

June 16, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)	
)	
PACIFIC GAS AND ELECTRIC COMPANY)	Docket No. 72-26-ISFSI
)	
(Diablo Canyon Power Plant Independent Spent Fuel Storage Installation))	ASLBP No. 08-860-01-ISFSI-BD01

NRC STAFF'S RESPONSE TO SAN LUIS OBISPO
MOTHERS FOR PEACE'S SUBPART K PRESENTATION

INTRODUCTION

Pursuant to the Commission's Order of June 6, 2008,¹ the Nuclear Regulatory Commission Staff ("Staff") hereby responds to the Subpart K summary filed by San Luis Obispo Mothers for Peace.² As discussed below, SLOMFP has failed to raise any genuine issue concerning the adequacy of the Staff's environmental review, documented in the Supplemental EA.³ The record in this proceeding establishes that the Staff's consideration of latent health impacts and land contamination was adequate to meet the NRC's obligations under the National Environmental Policy Act, 42 U.S.C. §§ *et seq.* ("NEPA"). Therefore, the Commission should resolve the admitted contention in favor of the Staff.

¹ *Pacific Gas & Electric Co.*, (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), slip op. at 2 (June 6, 2008) ("Scheduling Order").

² "San Luis Obispo Mothers for Peace's Detailed Summary of Facts, Data, and Arguments on Which it Intends to Rely at Oral Argument to Demonstrate the Inadequacy of the U.S. Nuclear Regulatory Commission's Final Supplement to the Environmental Assessment for the Proposed Diablo Canyon Independent Spent Fuel Storage Installation to Consider the Environmental Impacts of an Attack on the Facility (Contention 2)," April 14, 2008, ("SLOMFP Subpart K Summary").

³ "Supplement to the Environmental Assessment and Final Finding of No Significant Impact Related to the Construction and Operation of the Diablo Canyon Independent Spent Fuel Storage Installation," August 2007 ("Supplemental EA").

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DISCUSSION

As explained in its Subpart K Summary, SLOMFP is requesting a finding by the Commission under 10 C.F.R. § 2.1115(a)(2) that “there is no unresolved dispute of law or fact regarding Contention 2, and that SLOMFP should prevail on the claims raised in the contention.”⁴ Thus, SLOMFP is not seeking further adjudicatory proceedings but posits that the record before the Commission warrants resolution of Contention 2, alleging that the Staff did not consider the latent health effects and land contamination that could result from terrorist attack on the Diablo Canyon ISFSI. *Id.* Contrary to SLOMFP’s claims that the Staff ignored these environmental impacts, the record before the Commission demonstrates that the Staff considered the contribution of land contamination to dose and the consequences of dose to human health, including latent effects, in its environmental review.⁵ When considered in the context of the low probability that a terrorist attack will be successful in causing a significant release of radiation, the record demonstrates that the Staff’s consideration of those impacts was sufficient to satisfy the requisite “hard look” required under NEPA.⁶ The Staff’s response to SLOMFP’s specific arguments is set forth below.

I. SLOMFP’s Claims That The Staff Did Not Properly Account for the Consequences of Terrorist Threat Scenarios Are Factually Unsupported and Cannot Be Considered Undisputed.

SLOMFP claims that there is no dispute that the Staff failed to consider impacts of credible terrorist threat scenarios because the Staff has not offered justification or explanation for the fact that the Supplemental EA does not disclose radiological impacts of the magnitude

⁴ SLOMFP Subpart K Summary at 3.

⁵ “NRC Brief and Summary of Relevant Facts, Data, and Arguments Upon Which the Staff Proposes to Rely at Oral Argument on San Luis Obispo Mothers for Peace’s Contention 2,” April 14, 2008, (“Staff Subpart K Summary”) at 19, Aff.1 at ¶¶ 36, 51 and Aff. 2 at ¶¶ 8 – 9.

⁶ See, *Baltimore Gas & Electric v. Natural Resource Defense Council, Inc.* 462 U.S. 87, 97 (1983), citing, *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976).

postulated by its expert, Dr. Thompson.⁷ In the affidavits offered by SLOMFP to support this claim, Dr. Thompson notes that the Staff calculated that for the credible terrorist scenario with the largest potential impact, the dose to the nearest resident would be less than 5 rem.⁸ After observing that such a low dose would require only a small release of material from the storage casks from a terrorist attack, Dr. Thompson postulated a threat scenario from which he calculated a radiological release of 3 million curies of cesium – 137, representing about 50 percent of the amount present in four spent fuel storage modules. Based on the assumption that his postulated scenario is at least as plausible as those considered by the Staff and to explain the difference between the release considered by the Staff and one postulated by him, he concluded that the Staff must have failed to consider all plausible scenarios or, alternatively, misapprehended the potential consequences of the terrorist threat scenarios it did consider.⁹

The Staff has not disputed Dr. Thompson's factual claims regarding potential threat scenarios and consequences in legal filings or supporting affidavits because the Staff cannot discuss its analysis of specific threat scenarios without disclosing sensitive security information. However, the fact that the Staff has not disputed SLOMFP's claims in this public adjudication does not mean that the Staff agrees with Dr. Thompson's conclusions or concedes that Dr. Thompson is qualified to provide expert opinions on threat scenarios or their radiological consequences. In fact, the Staff has been clear that Dr. Thompson's views should not be afforded any weight given the fact that he does not have access to intelligence information that

⁷ SLOMFP Subpart K Summary at 20 – 21 and 24 – 26.

⁸ As explained in Staff Aff. 1 at ¶ 50, the Staff revised its dose calculation after issuance of the Supplemental EA, but nevertheless determined that the projected dose would be less than 5 rem.

⁹ See, "Assessing Risks of Potential Malicious Actions at Commercial Nuclear Facilities: The Case of a Proposed Independent Spent Fuel Storage Installation at the Diablo Canyon Site," submitted with SLOMFP's Contentions and Request for Hearing on June 28, 2007, at 33 – 37 and 40 and "Second Declaration of Dr. Gordon R. Thompson on Behalf of San Luis Obispo Mothers for Peace in Support of Contention 2 Regarding the Construction and Operation of the Diablo Canyon Independent Spent Fuel Storage Installation," submitted with SLOMFP's Subpart K Summary, at 13 – 14.

informs the Staff's assessment of threat scenarios or the expertise to make any expert judgment regarding threat assessments or dose consequences.¹⁰ In particular, it should be noted that because Dr. Thompson is not privy to the scenarios considered by the Staff or assumptions that underlie its dose calculation which would reveal threat scenario information, his conclusions about possible shortcomings in the Staff's analysis are necessarily based on speculation. For these reasons, the issues raised by SLOMFP regarding the threat scenarios considered plausible by the Staff cannot be considered to be undisputed by the Staff.

The absence of a factual record detailing the terrorist threat scenarios considered to be credible by the Staff follows from the Commission's initial decision on contention admissibility that public policy prohibits the airing of the sensitive security information in public adjudications.¹¹ The Commission reiterated its reasoning when denying SLOMFP's request that it reconsider its unwillingness to give SLOMFP access to safeguards and classified information, quoting from its earlier decision "[o]ur inability to disclose information based on the confidentiality of that information does not mean, however, that the NRC Staff (and the Commission, on review) has not performed the evaluation the Ninth Circuit directed, consistent with *Weinberger* – it simply means that certain information cannot be made public for security reasons."¹²

Since the factual information regarding the terrorist threat scenarios considered credible by the Staff has been withheld from public disclosure to protect national security, it follows that SLOMFP's speculation that the Staff may have ignored credible threat scenarios with significant environmental impacts or misapprehended the vulnerability of the ISFSI to a terrorist attack by

¹⁰ Staff Subpart K Summary at 12 – 13.

¹¹ *Pacific Gas & Electric Co.*, (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-01, 66 NRC ____, slip op. at 18 (January 15, 2008).

¹² *Pacific Gas & Electric Co.*, (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-08, 66 NRC ____, slip op. at 4 – 5 (April 30, 2008).

ignoring attack scenarios with greater sophistication¹³ is factually unsupported. Further, SLOMFP's claims cannot be considered undisputed simply because they cannot be addressed by the Staff in this public adjudication. For these reasons, SLOMFP has failed to make any showing that, as a factual matter, it is entitled to a ruling under 10 C.F.R. § 2.115(a)(2) that the Staff failed to consider the environmental impacts of credible terrorist threat scenarios.

II. SLOMFP's Claim That the Staff Relied Upon "Secret Law" That Limited Staff Consideration of Environmental Impacts to Early Fatalities Should Be Rejected.

In its Subpart K Summary, SLOMFP claims that the Staff considered impacts of a terrorist attack to be significant only if the consequences would result in early fatalities.¹⁴ This claim is entirely unsupported by the evidentiary record in this case. Indeed, the Supplemental EA explains that the Staff, in assessing the impacts of a terrorist attack, calculated the dose to the nearest resident to the Diablo ISFSI for the terrorist scenario with greatest potential consequences. Supplemental EA at 7. The dose calculated by the Staff (less than 5 rem) is so low that it would not be expected to cause any discernible health effects.¹⁵ This clearly demonstrates that the Staff evaluated and disclosed consequences in its environmental review that were far less than those that would cause early fatalities. As the Staff explained when responding to comments on the Draft Supplemental EA which also raised this issue, "[t]o clear up some apparent confusion, the EA supplement did not consider early fatalities as a measure of environmental impact." *Id.* at A-6.

Given the absence of any documented basis on which to advance its claim that the Staff used early fatalities as a threshold for assessing environmental impacts, SLOMFP accused the Staff of withholding "secret law" allowing it to disregard any environmental consequences which

¹³ SLOMFP Subpart K Summary at 20 – 21 and 24 – 26.

¹⁴ SLOMFP Subpart K Summary at 20, 21 – 24.

¹⁵ Staff Subpart K Summary, Aff. 1 at ¶ 51.

would not result in early fatalities. Specifically, SLOMFP disputed the adequacy of the Staff's disclosure of reference documents¹⁶ and sought to pursue discovery to obtain additional information regarding the Staff's reliance on the reference documents on this issue.¹⁷ These claims, which were considered in relation to SLOMFP's contention 1(b), were decided by the Presiding Officer, who granted summary disposition of the contention in favor of the Staff.¹⁸ Notably, SLOMFP did not object to resolution of this issue in favor of the Staff, conceding that the Staff had provided all references on which it relied in developing the Supplemental EA.¹⁹

Thus, SLOMFP's claim that the Staff relied on "hidden" or "secret" law that permitted the Staff to ignore impacts which would not result in early fatalities in its environmental review has already been rejected in a decision which has become final agency action given the absence of an appeal or Commission *sua sponte* review. 10 C.F.R. § 2.341. Further, the factual record in this case is clear that the Staff did not use a threshold of "early fatalities" to limit its consideration of environmental impacts. Thus, SLOMFP's claim that it is entitled to a favorable ruling on this matter based on undisputed facts in this Subpart K proceeding should be summarily rejected by the Commission.

III. SLOMFP's Claim That the Staff Must Prepare an EIS Should be Rejected Because the Supplemental EA and FONSI Satisfy the NRC's Obligations to Comply with NEPA

¹⁶ "San Luis Obispo Mothers for Peace's Response to NRC Staff's Vaughn Index, Request for Leave to Conduct Discovery Against the NRC Staff, Request for Access to Unredacted Reference Documents, and Request for Procedures to Protect Submission of Sensitive Information," February 20, 2008.

¹⁷ "San Luis Obispo Mothers for Peace's Motion for Leave to Conduct Supplemental Discovery," April 10, 2008 at 1.

¹⁸ *Pacific Gas & Electric Co.*, (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), LBP-08-07, 66 NRC ____ (May 14, 2008).

¹⁹ "San Luis Obispo Mothers for Peace's Response to NRC Staff's Motion for Summary Disposition of Contention 1(b)," April 26, 2008, at 12. Both the Staff's motion for summary disposition and SLOMFP's response were filed after SLOMFP's Subpart K Summary. Thus, by not opposing summary disposition in favor of the Staff SLOMFP was conceding that the Staff had satisfied its burden of demonstrating that all references had been disclosed to the extent permitted by law and effectively withdrawing its claim that the Staff was concealing "secret law."

NEPA requires the preparation of an Environmental Assessment (EA) to determine whether a major Federal action will significantly affect the quality of the human environment. 42 U.S.C. § 4332(2)(C); 10 C.F.R. 51.21. If the agency determines there is a significant impact to the environment, it must prepare an Environmental Impact Statement. 10 C.F.R. § 51.31. If, on the other hand, it concludes that there is no significant impact, the agency will prepare a Finding of No Significant Impact (FONSI). *Id.*²⁰ In preparing an EA an agency must take a “hard look” at the environmental impacts of the proposed action.²¹ The Staff did just that for the Diablo Canyon ISFSI, and arrived at a FONSI.

The Staff has explained that its FONSI is premised upon the belief that under general credible threat conditions the probability of attack is low and the existence of ISFSI design features and security measures that provide high assurance that substantial environmental impacts will be avoided even if a terrorist attack were attempted.²² Despite the low probability that an attack on an ISFSI would have any significant environmental consequences, the Staff analyzed the potential offsite dose of the plausible attack scenario with the largest potential release, finding that even under that scenario there would be no discernible health effects to the public. *Id.* at 15, Aff. 1 at ¶¶ 14, 51. In calculating dose, the Staff accounted for the contribution of radiation from inhalation and from the radioactive material deposited on the ground. *Id.* Aff. 1 at ¶ 39. Considering the low probability of a successful attack and the small potential health impacts from even the most serious threat scenario, the Staff concluded that the overall risk of environmental consequences would be insignificant, and issued its FONSI.

²⁰ *Virginia Electric & Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-790, 20 NRC 1450, 1452 n.5 (1984) (finding that the Staff is not required to prepare a complete EIS if, after performing an EA, it determines that the proposed action will have no significant impact).

²¹ *Baltimore Gas & Elec.*, 462 U.S. at 97 (citing *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976)).

²² NRC Staff Subpart K Summary at 9, 19, Aff. 2 at ¶ 6.

As the Staff explained in its Subpart K filing, the use of an approach in which an agency assesses the significance of potential – but not certain – environmental consequences in terms of overall risk has been approved by the Second Circuit Court of Appeals in *City of New York v. Department of Transportation*, 715 F.2d 732, 752 (2nd Cir. 1983) *cert. denied* 465 U.S. 1055. While in that case, unlike the situation here, the Department of Transportation was able to quantify the risk of the accidents at issue, the NRC is able to state qualitatively that, under general threat conditions, the probability of a terrorist attack is believed to be low.²³ The Staff agrees with SLOMFP that in an environmental analysis, where certain factors cannot be quantified, it is proper to discuss them qualitatively.²⁴ While the basis for the Staff's belief that the probability of an attack is low cannot be discussed in a public document due to the sensitive nature of the information, the determination is based on the Staff's expert counterterrorism analysis of threat information.²⁵ Further, as explained in the Supplemental EA, even in the unlikely event that a terrorist attack is attempted the likelihood that it will be successfully carried out and result in a radiological release reduces the probability of environmental consequences even further.²⁶

Because the Staff found that terrorism would not have any significant environmental impacts the issuance of an EA and FONSI rather than an EIS was proper. 10 C.F.R. § 51.31. As discussed above, the Staff's assessment of environmental impacts was not limited by any threshold for "early fatalities" and accounted for the potential for latent health effects from radiation in the air and radioactive deposits on the ground. Thus, contrary to SLOMFP's factual assertions, the Staff does not need to prepare an EIS for the Diablo Canyon ISFSI.

²³ NRC Staff Subpart K Summary at 12, Aff. 2 at ¶ 7.

²⁴ SLOMFP Subpart K Summary at 8, quoting 10 C.F.R. § 51.71

²⁵ NRC Staff Subpart K Summary at 12, Aff. 2, Att. 3.

²⁶ Supplemental EA 5, A-6.

SLOMFP also misconstrues the legal grounds for its argument that the NRC is required to prepare an EIS where uncertainty exists when it relies on *Foundation on Economic Trends v. Heckler*, 756 F.2d 143 (D.C. Cir. 1985), and *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208 (9th Cir. 1998), *cert. denied by, Malheur Lumber Co. v. Blue Mountains Biodiversity Project*, 527 U.S. 1003.²⁷ In *Foundation on Economic Trends*, the National Institutes of Health (“NIH”) prepared an EA which stated that, as part of a project, genetically engineered organisms could be dispersed in small quantities, but did not perform any environmental analysis of the impacts of that dispersal. 756 F.2d at 153. The court held that “conclusory statements of ‘no impact’ are not enough to fulfill an agency’s duty under NEPA.” *Id.* The court went on to explain that the relevance of the inquiry into the EA is that the “ultimate purpose” of an EA is to “determine whether an EIS should be prepared.” *Id.* The court’s standard for an adequate EA is one that “provides sufficient evidence and analysis for determining whether to prepare an [EIS] or a [FONSI].” *Id.* quoting 40 C.F.R. § 1508.9(a)(1).

In *Blue Mountains*, the Forest Service did not analyze the effects of a road building and logging project because it had not obtained any data about the potential effects of the project, but still issued a FONSI. *Id.* at 1210, 1213. The Ninth Circuit Court of Appeals rejected the Forest Service’s EA and FONSI warning that “‘general statements’ about ‘some risk’ do not constitute a ‘hard look’ absent a justification regarding why more definitive information could not be provided.” *Id.* at 1213 quoting *Neighbors of Cuddy Mountain. v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998).

These cases can be easily differentiated from the case at hand. While the probability of a terrorist attack on the Diablo Canyon ISFSI cannot be quantified, it can be qualitatively assessed. Further, the consequences to the public of a plausible attack are quantifiable. The

²⁷ SLOMFP Subpart K Summary at 10.

Staff considered a number of plausible terrorist attack scenarios, and thoroughly analyzed the potential consequences to the public of the scenario with the largest potential release, in order to be conservative.²⁸ The Staff's affidavits and the administrative record demonstrate that the Staff based its determination to issue a FONSI, rather than to develop an EIS, on substantial data and analysis, unlike the Forest Service in *Blue Mountains* or the NIH in *Foundation on Economic Trends*, both of whom identified potential environmental effects, but did not analyze them sufficiently to assure that their effects would not be significant. Based on all of the data and analysis in the record, the NRC Staff concluded that it has high assurance that there will be no significant impact to the public from a terrorist attack on the Diablo Canyon ISFSI.²⁹

CONCLUSION

For the reasons stated above, the record in this proceeding establishes that the Staff's consideration of latent health impacts and land contamination was adequate to satisfy the NRC's obligations under NEPA. Therefore, the Commission should resolve the admitted contention in favor of the Staff.

Respectfully submitted,

/RA/

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²⁸ NRC Staff Subpart K Summary at 15, Aff. 1 ¶ 14.

²⁹ Supplemental EA at 8; NRC Staff Subpart K Summary at 15-16.

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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S RESPONSE TO SAN LUIS OBISPO MOTHERS FOR PEACE'S SUBPART K PRESENTATION " in the above-captioned proceedings have been served on the following by deposit in the United States mail; through deposit in the Nuclear Regulatory Commission's internal system as indicated by an asterisk (*), and by electronic mail as indicated by a double asterisk (**) on this 16th day of June, 2008.

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