

February 5, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
PA'INA HAWAII, LLC)	Docket No. 30-36974
)	
Material License Application)	ASLBP No. 06-843-01

NRC STAFF'S REPLY TO INTERVENOR'S BRIEF REGARDING *DIABLO CANYON*

INTRODUCTION

On February 24, 2008, the Board directed the parties to file briefs addressing how, if at all, the Commission's January 15, 2008 decision on parallel contentions in *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-01, 67 NRC ___ (slip op.), impacts the admissibility of the fourth segment of amended environmental contention 3, in which Concerned Citizens of Honolulu (Intervenor) alleges various deficiencies in the Staff's analysis of potential terrorism attacks involving Pa'ina's proposed irradiator.¹ The Board also provided the opportunity for the parties to submit reply briefs. The Staff, the Intervenor, and Pa'ina Hawaii, LLC (Licensee) filed initial briefs on January 31, 2008. The Staff herein responds to the Intervenor's brief.

DISCUSSION

I. The Intervenor Provides No Support for its Argument that the Staff Must Disclose Likely Modes of Attack against Pa'ina's Irradiator.

In *Diablo Canyon*, the Commission found that the Staff's threat assessment process, "grounded in the NRC Staff's access to classified threat assessment information, [was] reasonable on its face" and in compliance with the National Environmental Policy Act of 1969

¹ Licensing Board Order (Requiring Parties to File Responsive Pleadings) (January 24, 2008) (unpublished).

(NEPA), 42 U.S.C. §§ 4321–4437. CLI-08-01, 67 NRC __ (slip op. at 23). The Commission found the NRC was not required to conduct an adjudicatory inquiry into the credibility of various hypothetical terrorist attacks against the Diablo Canyon independent spent fuel storage installation (ISFSI). *Id.* (slip op. at 23–24). According to the Commission, adjudicating alternate terrorist scenarios is impracticable because “[t]he range of conceivable (albeit highly unlikely) terrorist scenarios is essentially limitless” and “hearings on such claims could not be conducted in a meaningful way without substantial disclosure of classified and safeguards information on threat assessments and security arrangements and without substantial litigation over their significance.” *Id.* (slip op. at 24). The Commission recognized that, [i]n practical terms, this leaves the matter of threat assessment under NEPA in the hands of the NRC, without judicial oversight or agency hearings[,]” but concluded that this is precisely the result directed by the Supreme Court’s controlling decision in *Weinberger v. Catholic Action of Hawaii*, 454 U.S. 139, 145 (1981). CLI-08-01, 67 NRC at __ (slip op. at 24).

Despite this language, the Intervenor argues that the Staff must publicly disclose the threat scenarios it considers likely to affect Pa’ina’s irradiator. Intervenor’s Brief at 4–6. According to the Intervenor, *Diablo Canyon* is inapposite because the Commission based its ruling on information in the Diablo Canyon supplemental environmental assessment (EA)² that is wholly missing from the Pa’ina EA.³ The Intervenor argues that whereas the Diablo Canyon Supplemental EA identifies plausible threat scenarios, including “a large aircraft impact . . . and ground assaults using expanded adversary characteristics,” the Pa’ina EA fails to assess and disclose likely modes of attack on the Licensee’s irradiator. Intervenor’s Brief at 5–6.

² “Supplement to the Environmental Assessment and Draft Finding of No Significant Impact Related to the Construction and Operation of the Diablo Canyon Independent Spent Fuel Storage Installation” (May 29, 2007) (ADAMS ML071500033).

³ “Final Environmental Assessment for Proposed Pa’ina Hawaii, LLC Underwater Irradiator in Honolulu, Hawaii” (August 10, 2007) (ADAMS ML071150121).

The Intervenor draws a false distinction. The Commission did not base its ruling in *Diablo Canyon* on the Staff's disclosure of plausible modes of attack. The Commission could not have done so, because the Staff did not, in fact, state that it was disclosing all plausible modes of attack. Rather, the Staff stated that it had considered "[p]lausible threat scenarios . . . in the generic security assessments for ISFSIs."⁴ These scenarios "included" a large aircraft impact and ground assaults.⁵ The Staff did not assert that it was disclosing *all* plausible modes of attack, nor did it describe any mode of attack as "likely"—a term the Intervenor uses here—rather than merely "plausible." Instead, the Staff simply provided a general description of two modes of attack it considered when preparing the EA.

The Pa'ina EA contains the same type of information that the Commission found material to its ruling in *Diablo Canyon*. Like the *Diablo Canyon* Supplemental EA, the Pa'ina EA states that the Staff conducted a threat assessment that considered plausible threat scenarios.⁶ The Commission in *Diablo Canyon* gave no indication that it required more of the Staff, and nowhere did the Commission hold that the Staff must disclose plausible—much less "likely"—modes of attack. Rather, the Commission held that "[i]n practical terms . . . the matter of threat assessment under NEPA [is] in the hands of the NRC, without judicial oversight or agency hearings[.]" CLI-08-01, 67 NRC __ (slip op. at 24–25). Moreover, even if the Commission in *Diablo Canyon* considered the Staff's general description of two modes of attack relevant to determining whether the Staff had conducted a threat assessment, the Pa'ina EA likewise describes in general terms two modes of attack: radiological sabotage and theft or diversion of the radioactive sources. This further demonstrates that the Staff assessed threat scenarios

⁴ *Diablo Canyon* Supplemental EA at 7.

⁵ *Id.*

⁶ Pa'ina EA at B-5.

involving Pa'ina's irradiator. Under *Diablo Canyon*, the specific information underlying the Staff's assessment is not a matter for litigation. *Id.* (slip op. at 24).

II. The Intervenor Fails to Show that the Staff's Analysis of the Consequences of a Terrorist Attack is Inadequate.

The Intervenor argues that in the Pa'ina EA the Staff failed to quantify and disclose the site-specific impacts of the various terrorist threats it considered. Intervenor's Brief at 6–8. The Intervenor claims that the Pa'ina EA stands in sharp contrast to the Diablo Canyon Supplemental EA, in which the Staff stated that, even in the worst-case plausible threat scenarios, the dose to the nearest affected resident would likely be well below 5 rem.⁷ According to the Intervenor, *Diablo Canyon* demonstrates that the Staff in Pa'ina could, and should, have provided more definitive information about radiation exposure in the EA.

The Intervenor overlooks critical language in the Pa'ina EA. In its discussion of potential sabotage, the Staff concluded that, based on its assessment of numerous factors—including the nature and location of the sources and the source design and construction—Pa'ina's irradiator “is unlikely to have an offsite release of radioactive material from radiological sabotage.”⁸ The Staff noted that, because the Co-60 slugs to be used in Pa'ina's irradiator are essentially non-soluble in water, there is a low risk of risk of radioactive material escaping the irradiator pool.⁹ The Staff also referenced the Final Topical Report, which further supports this conclusion.¹⁰ Because the Staff did not identify *any* reasonably foreseeable offsite consequences, the Board

⁷ *Diablo Canyon Supplemental EA* at 7.

⁸ Pa'ina EA at B-5.

⁹ *Id.* at B-6.

¹⁰ “Final Topical Report on Aircraft Crash and Natural Phenomena Hazard at the Pa'ina Hawaii, LLC Irradiator Facility” (May 1, 2007) (ADAMS ML071280833) at 1-3.

should reject the Intervenor's argument that the Staff had to assess dosage based on the assumption that such a release was, contrary to the Staff's finding, reasonably foreseeable.

The Staff also discussed potential impacts associated with theft or diversion of the source. These impacts included the risk that material could be used in a dirty bomb and possible consequences associated with a dirty bomb. The possible consequences noted by the Staff included "contamination of several city blocks to an entire city."¹¹ However, this discussion in no way suggests that the Staff considered impacts from a dirty bomb to be reasonably foreseeable, or even remotely foreseeable. Instead, the Staff discussed the possibility of a dirty bomb in keeping with the informational purposes of NEPA, because this was an issue of concern to certain members of the public.¹²

III. The Intervenor's Claim that the Staff Must Identify All Data and Analyses Underlying the EA is Not Supported by *Diablo Canyon*.

In *Diablo Canyon*, the Commission admitted a portion of contention 1(b) alleging that the Staff failed to fully reference the sources of scientific data used in the supplemental EA. The Commission directed the Staff to prepare a complete list of the documents on which it relied in preparing its EA, together with a Vaughn index (or its equivalent) for any document for which the Staff claimed an exemption from disclosure under the Freedom of Information Act. *Id.* (slip op. at 18).

Here, by contrast, the Intervenor does not ask the Staff to identify the documents upon which it relied in its terrorism analysis. Instead, the Intervenor focuses on obtaining the "data"

¹¹ EA at B-6.

¹² See *Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements (the Green Book), Second Edition* (2004) at 28 (explaining that "[b]ecause one purpose of NEPA analysis is to inform the public, consider analyzing an accident scenario in which the public has expressed a keen interest, even when the scenario is not reasonably foreseeable"). See also "Transcript of Public Meeting on February 1, 2007 in Honolulu, Hawaii re: Draft Environmental Assessment for Pa'ina Hawaii, LLC" (ADAMS 070590710) (February 1, 2007) at 28, 47 (discussing possibility Co-60 sources could be used in a dirty bomb).

and “analyses” underlying the Staff’s conclusions. The Intervenor’s contention does not parallel the portion of contention 1(b) admitted by the Commission in *Diablo Canyon*, but rather contention 1(a), which the Commission did not admit. In contention 1(a), the Petitioner argued that the Staff failed to explain the methodology underlying its terrorism analysis. Among its arguments, the Petitioner claimed that the Diablo Canyon EA (1) did not describe any analysis performed by the NRC; (2) poorly described the analytical steps taken by the NRC in a 2002 analysis; (3) failed to explain how its review of security assessments for other facilities factored into a NEPA analysis; and (4) failed to provide any analysis of the radiological impacts of threat scenarios, including any documented estimate of the radiation dose arising from release of radioactive material.¹³ These claims, all of which the Commission rejected, parallel the arguments made by the Intervenor in the present case. Here, the Intervenor argues that the Staff failed to provide: (1) any discussion of the aspects of prior security assessments the Staff concluded were relevant to its analysis; (2) the assumptions regarding irradiator design and the source term on which the Staff based its FONSI; (3) data supporting the Staff’s assertion that immediate health effects from exposure to low radiation levels are expected to be “minimal”; and (4) the methodology and data used to determine that the risk of terrorist attack involving Pa’ina’s irradiator would be at an “acceptable level.”¹⁴ Rather than asking the Staff to identify documents, the Intervenor contends that the Staff must describe specific data and analyses it deemed relevant to its analysis. As in *Diablo Canyon*, that argument should be rejected.

¹³ “San Luis Obispo Mothers for Peace Request for a Hearing Regarding Diablo Canyon Environmental Assessment Supplement” (June 29, 2007) (ADAMS ML071910169) at 5-9.

¹⁴ “Intervenor Concerned Citizens of Honolulu’s Amended Environmental Contentions #3 through #5” (September 4, 2007) (ADAMS ML072530634) at 23–25.

IV. The Intervenor Fails to Show that the Staff Overlooked any Reasonably Foreseeable Impacts.

The Intervenor argues that here, as in *Diablo Canyon*, the Staff failed to consider all reasonably foreseeable impacts of a terrorist attack. Intervenor's Brief at 11. The Intervenor argues that the Staff inappropriately focused on only the immediate effects of a potential terrorist attack, failing to analyze the long-term effects of dispersed Co-60 persisting in the environment. *Id.*

The Intervenor bears the burden of proving there is a genuine dispute as to whether the Staff failed to consider any reasonably foreseeable effect of the licensing action 10 C.F.R. § 2.309(f)(1)(vi); *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004). Here, the Intervenor does not carry its burden. The long-term effects alleged by the Intervenor rest on numerous assumptions, including assumptions that a terrorist group would attack Pa'ina's irradiator, remove its sources, build a dirty bomb and detonate the bomb, all while avoiding detection and arrest. The Intervenor fails to show that these predicate steps are anything other than remote and speculative.

CONCLUSION

The Board should reject the Intervenor's arguments regarding *Diablo Canyon's* application in the present case and, for the reasons stated in the Staff's initial brief and in the Staff's contention responses, refuse to admit any contention related to the fourth segment of Amended Environmental Contention 3.

Respectfully submitted,

Michael J. Clark
Counsel for the NRC Staff

Dated at Rockville, Maryland
this 5th day of February, 2008

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NUCLEAR REGULATORY COMMISSION

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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S REPLY TO INTERVENOR'S BRIEF REGARDING *DIABLO CANYON*" 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 5th day of February, 2008.

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