategies, the NRC concluded that the environmental impacts of high-density storage of spent fuel remained insignificant. *Id.*

The U.S. Court of Appeals for the Second Circuit affirmed the NRC's decision but did not apply the test of reasonableness generally applied to NEPA decisions. *See, e.g., Warm Springs Dam Task Force v. Gribble,* 621 F.2d 1017, 1024 (9th Cir. 1980). Instead, the Court applied the standard for review of decisions denying rulemaking petitions, which is "so high as to be 'akin to non-reviewability.'" *New York v. NRC,* 589 F.3d 551, 554 (2nd Cir. 2008) (quoting *Cellnet Comm'n, Inc. v. FCC,* 965 F.2d 1106, 1111 (D.C. Cir. 1992)). The court refused to "second-guess" the NRC's technical analysis of the factual issues raised by the rulemaking petition. *Id.* at 555. It also concluded that the NRC could rely upon mitigation measures imposed at all nuclear plants for its conclusion that as a general matter, environmental impacts of spent fuel storage are low. *Id.*

5. 2009 Draft Revised License Renewal GEIS

a. Issuance of 2009 Draft Revised License Renewal GEIS

In the summer of 2009, the NRC issued the 2009 Draft Revised License Renewal GEIS, in which it updated the 1996 License Renewal GEIS by addressing additional spent fuel pool risk analyses performed since 1996. *Id.,* § E.3.7 at E-32 – E-37. While the Draft Revised License Renewal GEIS reaches the same conclusion as the 1996 License Renewal GEIS that spent fuel storage environmental impacts are insignificant, it substantially alters the technical basis for that conclusion. The "key document" on which the NRC now relies for its conclusion that spent fuel pool storage risks are small is NUREG-1738. *Id.* at E-33 – E-34. Based on NUREG-1738, the Draft Revised License Renewal GEIS contains an analysis of "airborne pathway impacts" of a

spent fuel pool fire, but the analysis specifically excludes Diablo Canyon and two other western nuclear power plants. *Id.*

The Draft Revised License Renewal GEIS also amends NUREG-1738 by stating that recent and "more rigorous accident progression analyses," "mitigation enhancements," and "NRC site evaluations of every SFP in the United States" have led it to conclude that "the risk of an SFP zirconium fire initiation is expected to be less than reported in NUREG-1738 . . . and previous studies." *Id.* at E-36. However, the Draft Revised License Renewal GEIS does not represent that any of these accident progression analyses, mitigation enhancements, or NRC site evaluations examined the relationship between a spent fuel pool fire and earthquake risk at DCNPP. Indeed, the Draft Revised License Renewal GEIS provides no information whatsoever regarding any site-specific analysis for DCNPP or any other reactor.

b. SLOMFP comments on 2009 Draft Revised License Renewal GEIS

On January 12, 2010, SLOMFP submitted comments on the 2009 Draft Revised License Renewal GEIS. Memorandum from Jill ZamEk and Jane Swanson, SLOMFP, to Secretary, U.S. NRC, re: Draft revision to the Generic Environmental Impact Statement for License Renewal of Nucler plants, NUREG-1437, revision 1 (GEIS). In support of its comments, SLOMFP attached and incorporated by reference five technical reports, including three reports by Dr. Gordon R. Thompson which had been previously submitted to the NRC in other proceedings: *Assessing Risks of Potential Malicious Actions at Commercial Facilities: The Case of a Proposed Independent Spent Fuel Storage Installation at the Diablo Canyon Site* (June 27, 2007); *Environmental Impacts of Storing Spent Nuclear Fuel and High-Level Waste from Commercial Nuclear Reactors: A Critique of NRC's Waste Confidence Decision and Environmental Impact Determination* (February 6, 2009); and *Risks and Risk-Reducing Options Associated with Pool*

Storage of Spent Nuclear Fuel at the Pilgrim and Vermont Yankee Nuclear Power Plants (May 25, 2006).

Citing Dr. Thompson's June 27, 2007, and February 6, 2009, reports, SLOMFP criticized the 2009 Draft Revised License Renewal GEIS for restricting its consideration of the impacts of a pool fire to latent fatalities and ignoring the dominant environmental impact of a pool fire: land contamination. Comments at 3. SLOMFP also criticized the NRC for distorting NUREG-1738 by characterizing it as "conservative" with respect to operating plants and ignoring the fact that NUREG-1738 itself states that while event sequences important to risk at decommissioning plants are limited to large earthquakes and cask drops, for operating reactors a large number of different accident sequences contribute significantly to risk. *Id.* at 4 (citing Dr. Thompson's May 25, 2006, report).

SLOMFP also challenged the 2009 Draft Revised License Renewal GEIS' reliance on site-specific mitigative measures for its general assertion that spent fuel pool storage risks are insignificant. *Id.* at 5. To the extent that the 2009 Draft Revised GEIS depended on classified and safeguards documents, SLOMFP demanded that the NRC establish procedures for obtaining access to those documents under 42 U.S.C. § 2231.

Finally, SLOMFP asserted that the NRC was precluded from treating spent fuel pool accident risks as a "Category 1" issue with respect to DCNPP by virtue of its own acknowledgement in Appendix E that earthquake risks for the DCNPP were excluded from consideration of the risks of a spent fuel pool fire. *Id.* at 8 (citing Draft Revised License Renewal GEIS at E-33).

B. License Renewal Proceeding for Diablo Canyon Nuclear Power Plant.

On November 23, 2009, PG&E submitted an application and Environmental Report for renewal of the DCNPP operating license. In reliance on the 1996 GEIS, the Environmental Report did not address the environmental impacts of continued storage of spent fuel in high-density pool storage racks at the reactor site. Environmental Report at 4-1.

With respect to earthquake risks, PG&E's SAMA analysis for Diablo Canyon states that while it is generally reasonable to conclude that the risk of external and internal events are "approximately equal," seismic accident risk contributors (along with fire) are "disproportionately dominant" when compared to all external events. *Id.* at F-65.

On March 22, 2010, SLOMFP submitted a Request for Hearing and Petition to Intervene ("Hearing Request") and Petition for Waiver of 10 C.F.R. Part 51 Subpart A Appendix B and 10 C.F.R. § 51.53(c)(2) ("Waiver Petition") in this proceeding. SLOMFP's contentions included Contention EC-2, which asserted that:

> PG&E's Environmental Report is inadequate to satisfy NEPA because it does not address the airborne environmental impacts of a reasonably foreseeable spectrum of spent fuel pool accidents, including accidents caused by earthquakes.

Hearing Request at 16. Although both PG&E and the NRC Staff objected to the admissibility of Contention EC-2 and the granting of the waiver petition, in LBP-10-15 the ASLB admitted a modified version of the contention and held that SLOMFP had made a *prima facie* case in support of a waiver. LBP-10-15, slip op. at 45.

III. STATUTORY AND REGULATORY FRAMEWORK

A. NEPA

1. General requirements of NEPA

NEPA is the "basic charter for protection of the environment." 40 C.F.R. § 1500.1. Its fundamental purpose is to "help public officials make decisions that are based on understanding of environmental consequences, and take decisions that protect, restore and enhance the environment." *Id.* NEPA requires federal agencies to examine the environmental consequences of their actions *before* taking those actions, in order to ensure "that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). An agency's obligations under NEPA are "not discretionary, but specifically mandated by Congress, and are to be reflected in the procedural process by which agencies render their decisions." *Silva v. Romney,* 473 F.2d 287, 292 (1st Cir. 1973).

The primary method by which NEPA ensures that its mandate is met is the "action-forcing" requirement for preparation of an EIS, which assesses the environmental impacts of the proposed action and weighs the costs and benefits of alternative actions. *Id.,* 490 U.S. at 350-51.

The environmental impacts that must be considered in an EIS include "reasonably foreseeable" impacts which have "catastrophic consequences, even if their probability of occurrence is low." 40 C.F.R. § 1502.22(b)(1). However, environmental impacts that are "remote and speculative" need not be considered. *Limerick Ecology Action v. NRC,* 869 F.2d 719, 745 (3rd Cir. 1989), citing *Vermont Yankee Nuclear Power Corp. v. Natural Resources*

Defense Council, Inc., 435 U.S. 519, 551 (1978).[3]

2. Continuing duty to consider new information

A federal agency "has a continuing duty to gather and evaluate new information relevant to the environmental impact of its actions." *Warm Springs Dam Task Force,* 621 F.2d at 1023-24. "When new information comes to light the agency must consider it, evaluate it, and make a reasoned determination whether it is of such significance as to require implementation of formal NEPA filing procedures." *Id. See also Friends of the Clearwater v. Dombeck,* 222 F.3d 552, 558 (9th Cir. 2000) (finding "no evidence in the record" that Forest Service had considered new information bearing on sufficiency of programmatic EIS to support individual timber sale). Where aspects of a proposed action are addressed by a previously prepared EIS, a new EIS must be issued if there remains "major federal action" to occur, and if there is new information showing that the remaining action will affect the quality of the human environment "in a significant manner or to a significant extent not already considered." *Marsh,* 490 U.S. at 374. Thus, NRC regulation 10 C.F.R. § 51.92(a)(2) requires that the Commission must supplement an EIS where there are "new and significant circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts."

[3] In determining whether a particular accident scenario is "reasonably foreseeable," the NRC has held that low probability in quantitative terms is "key." *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-90-7, 32 NRC 129, 131 (1990). The NRC has not fixed a line of demarcation between probability that is considered "reasonably foreseeable" and probability that is considered "remote and speculative." *Carolina Power and Light Co.* (Shearon Harris Nuclear Power Plant), CLI-01-11, 53 NRC 370, 388 n.8 (2001). However, the Commission has refused to rule out an accident probability of 10^{-4} per year as remote and speculative. *Id.* (citing *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-90-4, 31 NRC 333, 334 (1990)).

3. Generic environmental impact statements and supplementation

An agency may rely on a generic EIS to evaluate environmental impacts that are common to more than one federal action. *Baltimore Gas & Elec. Co. v. NRC,* 462 U.S. 87, 100 (1983). Thus, for renewal of nuclear reactor licenses, NRC regulations allow both applicants and the agency to rely on the License Renewal GEIS for an analysis of issues that are common to all reactors. These issues, including spent fuel storage impacts, are designated as "Category 1" in 10 C.F.R. Part 51, Subpart A, Appendix B.

Importantly, however, reliance on the License Renewal GEIS for analysis of Category 1 impacts is only permitted "absent new and significant information." Final Rule, Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467, 28,483 (June 5, 1996). The NRC's NEPA regulations for license renewal also contain numerous procedural mechanisms designed to ensure that new and significant information is taken into account in each individual license renewal decision, such as the requirement for a Supplemental EIS instead of an Environmental Assessment and the requirement that:

> [i]f a commenter [on the draft Supplemental EIS] provides new, site specific information which demonstrates that the analysis of an impact codified in the rule is incorrect with respect to a particular plant, the NRC staff will seek Commission approval to waive the application of the rule with respect to that analysis in that specific renewal proceeding. The supplemental EIS would reflect the corrected analysis as appropriate.

Id., 61 Fed. Reg. at 28,470.

B. NRC Regulations for Regulatory Waivers

NRC regulations and case law governing waiver petitions do not explicitly address NEPA issues, but they may be interpreted consistently with 10 C.F.R. § 51.92(a)(1) and *Marsh.* The applicable regulation, 10 C.F.R. § 2.335(b), provides that the "sole ground for a petition of waiver or exception" to NRC regulations is that "special circumstances with respect to the

subject matter of the particular proceeding are such that the application or the rule or regulation (or a provision of it) would not serve the purposes for which the rule or regulation was adopted." In the context of a NEPA analysis, the question raised by § 2.335(b) of whether application of a regulation would "serve the purposes for which the rule or regulation was adopted" can be addressed by examining the continued viability of the environmental analysis on which the regulation is based. The "special circumstances" test is also consistent with the "new information or changed circumstances" standard of 10 C.F.R. § 51.92(a)(2).

In *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551 (2005), which involved a request for a waiver of the NRC's emergency planning regulations, the Commission broke down the requirements of § 2.335(b) into the following four-fold showing:

> That (i) the rule's strict application "would not serve the purposes for which [it] as adopted"; (ii) the movant has alleged "special circumstances" that were "not considered, either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived"; (iii) those circumstances are "unique" to the facility rather than "common to a large class of facilities"; and (iv) a waiver of the regulation is necessary to reach a "significant safety problem."[4]

Consistent with NEPA, the *Millstone* test can be applied to whether special environmental circumstances that are significant to the outcome of a NEPA analysis were considered in an earlier EIS or EA for the proposed action. LBP-10-15, slip op. at 43.

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[4] 62 NRC at 560 (quoting 10 C.F.R. § 2.335(b) and citing *Public Service Company of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-20, 30 NRC 231, 235 (1989); *Public Service Company of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 597 (1988), *reconsid'n denied,* CLI-89-3, 29 NRC 234 & CLI-89-7, 29 NRC 395 (1989); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 239, *reconsid'n granted in part on other grounds,* LBP-98-10, 47 NRC 288, *aff'd,* CLI-98-13, 48 NRC 26 (1988)).

IV. ARGUMENT

A. The Draft Revised License Renewal GEIS Presents New and Significant Information That Must be Considered in a Supplemental EIS.

As discussed above in Section II.A.2, the NRC's duty to consider new and significant information bearing on the outcome of its environmental analysis of a proposed action is non-discretionary. *Silva,* 473 F.2d at 292. Here, the NRC is legally obligated to issue a supplemental EIS regarding the environmental impacts of spent fuel storage at DCNPP because the Draft Revised License Renewal GEIS contains an explicit disclaimer that the NRC will not vouch for the insignificance of spent fuel pool storage impacts with respect to nuclear reactors located in the western United States. *See* discussion above in Section II.A.5.a. By the NRC's own admission, therefore, a new analysis of the risks of pool storage of spent fuel at DCNPP is required by NEPA.[5]

Other statements in the Draft Revised GEIS for License Renewal and PG&E's Environmental Report provide further support for the existence of new information calling for the re-evaluation of earthquake-related spent fuel pool storage risks at DCNPP, including:

- The statement in PG&E's Environmental Report that earthquakes dominate severe accident risks at DCNPP (*see* discussion above in Section II.B);
- The statement in the Draft Revised License Renewal GEIS that NUREG-1738 is now the "key" document on which the NRC relies for its evaluation of spent fuel pool accident risks (*see* discussion above in Section II.A.5.a);
- The statement in NUREG-1738 that partial drainage of a spent fuel pool is a more severe accident case than total drainage, which implies that less severe (and therefore more

[5] As noted by the ASLB, the fact that the 2009 Draft Revised License Renewal GEIS is not final "is not crucial. The relevant point is that the 2009 Draft GEIS contains new and significant information, not that the document is labeled 'draft.'" LBP-10-15, slip op. at 24 n.53.

probable) earthquakes may present a greater risk than the most severe earthquakes (*see* discussion above in Section II.A.2.a);

- The statement in NUREG-1738 that for operating plants, other causative factors besides earthquakes may play a significant role in causing accidents, thus increasing the risk of a spent fuel pool fire (*see id.*); and
- The fact that in claiming to have mitigated the impacts of a spent fuel pool fire through mitigative measures, the NRC has not identified any mitigative measures specific to DCNPP or explained how they took into account the increased risk of an earthquake at that site. *See* discussion above in Section II.A.5.a.

B. The New and Significant Information Presented in the Draft Revised GEIS is Specific to DCNPP and Other Western Reactors.

As a general rule, the NRC has the discretion to choose between a rulemaking and an individual licensing proceeding for purposes of preparing or supplementing an EIS. *Baltimore Gas & Elec. Co.,* 462 U.S. at 100. SLOMFP believes that in this case, it would be appropriate to address the issue of spent fuel storage risks in the individual license renewal proceeding for DCNPP, based on the recommendation of NUREG-1738 that seismic risks for H.B. Robinson and the three western reactors should be evaluated on a "plant-specific basis." *Id.* at 4-3. Plant-specific consideration is also appropriate given the fact that (a) the mitigative measures relied on by the NRC are site-specific; and (b) in the Draft Revised GEIS, the NRC has not provided enough information about those measures to allow any member of the public to determine whether and to what extent the measures took into account the earthquake risks at DCNPP.

SLOMFP respectfully submits that before the NRC may rely on the analysis in the Draft Revised License Renewal GEIS to claim that earthquake-related spent storage risks at DCNPP are insignificant, it must identify and provide access to publicly releasable portions of the

documents which describe those measures, as required by *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant Independent Spent Fuel Storage Installation), CLI-08-01, 67 NRC 1, 14-16 (2008). And to the extent that information about those mitigative measures constitutes classified or safeguards information, SLOMFP requests the Commission to establish procedures under 42 U.S.C. § 2231 to permit SLOMFP to seek protected access to the information.

C. SLOMFP Has Met the Standard for a Waiver in 10 C.F.R. § 2.335.

As discussed at length by the ASLB in LBP-10-15, SLOMFP has met the NRC's standard for issuance of a waiver, in the "absence of evidence that the 1996 GEIS relies on sufficient information to reach a conclusion applicable to DCNPP regarding the impacts of a seismically-induced SFP accident." *Id.,* slip op. at 43. In order to present sufficient evidence to support PG&E's continued reliance on the 1996 GEIS, PG&E and the NRC Staff would have to provide a great deal of additional information about how the NRC's analysis of spent fuel pool risks changed over time, including identification and disclosure of relevant parts of all of the studies to which the NRC vaguely refers in the Draft Revised License Renewal GEIS for purposes of asserting that the risks of a spent fuel pool accident are not as severe as stated in NUREG-1738 and have been sufficiently mitigated to be reduced to an insignificant level. *See* discussion above in Section IV.B.

SLOMFP believes the ASLB has provided a thorough and well-reasoned analysis of how and why it has meet the standard for waiver of the NRC's regulations precluding consideration of spent fuel storage impacts in this proceeding. In addition, SLOMFP wishes to point out that the NRC does not have the same discretion in applying 10 C.F.R. § 2.335 to a NEPA waiver request as it might to a request for waiver of a safety regulation because the NRC's obligations under NEPA are non-discretionary. *See* discussion above in Section III.A.1. By the same token,

it would be inappropriate for the NRC to apply a higher standard than one of "reasonableness" to the question of whether SLOMFP has identified new and significant information that should be addressed in a supplemental EIS. *Warm Springs Dam Task Force,* 621 F.2d at 1024.

D. Contention EC-2 is Admissible Under 10 C.F.R. § 2.309(f).

SLOMFP also believes the ASLB has provided a thorough and well-reasoned analysis of the admissibility of Contention EC-2. LPB-10-15, slip op. at 45-51. SLOMFP agrees with the ASLB that despite the reference to PG&E's SAMA analysis in the contention's title, the subject matter of the contention is the adequacy of PG&E's analysis of airborne environmental impacts of spent fuel pool accidents. *Id.,* slip op. at 48.

SLOMFP disagrees with the ASLB, however, to the extent it states that the contention would be inadmissible if the subject matter were restricted to the question of whether PG&E had done a sufficient severe accident mitigation alternatives ("SAMA") analysis for spent fuel pool accidents at DCNPP. *Id.,* slip op. at 46 (citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4)*,* CLI-01-17, 54 NRC 3 (2001). According to the ASLB, the Commission has ruled that SAMA analyses apply to nuclear *reactor* accidents, not spent fuel storage accidents. *Id.* (citing 54 NRC at 21 (emphasis in original)). The ASLB's reasoning is circular: the only legitimate reason not to do a SAMA analysis for spent fuel pool accidents would be that no NEPA analysis of spent fuel pool accidents is required by virtue of 10 C.F.R. Part 51, Subpart A, Appendix B. If Appendix B no longer applies, then it is just as necessary to prepare a plant-specific SAMA analysis for a spent fuel pool accident as for a reactor accident, because no such analysis has been done generically.

V. CONCLUSION

For the foregoing reasons, the Commission should grant SLOMFP's waiver petition and affirm the ASLB's decision to admit Contention EC-2.

Respectfully submitted,

Electronically signed by
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