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PREFACE

This is the fifty-sixth volume of issuances (1–481) of the Nuclear Regulatory Commission and its Atomic Safety and Licensing Boards, Administrative Law Judges, and Office Directors. It covers the period from July 1, 2002, to December 31, 2002.

Atomic Safety and Licensing Boards are authorized by Section 191 of the Atomic Energy Act of 1954. These Boards, comprised of three members conduct adjudicatory hearings on applications to construct and operate nuclear power plants and related facilities and issue initial decisions which, subject to internal review and appellate procedures, become the final Commission action with respect to those applications. Boards are drawn from the Atomic Safety and Licensing Board Panel, comprised of lawyers, nuclear physicists and engineers, environmentalists, chemists, and economists. The Atomic Energy Commission (AEC) first established Licensing Boards in 1962 and the Panel in 1967.

Between 1969 and 1990, the AEC authorized Atomic Safety and Licensing Appeal Boards to exercise the authority and perform the review functions which would otherwise have been exercised and performed by the Commission in facility licensing proceedings. In 1972, that Commission created an Appeal Panel, from which were drawn the Appeal Boards assigned to each licensing proceeding. The functions performed by both Appeal Boards and Licensing Boards were transferred from the AEC to the Nuclear Regulatory Commission by the Energy Reorganization Act of 1974. Appeal Boards represented the final level in the administrative adjudicatory process to which parties could appeal. Parties, however, were permitted to seek discretionary Commission review of certain board rulings. The Commission also could decide to review, on its own motion, various decisions or actions of Appeal Boards.

On June 29, 1990, however, the Commission voted to abolish the Atomic Safety and Licensing Appeal Panel, and the Panel ceased to exist as of June 30, 1991. Since then, the Commission itself reviews Licensing Board and other adjudicatory decisions, as a matter of discretion. *See* 56 Fed. 29 & 403 (1991).

The Commission also has Administrative Law Judges appointed pursuant to the Administrative Procedure Act, who preside over proceedings as directed by the Commission.

The hardbound edition of the Nuclear Regulatory Commission Issuances is a final compilation of the monthly issuances. It includes all of the legal precedents for the agency within a six-month period. Any opinions, decisions, denials, memoranda and orders of the Commission inadvertently omitted from the monthly softbounds and any corrections submitted by the NRC legal staff to the printed softbound issuances are contained in the hardbound edition. Cross references in the text and indexes are to the NRCI page numbers which are the same as the page numbers in this publication.

Issuances are referred to as follows: Commission—CLI, Atomic Safety and Licensing Boards—LBP, Administrative Law Judges—ALJ, Directors' Decisions—DD, and Decisions on Petitions for Rulemaking—DPRM.

The summaries and headnotes preceding the opinions reported herein are not to be deemed a part of those opinions or to have any independent legal significance.

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr.

In the Matter of Docket Nos. 50-369-LR

50-370-LR 50-413-LR 50-414-LR

DUKE ENERGY CORPORATION (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2)

July 23, 2002

The Commission reviews an Atomic Safety and Licensing Board decision that granted two Petitioners' requests for hearing in this license renewal proceeding. The Commission affirms in part and reverses in part the Decision.

NEPA: SEVERE ACCIDENT MITIGATION ALTERNATIVES (SAMA)

Whether a SAMA may be worthwhile to implement is based upon a cost-benefit analysis — a weighing of the cost to implement the SAMA with the reduction in risks to public health, occupational health, and offsite and onsite property.

NEPA: ENVIRONMENTAL ANALYSIS

The adequacy and accuracy of environmental analyses and proper disclosure of information are always at the heart of NEPA claims. If further analysis is called for, that in itself is a valid and meaningful remedy under NEPA.

NEPA: SEVERE ACCIDENT MITIGATION ALTERNATIVE (SAMA)

For any severe accident concern, there are likely to be numerous conceivable SAMAs and thus it will always be possible to come up with some type of mitigation alternative that has not been addressed by the Licensee. But whether a SAMA is worthy of more detailed analysis in an Environmental Report or SEIS hinges upon whether it may be cost-beneficial to implement. It would be unreasonable to trigger full adjudicatory proceedings based merely upon a suggested SAMA under circumstances in which Petitioners have done nothing to indicate the approximate relative cost and benefit of the SAMA. A conclusory statement that an envisioned SAMA "would not pose a great challenge" is insufficient.

MEMORANDUM AND ORDER

I. INTRODUCTION

This order addresses one portion of appeals filed by Licensee Duke Energy Corporation and the NRC Staff in this license renewal proceeding. The proceeding stems from Duke's application to renew its operating licenses for the McGuire Nuclear Station, Units 1 and 2, and the Catawba Nuclear Station, Units 1 and 2. In LBP-02-4, 55 NRC 49 (2002), the Atomic Safety and Licensing Board granted the petitions to intervene and requests for hearing of the Blue Ridge Environmental Defense League (BREDL) and the Nuclear Information and Resource Service (NIRS). The Board found that BREDL and NIRS each had shown standing to intervene and submitted at least one admissible contention. Among the contentions admitted was one challenging the adequacy of the Severe Accident Mitigation Alternatives (SAMA) analysis provided in Duke's Environmental Reports, submitted with its license renewal application. In their appeals, both Duke and the NRC Staff argue that the contention was inadmissible. We agree in part and disagree in part.¹

¹ In LBP-02-4, the Licensing Board also admitted a contention concerning the possible use of mixed oxide (MOX) fuel at the McGuire and Catawba facilities, and certified to the Commission the Petitioners' issues on the risks from acts of terrorism. The Commission reversed the MOX ruling in CLI-02-14, thus eliminating that contention from this proceeding. Still pending before the Commission are the Petitioners' issues relating to terrorism. Those will be addressed in a future Commission decision.

II. BACKGROUND

The full procedural background of this proceeding is described in the Commission's decision in April 2002, reversing a Board order admitting a contention on Duke's possible use of mixed oxide fuel.² We confine our discussion here to the admitted SAMA contention. Because the contention relates to particular characteristics and vulnerabilities of plants with ice condenser containments, we begin with a brief description of ice condenser containments.

A. Ice Condenser Containments and Hydrogen Control

Plants with ice condenser containments, such as McGuire and Catawba, do not have large dry or subatmospheric reactor containment buildings. Instead of a massive concrete containment building designed to withstand strong internal pressures, ice condenser containments rely upon "ice beds" — baskets filled with blocks of ice — to prevent steam pressure from building up. In the event of a severe accident, these ice beds are intended to cool and condense steam, suppress pressure, and maintain containment integrity. Ice condenser plants are relatively more vulnerable to the risk of hydrogen combustion events in the containment because (1) the containment volume is smaller, leading to higher hydrogen concentrations; and (2) the smaller, thinner containment and lower ultimate capacity cannot withstand the same degree of internal pressure as large dry containments.

During the Three Mile Island accident in 1979, a large amount of hydrogen gas was released into the containment and burned, but the large dry TMI-2 containment building withstood the increase in pressure and did not fail. Following the TMI accident, the NRC has required all plants with ice condenser containments to have "hydrogen igniters" — devices to intentionally ignite hydrogen and burn it off at a controlled rate, preventing dangerous concentrations from forming. Current hydrogen igniter systems require alternating current (ac) power. Therefore, these systems would not function in the event of a simultaneous loss of both offsite and onsite ac power, known as station blackout (SBO). Thus, under particular severe accident sequences involving station blackout, in which neither offsite ac power nor backup ac power provided by emergency diesel generators was available, the hydrogen igniter system would be unavailable and containment integrity could be challenged.

A recent NRC-sponsored study conducted by the Sandia National Laboratories (SNL) addresses this concern and notes that such severe accident scenarios would be largely dependent upon plant-specific probabilities for station blackout.

² See CLI-02-14, 55 NRC 278 (2002).

Issued in April of 2002, the Sandia study evaluates the early containment failure probability (given core damage) for all Westinghouse plants with ice condenser containments, including McGuire and Catawba. *See generally* NUREG/CR-6427, "Assessment of the DCH [Direct Containment Heating] Issue for Plants with Ice Condenser Containments" (April 2000) ("Sandia study").³

B. The Commission's Environmental Requirements and SAMAs

The Commission's environmental protection requirements for license renewal are found in 10 C.F.R. Part 51. Part 51 divides environmental issues into those for which "generic" conclusions — applicable to all existing nuclear power plants or to a specific subgroup of plants — can be made, and those for which no such all-encompassing conclusions can be drawn. For the latter, the license renewal applicant must provide a plant-specific assessment of the issue. In other words, as we said last year in the Turkey Point license renewal case, "if the severity of an environmental impact might differ significantly from one plant to another, or, if additional plant-specific measures to mitigate the impact should be considered, then the applicant must provide a plant-specific analysis of the environmental impact." Under our license renewal rules, the NRC Staff already has assessed some environmental impacts in a Generic Environmental Impact Statement, and the license renewal applicant must address other environmental impacts in plantspecific fashion in its Environmental Report.⁵ Turkey Point contains a detailed description of NRC environmental requirements governing license renewal. It need not be repeated here.

For purposes of this Decision, it suffices to say that severe accident mitigation alternatives — SAMAs — generally must be addressed by the Applicant on a plant-specific basis. Specifically, 10 C.F.R. § 51.53(c)(3)(ii)(L) requires license renewal applicants to consider alternatives to mitigate severe accidents "[i]f the staff has not previously considered severe accident mitigation alternatives for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment." For McGuire and Catawba, the Staff had not

³While the study addresses the concern over hydrogen igniters functioning during station blackout, the overall focus of the study was on another issue — direct containment heating (DCH) and plants with ice condenser containments. DCH is a severe accident issue. In a light-water reactor core melt accident, if the reactor pressure vessel fails while the reactor coolant system is at high pressure, the expulsion of molten core debris may pressurize the reactor containment building beyond its failure pressure. The Sandia study examined the DCH issue for ice condenser plants. Sandia concluded that early containment failure probability in ice condenser plants is dominated not by DCH events, but by non-DCH hydrogen combustion events (which only occur during station blackouts). Therefore, the study also touched upon the issue of the availability of hydrogen igniters during station blackout.

⁴ Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11 (2001).

⁵ See 10 C.F.R. Part 51, Subpart A, Appendix B, and Table B-1; NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Final Report, Vol. 1 (May 1996).

previously considered SAMAs, and therefore Duke provided a SAMA analysis in its Environmental Reports for these facilities.

The purpose of the SAMA review is to ensure that any plant changes — in hardware, procedures, or training — that have a potential for significantly improving severe accident safety performance are identified and assessed. If the cost of implementing a particular SAMA is greater than its associated benefit, the SAMA would not be considered cost-beneficial. SAMAs, in short, are rooted in a cost-benefit assessment. Duke concluded in its Environmental Reports that none of the assessed SAMAs relating to hydrogen control during station blackout warranted implementation because none would be cost-effective.⁶

C. The Admitted Contention

In LBP-02-4, the Licensing Board admitted a contention challenging the SAMA analyses submitted by Duke for the McGuire and Catawba plants. Two bases underlie the contention. First, both BREDL and NIRS challenged Duke's SAMA analysis for its failure to include information from the recent Sandia study, NUREG/CR-6427, including particularly its assessment of the early containment failure probability during station blackout accidents at McGuire and Catawba. The Board agreed that Duke's SAMA analysis had not applied the same underlying "values" for containment failure probability as the Sandia study, and that this omission called into question the ultimate cost-benefit determinations presented in Duke's SAMA discussion.7 "Whether or not [Duke] should apply these values" was a material issue of dispute between the parties and a question for the merits, reasoned the Board.8 As a second basis for the contention, the Board admitted an argument raised by NIRS that the SAMA analysis should have addressed the additional mitigation alternative of a dedicated electrical line to nearby hydroelectric generating dams, which could provide an alternate power source during station blackout events.

On appeal to the Commission, both Duke and the NRC Staff argue that the SAMA contention is inadmissible.

III. ANALYSIS

The admitted SAMA contention, termed "BREDL/NIRS Contention 2," is a consolidated and condensed version of three related contentions, one submitted

⁶ See, e.g., Table 4-2, Attachment K, McGuire Nuclear Station SAMAs Analysis (May 2001) at 19; Table 4-2, Attachment H, Catawba Nuclear Station SAMAs Analysis (May 2001) at 18.

⁷ See 55 NRC at 126-27.

⁸ Id. at 126 (emphasis in original).

by BREDL and two by NIRS.⁹ As reframed by the Board, the contention reads as follows:

The Duke SAMA analysis is incomplete, and insufficient to mitigate severe accidents, in that it

- (a) fails to include information from NUREG/CR-6427 [the Sandia study], and
- (b) fails to include a severe accident mitigation alternative relating to Station Blackout-Caused Accidents, namely, a dedicated electrical line from the hydroelectric generating dams adjacent to each reactor site.

55 NRC at 128. We address these bases separately and in greater detail below. As always, we consider the specificity, factual support, and legal basis of the admitted contention.¹⁰

A. Failure To Include Information from NUREG/CR-6427

As support for the contention, BREDL argues that "[t]he licensee's SAMA analysis is incomplete because it fails to incorporate new and extensive information regarding ice condenser vulnerabilities." Specifically, BREDL claims that Duke's SAMA analysis should have taken into account information from the Sandia study, which looked at the likelihood for early containment failure from particular accidents involving station blackout at plants with ice condenser containments. BREDL quotes extensively from a November 2000 report by Dr. Edward S. Lyman of the Nuclear Control Institute. Dr. Lyman's report, entitled "Vulnerabilities of Ice Condenser Containments," discusses the risk of hydrogen combustion during station blackout. According to Dr. Lyman, the Sandia study found a relatively high risk of ice condenser containment failure in particular severe accident sequences involving hydrogen combustion and station blackout.

This study, which was performed by Sandia National Laboratories (SNL) in Albuquerque, calculated that for accidents in which the hydrogen igniters were not available, such as SBOs, the probability that the containment would rupture as a result of hydrogen combustion is 34% for Catawba and 58% for McGuire. . . .

SNL found that certain SBO accidents — namely, those in which the reactor coolant system remains at high pressure at the time that the reactor vessel is breached by molten fuel — the probability of early containment failure as a result of detonation of pre-existing hydrogen

⁹The admitted contention is based upon BREDL's Contention 4 and NIRS's Contentions 1.1.4 and 1.1.5. *See* BREDL Submittal of Contentions in the Matter of Renewal of Licenses for Duke Energy Corp. McGuire Nuclear Stations 1 & 2 and Catawba Nuclear Stations 1 & 2 (Nov. 29, 2001) ("BREDL's Amended Contentions") at 37-45; Contentions of NIRS (Nov. 29, 2001) at 12-15.

¹⁰ See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358-59 (2001); Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-35 (1999).

¹¹BREDL's Amended Contentions at 38.

is nearly 100% for both Catawba and McGuire. This means that if one of these [accident] sequences were to occur, there would be little difference between the ice condenser plants and nuclear plants without containments like Chernobyl....

The SNL report concludes that "all [ice condenser] plants, especially McGuire, would benefit from reducing the station blackout frequency or some means of hydrogen control that is effective in station blackout," noting that the latter course would reduce early containment failure probabilities "by more than an order of magnitude in all plants and especially McGuire."

However, according to the report, "previous cost/benefit studies generally do not justify the expense in providing hydrogen control in SBO because . . . the SBO probability is a small fraction of the core damage frequency" This assumption has now been called into question.

BREDL's Amended Contentions at 42-43.

Directly quoting conclusions of the Sandia study, BREDL's contention highlights the disparity between the early containment failure probability for McGuire that Duke reported in its Individual Plant Examination (IPE)¹² (2%), and the early failure probability estimated in the Sandia study (13.9%):

This higher containment failure probability for McGuire is dominated by the relatively high SBO frequency and the relatively weak containment for McGuire. The IPE assessments of early containment failure at McGuire (2%) are significantly lower than our assessments; however we have not investigated the reasons for the difference.

BREDL's Amended Contentions at 40 (quoting Sandia Study at 124). In BREDL's view, the Duke and SNL estimates were "so different" that the adequacy and conclusions of Duke's SAMA analysis was in question.¹³

The Commission finds the contention admissible. While the contention might have been more detailed or otherwise better supported, the Petitioners have done enough to raise a question about the adequacy of the probability figures used in Duke's SAMA analyses, namely, whether they should have incorporated or otherwise acknowledged information from the Sandia study. Whether a SAMA may be worthwhile to implement is based upon a cost-benefit analysis — a weighing of the cost to implement the SAMA with the reduction in risks to

¹² As part of the Commission's ongoing regulatory programs, licensees have performed an IPE to look for plant vulnerabilities to internally initiated events and a separate IPE for externally initiated events, called the IPEEE. These examinations look for potential improvements to reduce both the frequency and consequences of severe accidents and "essentially constitute a broad search for severe accident mitigation alternatives." See Final Rule, "Environmental Review for Renewal of Nuclear Power Plant Operating Licenses," 61 Fed. Reg. 28,467, 28,461 (June 5, 1996). IPEs have led to numerous procedural and programmatic improvements and also to some plant modifications to reduce the risk of severe accidents. IPEs and IPEEEs are essentially site-specific probabilistic risk assessments that identify the probabilities of core damage and evaluate containment performance under severe accident conditions. It has been the Commission's expectation that IPE and IPEEE results would be used in the consideration of SAMAs. See id.

¹³ See, e.g., Transcript (Dec. 18, 2001) at 389.

public health, occupational health, and offsite and onsite property. ¹⁴ For Catawba and McGuire, Duke found that no form of hydrogen control SAMAs would be cost-beneficial because the costs of implementing any of the SAMAs would outweigh their benefits.

The Sandia study, however, concluded that previous cost-benefit studies may not have justified additional hydrogen control measures because those studies viewed the probability of station blackout as only a small fraction of core damage frequency. 15 The Sandia study went on to find significantly higher station blackout frequencies and, consequently, higher probabilities of containment failure, particularly for the McGuire station. Thus, as Duke's own counsel acknowledged, if the event frequencies used in the Sandia report had been used in Duke's SAMA analysis, the calculated "benefits" of implementing different particular SAMAs "probably would be larger." In turn, had larger benefits been identified for hydrogen control-related SAMAs, the ultimate conclusions of the Duke SAMA cost-benefit analysis could have been different. In the Board's view, for example, the difference between the data used in Duke's SAMA analysis and the Sandia report was of "some magnitude, possibly a large enough magnitude to justify one or more of these [SAMA] alternatives." As NIRS has emphasized, "the cost/risk equation that is the SAMA 'bottom line' is only accurate if the risk assessment is valid."18

In sum, the Petitioners presented and discussed relevant results from an NRC-sponsored study that cited McGuire and Catawba specifically, and that highlighted a discrepancy between the containment failure probabilities found by the study and those earlier calculated by Duke. This contention raises a question about whether information from the Sandia study should have been utilized or otherwise addressed in Duke's SAMA analysis. The plausibility of the contention is further reinforced by the SAMA review contained in the Staff's recently issued draft Supplemental Environmental Impact Statements for McGuire and Catawba. Staff discusses and applies the containment failure probabilities reported in the Sandia study in order to estimate the benefits of particular hydrogen control-

¹⁴ Severe accident risk is assessed in terms of the total averted risk: averted public exposure (health risk converted into dollars to estimate the cost of the public health consequence), averted onsite cleanup cost, averted offsite property damage costs, averted occupational exposure costs, and averted power replacement costs. For detailed information on how averted risk is calculated, see NUREG/BR-0184, "Regulatory Analysis Technical Evaluation Handbook" (1997); see also, e.g., draft NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Supp. 8, Regarding McGuire Nuclear Station, Units 1 & 2 (May 2002) at 5-23 to 5-26.

¹⁵ See Sandia Study at 114 (referenced in BREDL's Amended Contentions at 43).

¹⁶ Transcript at 366-67; see also id. at 374-75.

¹⁷ Id. at 367.

¹⁸ NIRS Appeal Brief (Feb. 4, 2002) at 11.

related SAMAs. The Staff itself, then, apparently has not treated the Sandia study as discountable or otherwise irrelevant to the SAMA cost-benefit analysis.¹⁹

On appeal, Duke stresses that while the Sandia study specifically references the containment failure probabilities for McGuire and Catawba, it 'does not on its face purport to address the current design, operation, or maintenance of the two plants," and therefore 'provides no insights or commentary on the plant-specific McGuire and Catawba analyses described in the discussion of the SAMA issue in the license renewal application." For instance, "Duke has already taken actions (not reflected in the [Sandia study] data) to reduce the frequency of Station Blackout sequences by improving diesel generator reliability." Duke stresses, therefore, that the best technical data available to use for the SAMA analysis are Duke's own plant-specific data, which take into account safety-enhancing plant improvements that Duke already has implemented — improvements that reduce the risk of station blackout and containment failure, and which were not taken into account by the Sandia study.

Duke is correct in stressing that its own data may represent the best assumptions and frequencies to use in the SAMA cost-benefit analysis. The Board fully acknowledged as much, both in its decision and at the prehearing conference.²² But the Board nonetheless found that a sufficient question had been raised about the SAMA analyses' failure to address or otherwise acknowledge results from the Sandia study. Whether the SAMA analysis in fact should have addressed the study was a question for the merits, the Board held.²³ We cannot say that the Board's view is unreasonable. It did not resolve the merits questions whether the Sandia study's assumptions reflected better estimates than Duke's or whether Duke's SAMA analysis should have addressed the study. But for an admissible contention the Petitioners did not have to prove outright that Duke's SAMA analysis was deficient.²⁴ In short, the Board merely found that a sufficient genuine

¹⁹Using the underlying assumptions of the Sandia study, the estimated benefits of particular SAMAs — such as installing ac-independent backup power to the hydrogen igniters — grow significantly higher than when the values from the Duke Probabilistic Risk Assessment (PRAs) are used. See, e.g., NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Supp. 8, Regarding McGuire Nuclear Station, Units 1 & 2 (May 2002) ("Draft SEIS for McGuire") at 5-28 (which includes information from Duke's responses to Staff RAIs). In contrast to Duke's earlier Environmental Reports, the Staff concludes in the draft SEISs that "supplying existing hydrogen igniters with back-up power from an independent power source during SBO events[] is cost-beneficial under certain assumptions." See Draft SEIS for McGuire at 5-30 (emphasis added); see also Draft SEIS for Catawba (NUREG-1437, Supp. 9) at 5-28 to 5-29.

²⁰ Duke Appeal Brief at 34.

²¹ *Id.* at 35.

²² See 55 NRC at 126; Transcript at 377.

²³ 55 NRC at 126.

²⁴Whether the Sandia study in fact provides helpful information on the hydrogen igniters/station blackout issue remains disputed. Industry representatives, for example, have challenged the relevance of the Sandia study, arguing that its underlying assumptions are overly conservative (e.g., significant amounts of zirconium–water reaction, guaranteed ignition, ignition at worst time, and global burn, which includes the upper containment compartments) and therefore unsurprisingly led to higher containment failure probabilities. *See, e.g.*, NIRS Appeal Brief (Feb. 14, 2002) at 8-9 (referencing internal NRC memorandum on public meeting).

dispute existed on whether the SAMAs should have applied the containment failure probability estimates from the Sandia study, which would have resulted in larger "benefits" being associated with the individual SAMAs.

Duke further argues that while the SAMA analyses never explicitly cited the Sandia study, the analyses nonetheless addressed the same kind of early containment failures discussed in the Sandia study. ²⁵ But the mere fact that Duke in its Environmental Reports identified the possibility of early containment failure during station blackout events, and identified some alternatives to mitigate that failure, does not resolve the basic question ultimately raised by the contention: the possibility that the overall cost-benefit assessment was skewed or incomplete because of a failure to include — or at least acknowledge and discount — the higher event frequencies from the Sandia study.

Duke also claims that the contention is inadmissible because NEPA cannot require Duke to *implement* any particular SAMA, regardless of how the costbenefit calculations come out.²⁶ Quoting Robertson v. Methow Valley Citizens Council, Duke stresses that "NEPA imposes no substantive requirement that mitigation measures actually be taken."27 Thus, argues Duke, the contention would not entitle Petitioners to any meaningful relief in this proceeding.²⁸ This argument, however, is fallacious. While NEPA does not require agencies to select particular options, it is intended to "foster both informed decision-making and informed public participation, and thus to ensure that the agency does not act upon incomplete information, only to regret its decision after it is too late to correct." ²⁹ If Duke's premise held true, there never could be an admissible NEPA contention because, as Duke notes, "the only relief possible [under NEPAl is further analysis." ³⁰ But the adequacy and accuracy of environmental analyses and proper disclosure of information are always at the heart of NEPA claims. If "further analysis" is called for, that in itself is a valid and meaningful remedy under NEPA. As the Board explained, if the Petitioners prevailed on this contention, they would be entitled to "consideration in Duke's SAMA analysis of the [Sandia study] information."31

Duke argues that the contention has now become moot because, in responses to Staff RAIs, Duke has now addressed the Sandia study. Moreover, after Duke's appeal was filed, the NRC Staff issued draft SEISs for McGuire and Catawba that also take into account the containment failure probabilities from the Sandia

²⁵ Duke Appeal Brief at 35.

²⁶ See id. at 38.

²⁷ Id. at 38 n.47; see Robertson, 490 U.S. 332, 353 n.16 (1989).

²⁸ Duke Appeal Brief at 38.

²⁹ Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 88 (1998) (internal quotations and citations omitted).

³⁰Duke Appeal Brief at 38.

³¹ 55 NRC at 128.

study.³² Because they address the Sandia study results, the draft SEISs may — indeed largely appear to — render moot the contention's first concern: the SAMA analysis's "fail[ure] to include information from [the Sandia study]." The Commission believes, however, that whether the contention is moot is a factual question best addressed by the Licensing Board in the first instance, perhaps in response to a summary disposition motion.³³

B. Failure To Include as a SAMA a Dedicated Electrical Line to Hydroelectric Generating Dams Adjacent to Each Reactor Site

The Board also included a second basis for the SAMA contention — Duke's failure to include as a SAMA the installation of a dedicated electrical line to hydroelectric generating dams. This was originally a separate contention proposed by NIRS, which the Board incorporated into the admitted contention involving Duke's SAMA analysis and the Sandia report.

As support for the contention, NIRS first states that "diesel generators have many problems, and that the NRC's stated 95% reliability rate is not good enough."34 In the past 10 years, NIRS argues, "diesel generator failure contributed to station blackout at 3 reactor sites and near blackout at several more. It would appear that margins of safety have been sufficient to prevent a severe accident due to station blackout to date; however, the compounding factors of terrorism and climate change may reduce this margin into the danger zone."35 It is "vital" to consider the alternative of a dedicated electrical line to hydroelectric dams, NIRS claims.³⁶ This would be an "alternative to reliance solely on emergency diesel generators at Catawba and McGuire." NIRS concludes by claiming that "[s]ince these hydro generation units are also owned by a subsidiary of Duke Power, and there are switchyards adjacent to both reactor sites as well, this would not pose a great challenge."38

We find that the Petitioners' minimal information in support of their contention is inadequate. For any severe accident concern, there are likely to be numerous conceivable SAMAs and thus it will always be possible to come up with some type of mitigation alternative that has not been addressed by the Licensee. In the end, whether a SAMA alternative is worthy of more detailed analysis in an

³² See, e.g., Draft SEIS for McGuire at 5-27 to 5-28; Draft SEIS for Catawba at 5-26 to 5-27.

³³Recently, the Petitioners filed before the Board an Amended Contention challenging the sufficiency of Duke's responses to the Staff RAIs. See "BREDL and NIRS's Amended Contention 2" (May 20, 2002). Whether the amended contention is timely and otherwise admissible are issues currently before the Board.

³⁴ Contentions of NIRS at 15.

³⁵ *Id*.

³⁶ *Id.* ³⁷ *Id.* ³⁸ *Id.*

Environmental Report or SEIS hinges upon whether it may be cost-beneficial to implement. Under the rule of reason governing NEPA, "[t]o make an impact statement something more than an exercise in frivolous boilerplate the concept of alternatives must be bounded by some notion of feasibility."³⁹ It would be unreasonable to trigger full adjudicatory proceedings based merely upon a suggested SAMA under circumstances in which the Petitioners have done nothing to indicate the approximate relative cost and benefit of the SAMA.

A conclusory statement that an envisioned SAMA "would not pose a great challenge" is insufficient. The Petitioners have not even in the broadest sense acknowledged or outlined what logistical or technical concerns might be involved in implementing their proposed hydroelectric SAMA at the Catawba and McGuire sites. Significantly, they provide no ballpark figure for what the cost of implementing this SAMA might be. Without any notion of cost, it is difficult to assess whether a SAMA may be cost-beneficial and thus warrant serious consideration. The Commission is unwilling to throw open its hearing doors to Petitioners who have done little in the way of research or analysis, provide no expert opinion, and rest merely on unsupported conclusions about the ease and viability of their proposed SAMA.

Again, any number of possible SAMAs may be theoretically conceivable, but many will prove far too costly compared to the reduction in risk that they might provide. A mitigation alternative that costs relatively far more to implement than its incremental benefit does not require a detailed analysis in an Environmental Report or SEIS.⁴⁰ In addition, it bears noting that Duke in its Environmental Reports did address specific mitigation alternatives related to the issue of the hydrogen igniters during station blackout. Duke discussed, for instance, the alternatives of installing a third diesel, and of providing backup power to the igniters themselves. In claiming the Environmental Reports also should have analyzed a dedicated line to hydroelectric stations, the Petitioners never even intimated why this alternative might be more cost-beneficial than those already rejected by Duke as too costly relative to benefit. As Duke argues on appeal, "[t]here is no comparison made in the proposed contention, and no basis offered, to conclude that the extraordinary cost of installing another dedicated offsite power line would be cost-justified" while other obviously less costly alternatives were not found to be cost-beneficial.41

³⁹ Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 551 (1978); see also Citizens Against Burlington v. Busey, 938 F.2d 190, 195 (D.C. Cir. 1991).

⁴⁰ See Supplement 1 to Regulatory Guide 4.2, "Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses" (Sept. 2000), § 4.20 ("Potential SAMAs that are not expected to be cost beneficial, even when uncertainties in the analysis . . . are taken into consideration, may be screened out based on a bounding analysis").

⁴¹ See Duke Appeal Brief at 36-37.

It may be, in any event, that the Petitioners' hydroelectric proposal has been rendered moot by the recently issued draft SEIS. While the Staff in its RAIs never requested that Duke address a dedicated electrical line to the hydroelectric dams, Duke nevertheless did provide estimates of the cost and benefits of such an alternative among its other responses to Staff RAIs. The Staff then addressed this SAMA in its draft SEIS, concurring that its estimated cost — \$3,000,000 for McGuire and \$8,000,000 for Catawba — were "far greater" than the calculated benefit for either plant.⁴²

C. Summary

We conclude, therefore, that the Petitioners' contention is admissible, but only insofar as it raises the question whether the values from the Sandia study should have been utilized in the McGuire and Catawba analyses of mitigation alternatives for hydrogen control during station blackout. By admitting this contention, the Commission does not intimate any view on the merits of the issue. We note, parenthetically, that our Office of Nuclear Regulatory Research has been conducting a generic review of the hydrogen igniter concern — Generic Safety Issue 189, "Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident." This review is separate from the license renewal proceeding, and may on its own lead to new rulemaking or NRC-mandated backfits.

IV. CONCLUSION

For the reasons given in this Decision, the Commission hereby *affirms* LBP-02-4 in part, and *reverses* it in part.

IT IS SO ORDERED.

For the Commission⁴³

ANDREW L. BATES
Acting Secretary of the Commission

Dated at Rockville, Maryland, this 23d day of July 2002.

⁴² See Draft SEIS for McGuire at 5-21; Draft SEIS for Catawba at 5-18.

⁴³Commissioner Dicus was not present for the affirmation of this Order. If she had been present, she would have approved it.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Thomas S. Moore, Chairman Dr. Peter S. Lam Dr. Thomas S. Elleman

In the Matter of Docket Nos. 50-327-OLA

50-328-OLA 50-390-OLA

(ASLBP No. 02-796-01-OLA)

TENNESSEE VALLEY AUTHORITY (Sequoyah Nuclear Plant, Units 1 and 2; Watts Bar Nuclear Plant, Unit 1)

July 2, 2002

In this reactor license amendment proceeding, the Licensing Board denies the intervention petition of Mrs. Jeannine Honicker for lack of standing, the petition of Blue Ridge Environmental Defense League for failure to file any contention, and the petition of We the People, Inc., for lack of an admissible contention.

RULES OF PRACTICE: STANDING TO INTERVENE

In determining whether a petitioner has sufficient "interest" to intervene, the Commission has long applied contemporary concepts of judicial standing. *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976).

RULES OF PRACTICE: STANDING TO INTERVENE

To obtain standing in a Commission proceeding, the petitioner must allege "a concrete and particularized injury that is fairly traceable to the challenged action and likely to be redressed by a favorable decision." *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995); *accord Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992). The petitioner must also demonstrate that the interest falls within the zone of interests of the statutes governing NRC proceedings. *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993).

RULES OF PRACTICE: STANDING TO INTERVENE (REPRESENTATIONAL)

When an organization chooses to intervene on behalf of one of its members, the organization must demonstrate that the individual member has standing to intervene and has authorized the organization to represent his or her interests. *Georgia Tech*, CLI-95-12, 42 NRC at 115.

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

The proximity or geographic presumption "presumes a petitioner has standing to intervene without the need specifically to plead injury, causation, and redressability if the petitioner lives within, or otherwise has frequent contacts with, the zone of possible harm from the nuclear reactor or other source of radioactivity." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146 (2001), *aff'd on other grounds*, CLI-01-17, 54 NRC 3 (2001); *accord Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 191 (1999).

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

The analysis under the proximity presumption focuses upon whether "the proposed action involves a significant source of radioactivity producing an obvious potential for offsite consequences." *Georgia Tech*, CLI-95-12, 42 NRC at 116. It then looks to determine whether the petitioner is within the potential zone of harm of the proposed action by examining the nature of the proposed action and the significance of the radioactive source. *Id*.

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

The proximity presumption does not require a showing of causation with respect to how the proposed amendment will lead to an obvious potential for offsite consequences. Instead the appropriate focus is upon "the nature of the proposed action and the significance of the radioactive source." *Georgia Tech*, CLI-95-12, 42 NRC at 116-17.

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

The 50-mile zone of potential harm presumed for reactor construction permit and operating license proceedings does not automatically apply to operating license amendment proceedings. Instead the zone of harm must be determined on a case-by-case basis, examining the significance of the radioactive source in relation to the distance involved and the type of action proposed. *Georgia Tech*, CLI-95-12, 42 NRC at 116-17.

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

Occasional trips to areas located close to reactors have been found to be insufficient grounds to demonstrate a risk to the intervenor's health and safety. *See, e.g., Washington Public Power Supply System* (WPPSS Nuclear Project No. 2), LBP-79-7, 9 NRC 330, 337-38 (1979). Rather, petitioners must demonstrate that the frequency of their contacts within the zone of possible harm occurs on a regular basis that is akin to the kind of contact residency provides. *Georgia Tech,* CLI-95-12, 42 NRC at 116-17; *Gulf States Utilities Co.* (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, 226 (1974).

RULES OF PRACTICE: STANDING TO INTERVENE (DISCRETIONARY STANDING)

Commission jurisprudence allows licensing boards to grant discretionary standing to intervenors who do not meet the judicial standing tests. *Pebble Springs*, CLI-76-27, 4 NRC at 616.

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

In order to be admissible, each contention must specify the precise issue of law or fact being raised. 10 C.F.R. § 2.714(b)(2). Additionally, subsections

2.714(b)(2)(i), (ii), and (iii) provide that each contention must be accompanied by (1) a brief explanation of the basis of the contention; (2) a concise statement of the alleged facts or expert opinion that support the contention; and (3) sufficient information to demonstrate a genuine dispute with the applicant on a material issue of law or fact. Finally, the contention cannot be one that, even if proven, would be of no consequence to the proceeding and offer the petitioner no relief. 10 C.F.R. § 2.714(d)(2)(ii) (2001).

RULES OF PRACTICE: CONTENTIONS (BURDEN OF PROOF)

It is the burden of the petitioner to come forward with contentions meeting the pleading rules. *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 NRC 39, 41 (1998).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

A licensing board is not free to supply missing information or draw factual inferences on the petitioner's behalf. *See Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

A contention is admissible only if it is within the scope of the proceeding outlined in the Commission's hearing notice and referral order. *Wisconsin Electric Power Co.* (Point Beach Nuclear Plant, Units 1 and 2), ALAB-739, 18 NRC 335, 339 (1983).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

A contention attacking or challenging a Commission rule or regulation is inadmissible and that inadmissibility bar applies to contentions proffering, for example, stricter requirements than those that are imposed by the respective regulation. *See* 10 C.F.R. § 2.758(a); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-8, 29 NRC 399, 416-17 (1989); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 395 (1987); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

Consideration of a terrorist attack upon a reactor, causing a beyond design basis accident, is barred by the Commission's regulations and cannot be considered in a reactor licensing proceeding. *See* 10 C.F.R. § 50.13; *Long Island Lighting Co.* (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 851 (1973).

OPERATING LICENSE: HEALTH AND SAFETY ISSUES

With the exception of the backfit rule, 10 C.F.R. § 50.109, there is no requirement that the NRC make a safety benefit-cost determination in granting or denying an application. Rather an applicant must satisfy the requirements of 10 C.F.R. § 50.90 and demonstrate that the requested amendment meets all applicable regulatory requirements and acceptance criteria and does not otherwise harm the public health and safety or the common defense and security. *See, e.g.,* Atomic Energy Act of 1954, § 182a, 42 U.S.C. § 2232a (2000); 10 C.F.R. § 50.57.

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

It is a well-established principle of NRC adjudication that "contentions must rest on the *license application*, not on NRC Staff reviews." *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 349 (1998).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

"A contention will not be admitted if the allegation is that the NRC Staff has not performed an adequate analysis" because "the sole focus of the hearing is on whether the application satisfies NRC regulatory requirements, rather than adequacy of the NRC Staff performance." Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989).

OPERATING LICENSE AMENDMENT HEARING: ISSUES FOR CONSIDERATION

"License amendment proceedings are not a forum 'only to litigate historical allegations' or past events with no direct bearing on the challenged licensing action." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 366 (2001).

MEMORANDUM AND ORDER

(Ruling on Intervention Petitions)

The Commission issued two notices of opportunity for hearing on the applications of the Tennessee Valley Authority (TVA) to amend the technical specifications (TS) of the two-unit Sequoyah Nuclear Plant and the single-unit Watts Bar Nuclear Plant. The TVA applications seek permission to produce tritium in three reactors for the Department of Energy's (DOE) weapons program. In response to the hearing notices, Jeannine Honicker of La Grange, Georgia, the Blue Ridge Environmental Defense League (BREDL), and We the People, Inc. (WTP) filed petitions to intervene in the proceedings on TVA's operating license amendment applications. As explained below, the intervention petition of Mrs. Honicker is denied for lack of standing, and the petition of BREDL is denied for failing to file any contentions. Although WTP, unlike Mrs. Honicker, has standing to intervene and, unlike BREDL, has proffered contentions, its petition nonetheless is denied for failure to submit an admissible contention.

I. BACKGROUND

On December 17, 2001, the Commission published a notice of opportunity for hearing on the license amendment application of TVA for its Sequoyah Nuclear Plant, Units 1 and 2, located in Soddy-Daisy, Tennessee. See 66 Fed. Reg. 65,000 (Dec. 17, 2001). The requested technical specification changes seek permission to insert up to 2256 lithium burnable absorber rods into each of the Sequoyah reactor cores to produce tritium for DOE to use in maintaining its national defense inventory. Id. According to the hearing notice, each Sequoyah reactor core contains 193 fuel assemblies consisting of 264 fuel rods. Id. The amendment would allow TVA to insert up to 24 tritium-producing burnable absorber rods (TPBARs) in selected fuel assemblies to replace normal burnable neutron absorber rods. Id. The TPBARs will serve the same purpose as normal boron or gadolinium burnable absorber rods to shape neutron flux in the core, and like such rods, contain no fissile material. Id. Unlike normal burnable absorber rods, however, most of the lithium in the TPBARs will still remain at the end of core life, necessitating a number of additional changes in the Sequoyah TS. Id. at 65,001.

¹ Although the Commission's hearing notice states that the requested TS changes "would allow TVA to insert up to 2256 tritium-producing burnable absorber rods (TPBARS) into the reactor cores to support DOE," 66 Fed. Reg. at 65,000, TVA's pleadings indicate that the requested TS changes would allow the insertion of up to 2256 TPBARs for each Sequoyah reactor core. See, e.g., Tennessee Valley Authority's Answer to Request for a Hearing and Petition to Intervene of Jeannine Honicker (Jan. 28, 2002) at 2 [hereinafter TVA Answer to Honicker Petition].

In this regard, the TVA license amendment application also requests permission to amend the Sequoyah TS to revise the measurement ranges for the source range neutron monitors and increase the required boron concentration for both the coldleg accumulators and the refueling water storage tank. *Id.* These TS changes are required because the enrichment of the uranium-235 fuel assemblies containing the TPBARs must be increased from its current enrichment percentage to no more than 4.95 weight percent to compensate for the higher neutron absorbing properties of the lithium in the TPBARs. *Id.* Additionally, TVA seeks to amend the TS to (a) delete the boron concentration and spent fuel storage requirements for the cask pit pool, (b) establish a limit on the number of TPBARs that can be irradiated, (c) provide storage requirements for spent fuel assemblies containing TPBARs, and (d) implement requirements for TPBAR consolidation activities. *Id.*

On the same date it published the hearing notice on the amendment application for the Sequoyah reactors, the Commission published a second notice of opportunity for hearing on a similar operating license amendment application by TVA for the Watts Bar Nuclear Plant in Rhea County, Tennessee. *See* 66 Fed. Reg. 65,005 (Dec. 17, 2001). Similar to the Sequoyah license amendment application, the requested TVA technical specification changes for Watts Bar seek permission to insert up to 2304 TPBARs into the reactor core to produce tritium for DOE's weapons program. *Id.* at 65,006. Although not identical to the TS changes for the Sequoyah reactors, the requested Watts Bar TS amendments are very similar.

In response to the Commission's Sequoyah and Watts Bar hearing notices, Mrs. Honicker, BREDL, and WTP each filed petitions to intervene in the proceedings on the TVA operating license amendment applications.² On January 28, 2002, the Chief Administrative Judge consolidated the two proceedings and this Licensing Board was established to preside over them. *See* 67 Fed. Reg. 5003 (Feb. 1, 2002). Thereafter, TVA filed answers to the intervention petitions opposing the petitions on the grounds that the Petitioners lacked standing.³ For its part, the NRC Staff filed an answer opposing the intervention petitions of BREDL and Mrs. Honicker on the grounds that the Petitioners lacked standing to intervene.⁴ With respect to

² See Letter from Jeannine Honicker to U.S. Nuclear Regulatory Commission (Jan. 14, 2002) [hereinafter Honicker Petition]; Letter from Donald J. Moniak, BREDL, to U.S. Nuclear Regulatory Commission (Jan. 16, 2002) [hereinafter BREDL Petition]; Letter from Ann Pickel Harris, Director, WTP, to Nuclear Regulatory Commission (Jan. 16, 2002) [hereinafter WTP Watts Bar Petition]; Letter from Ann Pickel Harris, Director, WTP, to Nuclear Regulatory Commission (Jan. 14, 2002) [hereinafter WTP Sequoyah Petition].

³ See TVA Answer to Honicker Petition; Tennessee Valley Authority's Answer to Request for a Hearing and Petition To Intervene of Blue Ridge Environmental Defense League (Jan. 28, 2002) [hereinafter TVA Answer to BREDL Petition]; Tennessee Valley Authority's Answer to Request for a Hearing and Petition To Intervene of We the People Inc., Tennessee (Jan. 29, 2002) [hereinafter TVA's Answer to WTP Petition].

⁴ See NRC Staff's Answer to Requests for Hearing and Leave To Intervene Filed by Blue Ridge Environmental Defense League and Mrs. Jeannine Honicker (Jan. 31, 2002) [hereinafter Staff Answer to BREDL and Honicker Petitions].

the WTP petition, however, the Staff's answer asserts that WTP has demonstrated standing.⁵ In accordance with the date established by the Licensing Board for the Petitioners to exercise their right under the Commission's Rules of Practice, 10 C.F.R. § 2.714(a)(3), to amend their intervention petitions, Mrs. Honicker and WTP each filed amended petitions.⁶ In their responses, TVA continues to oppose the petitions of Mrs. Honicker and WTP for lack of standing, while the Staff opposes Mrs. Honicker's petition on the same grounds.⁷

Mrs. Honicker and WTP also filed timely supplements to their petitions, setting forth their contentions.⁸ Both TVA and the Staff filed answers opposing the admission of both Petitioners' proffered contentions on the grounds, *inter alia*, that the contentions failed to meet the standards in 10 C.F.R. § 2.714(b) for admissible contentions.⁹

Pursuant to the Commission's Rules of Practice, 10 C.F.R. § 2.714(a)(1) and (b)(1), a petitioner must demonstrate standing to intervene and proffer at least one admissible contention to be admitted as a party to an agency licensing proceeding. We turn now to address the questions of the Petitioners' standing and the admissibility of their contentions. Before doing so, however, we note that Petitioner BREDL filed no contentions in the proceeding. Therefore, we need not address the question of BREDL's standing to intervene. Because BREDL has failed to file at least one admissible contention and thereby meet one of the two mandatory prerequisites for admission as a party to the proceeding, its intervention petition is denied.

II. STANDING

Section 189a of the Atomic Energy Act (AEA) requires the Commission to grant a hearing request in a proceeding to amend a reactor operating license "upon the request of any person whose interest may be affected by the proceeding."

⁵ See NRC Staff's Answer to Request for Hearing and Leave To Intervene Filed by We the People, Inc. Tennessee (Feb. 4, 2002) [hereinafter Staff Answer to WTP Petition].

⁶ See Jeannine Honicker's Amended Petition To Intervene in the Hearing for a License Amendment for TVA To Produce Tritium at Sequoyah and Watts Bar (Feb. 14, 2002) [hereinafter Honicker Amended Petition]; We the People's Amended Petition for Request for a Hearing and Petition To Intervene (Feb. 21, 2002) [hereinafter WTP Amended Petition].

¹ See Response of Tennessee Valley Authority to Jeannine Honicker's Amended Petition To Intervene (Feb. 28, 2002); Response of Tennessee Valley Authority to We the People's Amended Request for a Hearing and Petition To Intervene and Motion To Strike (Feb. 28, 2002); NRC Staff's Answer to Jeannine Honicker's Amended Petition To Intervene (Feb. 28, 2002).

⁸ See Contentions of Jeannine Honicker (Mar. 7, 2002); Contentions of We the People (Mar. 6, 2002) [hereinafter WTP Contentions].

⁹ See Response of Tennessee Valley Authority to Proposed Contentions Filed by We the People and Jeannine Honicker (Apr. 4, 2002) [hereinafter TVA Contention Response]; NRC Staff's Answer to Contentions Filed by We the People, Inc., Tennessee (Apr. 3, 2002) [hereinafter Staff WTP Response]; NRC Staff's Answer to Contentions Filed by Mrs. Jeannine Honicker (Apr. 3, 2002).

42 U.S.C § 2239(a)(1)(A) (2000). The Commission's regulations effectuate this requirement by allowing any person whose interest may be affected by a Commission proceeding to file a petition to intervene. 10 C.F.R. § 2.714(a)(1). The petition must set forth the petitioner's interest in the proceeding and state how that interest may be affected by the proceeding. *Id.* § 2.714(a)(2). In determining whether a petitioner has a sufficient "interest" to intervene, the Commission has long applied contemporary concepts of judicial standing. *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976).

Thus, to obtain standing in a Commission proceeding, the petitioner must allege "a concrete and particularized injury that is fairly traceable to the challenged action and likely to be redressed by a favorable decision." Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995); accord Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992). The petitioner must also demonstrate that the interest falls within the zone of interests of the statutes governing NRC proceedings — generally, the AEA and the National Environmental Policy Act of 1969. Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993). This showing is required regardless of whether an individual or an organization is petitioning to intervene. Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999). When an organization chooses to intervene on behalf of one of its members, however, the organization must demonstrate that the individual member has standing to intervene and has authorized the organization to represent his or her interests. Georgia Tech. CLI-95-12, 42 NRC at 115.

Aside from the traditional requirements for standing, licensing boards in appropriate circumstances may also grant standing based upon a petitioner's proximity to the facility in question. This so-called proximity or geographical presumption "presumes a petitioner has standing to intervene without the need specifically to plead injury, causation, and redressability if the petitioner lives within, or otherwise has frequent contacts with, the zone of possible harm from the nuclear reactor or other source of radioactivity." Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146 (2001), aff'd on other grounds, CLI-01-17, 54 NRC 3 (2001); accord Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 191 (1999). In St. Lucie, the Commission articulated the standard for the appropriate application of the proximity presumption, stating that:

It is true that in the past, we have held that living within a specific distance from the plant is enough to confer standing on an individual or group in proceedings for construction permits, operating licenses, or significant amendments thereto such as the expansion of the capacity of a spent fuel pool. However, those cases involved the construction or operation of the reactor itself, with clear implications for the offsite environment, or major alterations to the facility with a clear potential for offsite consequences. Absent situations involving such obvious potential for offsite consequences, a petitioner must allege some specific "injury in fact" that will result from the action taken

Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329-30 (1989) (citations omitted).

As the Commission subsequently indicated in *Georgia Tech*, CLI-95-12, 42 NRC at 116, the focus of the proximity presumption is upon whether "the proposed action involves a significant source of radioactivity producing an obvious potential for offsite consequences." The analysis then looks to determine whether the petitioner is within the potential zone of harm of the proposed action by examining "the nature of the proposed action and the significance of the radioactive source." *Id.* at 116-17. "The determination of how proximate a petitioner must live or have frequent contacts to a source of radioactivity depends on the danger posed by the source at issue." *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 n.22 (1994).

With this backdrop in mind, we address the standing of the Intervenors in this proceeding.

A. WTP Petition

WTP, a nonprofit Tennessee organization that supports the safe operation of nuclear facilities, purports to intervene on behalf of two of its members, Ann Pickel Harris and Phil Carroll. See WTP Sequoyah Petition at 1-2; WTP Watts Bar Petition at 1-2. Mrs. Harris, the WTP Director, claims to reside within 17 miles of the Watts Bar facility and contends that permitting TVA to produce "weapons grade tritium" will jeopardize her health, life, and property. WTP Watts Bar Petition at 1. Further, Mrs. Harris asserts that the increased likelihood of an accident at the Watts Bar plant due to the production of tritium will "irrevocably change the value of [her] property" and in the event of an accident make her residence "uninhabitable." Id. According to his declaration, Mr. Carroll lives within 12 miles of the Sequoyah Nuclear Power Plant and believes that "his life health and property will be jeopardized if [the] Sequoyah Nuclear Power Plant is permitted to manufacture quantities of tritium for [the] U.S. nuclear weapons program." WTP Sequoyah Petition, Decl. of Phil Carroll at 1. Both Mrs. Harris and Mr. Carroll authorize WTP to represent their interests in this proceeding. See id. at 2; WTP Watts Bar Petition at 2. In its amended petition, WTP indicates, inter alia, that it is relying upon the proximity presumption to establish its standing. According to WTP, both of its representative members live within 17 miles of either Watts Bar or the Sequoyah facility, which WTP claims is well within the facilities' zone of harm. *See* WTP Amended Petition at 1. It also contends that the granting of the license amendment will greatly increase the likelihood of an accidental release. *See id.* at 2-3.

In response, TVA argues that the proximity presumption does not apply in this case, because the Petitioners fail to demonstrate how the proposed amendment will lead to offsite consequences. *See* TVA Answer to WTP Petition at 8. According to TVA, the Petitioner must demonstrate a "'plausible chain of causation' from the proposed amendment to offsite radiological injury," and the Petitioners have not done so in this case. *Id.* at 8. The Staff also argues that the presumption does not apply in this case because the Petitioner has not demonstrated that the proposed amendments involve an obvious potential for offsite consequences. *See* Staff Answer to WTP Petition at 7 n.5. The Staff asserts, however, that under traditional judicial standing concepts, WTP has established standing. According to the Staff, WTP's petition demonstrates an injury in fact that potentially could be caused by the amendment and therefore would be redressed if the amendment was denied. *See id.* at 7-8.

Contrary to the arguments of TVA and the Staff, the proximity presumption does not require a showing of causation with respect to how the proposed amendment will lead to an obvious potential for offsite consequences. As the previous discussion on the proximity presumption indicates, the appropriate focus is upon "the nature of the proposed action and the significance of the radioactive source." Georgia Tech, CLI-95-12, 42 NRC at 116-17. Here, WTP's representative members live within 17 miles of the two nuclear facilities at which TVA proposes to add tens of millions of curies of highly combustible radioactive hydrogen gas to the already significant core inventory of the Watts Bar and Sequoyah reactors. On its face, the potential for offsite consequences in such circumstances is obvious. Thus, because WTP's representative members live within 17 miles of the facilities, which is far less than the 50-mile radius applicable for the presumption in reactor construction permit and operating license proceedings, it may reasonably be presumed in this particular reactor amendment proceeding that they live within the area likely to be affected by a severe accident at one of the facilities. And, because the potential for offsite consequences is obvious, the proximity presumption does not require WTP to demonstrate the traditional standing elements of injury, causation, or redressability. Accordingly, WTP has standing to intervene.

B. Mrs. Jeannine Honicker's Petition

Similar to WTP, Mrs. Honicker also attempts to use the proximity presumption to establish standing. Admitting that she does not live within a 50-mile radius of the Watts Bar or Sequoyah facilities, she claims, nevertheless, to "frequent the area." Honicker Amended Petition at 2. According to her petition, these

"frequent" trips include attending TVA board meetings, expected use of the TVA libraries, and visiting her family and rental property, which are both located within 50 miles of the two facilities. *See id.* at 2-3.

Mrs. Honicker contends that her frequent trips to an area within a 50-mile radius of the Watts Bar and Sequoyah facilities bring her within the zone of potential harm for these two facilities. As previously discussed, however, the 50-mile zone of potential harm presumed for reactor construction permit and operating license proceedings does not automatically apply to operating license amendment proceedings. Instead the zone of harm must be determined on a case-by-case basis, examining the significance of the radioactive source in relation to the distance involved and the type of action proposed. *Georgia Tech*, CLI-95-12, 42 NRC at 116-17. Unlike WTP, however, Mrs. Honicker's pleadings do not indicate the actual distances these activities bring her from the Watts Bar and Sequoyah facilities so we cannot determine whether the proximity presumption is applicable.

Moreover, the proximity presumption only applies to petitioners who reside or have frequent contact with a facility's zone of possible harm. In this case, because Mrs. Honicker does not reside within the zone of harm for Watts Bar or Sequoyah, the frequency of her contacts within this zone became an essential factor in our decision. In the past, licensing boards have found mere occasional trips to areas located close to reactors to be insufficient grounds to demonstrate a risk to the intervenor's health and safety. See, e.g., Washington Public Power Supply System (WPPSS Nuclear Project No. 2), LBP-79-7, 9 NRC 330, 337-38 (1979). Instead, petitioners must demonstrate that the frequency of their contact within the zone of possible harm occurs on a regular basis that is akin to the kind of contact residency provides. Georgia Tech, CLI-95-12, 42 NRC at 116-17; Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, 226 (1974). Mrs. Honicker's petition, however, fails to indicate the frequency that she is within the anticipated zone of harm. At best her pleadings demonstrate only occasional contact with the zone of harm, not the regular interaction required. Thus, without a great deal more information than she sets out in her intervention filings, we cannot conclude that her contacts with the potential zone of harm are of a sufficient frequency that they are tantamount to residing in the area. Because her contacts do not rise to the level of frequency required, Mrs. Honicker has failed to plead the necessary facts that would make the proximity presumption applicable.

Further, because the proximity presumption does not apply, Mrs. Honicker's petition must be examined to determine whether it meets traditional judicial concepts for standing, i.e., she must demonstrate an actual, concrete harm resulting from the proposed activity that will be redressed by a favorable decision. *Pebble Springs*, CLI-76-27, 4 NRC at 613-14. In her petition, Mrs. Honicker makes several claims of potential harm that she argues will occur if the license

amendment is granted. First, she claims that food grown or raised near the Watts Bar and Sequoyah facilities may be contaminated and placed into the food supply. *See* Honicker Amended Petition at 4-5. Mrs. Honicker also contends that if the amendment is granted, she will be constantly fearful of harm to her family who live upwind of the reactor. *See id.* at 3. Finally, she argues that if a terrorist attack occurs while she is in Knoxville during a University of Tennessee home football game she could be trapped in traffic and unable to escape from harm. *See id.* at 4.

After reviewing her claims, we find none of the potential harms alleged by Mrs. Honicker sufficient to grant her standing as a matter of right in this proceeding. Her fear of receiving contaminated food that has been grown or raised near either Watts Bar or Sequoyah is too remote and generalized to provide a basis for standing. Compare Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 NRC 1423, 1449 (1982) (finding claims of contamination to the general food supply which may in turn be consumed by the petitioner too remote and general to confer standing), with Allied-General Nuclear Services (Barnwell Fuel Receiving and Storage Station), ALAB-328, 3 NRC 420, 423-24 (1976) (finding standing for an intervenor that consumed or sold produce grown in a garden sponsored by the intervenor that was located along an established transportation route that might occasion harm as a result of radiation release). Her claim, in this regard, also fails to provide a causal connection between the proposed license amendment and the anticipated harm. For example, her petition provides no explanation of how the "contaminated" food will find its way to her dinner plate.

Mrs. Honicker's claim of mental anguish has previously been found by the Commission to be outside the zone of interests of the AEA and thus it is not a recognizable harm upon which her standing can be based. *See Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), CLI-82-6, 15 NRC 407 (1982). Similarly, her claim of harm from a potential terrorist attack while trapped in traffic in the vicinity of either Watts Bar or Sequoyah is a matter outside the scope of the proceeding so it cannot support her claim of standing. *See* 10 C.F.R. § 50.13. Moreover, as her amended petition indicates, such an injury requires the simultaneous concurrence of a terrorist attack occurring while she is trapped in a traffic jam on an interstate highway caused by a home University of Tennessee football game within the zone of potential harm. The need for these events to occur simultaneously demonstrates the speculative nature of her claim of harm.

In addition to her claims being remote and speculative and outside the AEA's zone of interest, Mrs. Honicker's petition also fails to demonstrate that the alleged injuries would be redressed by a favorable Board decision. The Watts Bar and Sequoyah facilities are licensed operating reactors and the likelihood of the injuries articulated by Mrs. Honicker is just as high with or without the proposed license amendment. In this situation, a favorable decision denying the license amendment would not redress her alleged injuries. Thus, because Mrs. Honicker's

claimed potential harms do not establish a concrete, actual harm that would be redressed by this proceeding, she has not established her standing as a matter of right to intervene.

Although Mrs. Honicker has not demonstrated her standing as a matter of right, Commission jurisprudence allows licensing boards to grant discretionary standing to intervenors who do not meet the judicial standing tests. *Pebble Springs*, CLI-76-27, 4 NRC at 616. In deciding whether to grant discretionary standing, the Commission in *Pebble Springs* established several factors for licensing boards to consider. These factors include:

- (a) Weighing in favor of allowing intervention—
 - The extent to which the petitioner's participation may reasonably be expected to assist in developing a sound record.
 - (2) The nature and extent of the petitioner's property, financial, or other interest in the proceeding.
 - (3) The possible effect of any order which may be entered in the proceeding on the petitioner's interest.
- (b) Weighing against allowing intervention—
 - (4) The availability of other means whereby petitioner's interest will be protected.
 - (5) The extent to which the petitioner's interest will be represented by existing parties.
 - (6) The extent to which petitioner's participation will inappropriately broaden or delay the proceeding.

Id. Subsequent decisions demonstrate that foremost among these factors is whether the intervenor will produce a valuable contribution to the decision-making process. *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418 (1977); *Public Service Co. of Oklahoma* (Black Fox Station, Units 1 and 2), ALAB-397, 5 NRC 1143 (1977). Moreover, the need for a strong demonstration that Mrs. Honicker will make a significant contribution to the proceeding is especially important where, as we ultimately rule here, no other Petitioners have put forth a successful request for intervention. *Watts Bar*, ALAB-413, 5 NRC at 1422.

During a previous hearing concerning the Watts Bar facility, Mrs. Honicker also petitioned to be granted discretionary intervention. It was determined, however, that she did not demonstrate any qualifications or expertise that could make a substantial contribution to that hearing and she was denied such standing. *Id.* at 1422-23. Similar to the previous *Watts Bar* proceeding, Mrs. Honicker makes a request in this case to be granted discretionary standing if "the arguments that I have made still do not satisfy your rules for standing." Honicker Amended Petition at 6. Nothing in her petition, however, indicates that Mrs. Honicker has acquired the specialized knowledge or experience that was found lacking in the previous proceeding and that now would allow her to make a substantial contribution in this one.

Although Mrs. Honicker indicates a general familiarity with these proceedings and the Watts Bar and Sequoyah facilities in particular from her previous attempt to intervene, she has not demonstrated that her familiarity will allow her to make a substantial contribution to the present proceeding. Her petition raises several questions that she claims are relevant, but she fails to show how her involvement in the proceeding will help resolve these questions. Additionally, she fails to demonstrate any specialized education in these matters or the intent to produce expert opinion that will assist in evaluating the license amendment request. And, as the discussion of her standing indicates, she has not pled any substantial interest in this proceeding that will be harmed if she is not granted discretionary standing to intervene. Thus, the Petitioner has failed to show that the Board should exercise its discretion favorably toward her request to participate in this proceeding by granting her discretionary intervention. Because the Board has also determined that she has failed to establish standing both under the proximity presumption and as a matter of right, her petition is denied.

III. CONTENTIONS

In addition to establishing standing, a petitioner must also proffer at least one admissible contention in order to be admitted as a party to the proceeding. 10 C.F.R. § 2.714(b)(1). In order to be admissible, each contention must specify the precise issue of law or fact being raised. *Id.* § 2.714(b)(2). Additionally, subsections 2.714(b)(2)(i), (ii), and (iii) provide that each contention must be accompanied by:

- (i) A brief explanation of the bases of the contention.
- (ii) A concise statement of the alleged facts or expert opinion which support the contention ... together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion.
- (iii) Sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

Finally, pursuant to 10 C.F.R. § 2.714(d)(2)(ii) (2001), the contention cannot be one that, even if proven, would be of no consequence to the proceeding and entitle the petitioner to no relief.

The contention pleading criteria in section 2.714(b)(2) are mandatory. The Commission has stated that "[i]f any one of these requirements is not met, a contention must be rejected." *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991);

accord Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 335 (1999); see Final Rule, "Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process," 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989) [hereinafter Procedural Changes in the Hearing Process]. The provisions of section 2.714 were specifically adopted by the Commission "to raise the threshold bar for an admissible contention" and prohibit "vague, unparticularized contentions" or "notice pleading, with the details . . . filled in later." "Oconee, CLI-99-11, 49 NRC at 334, 338.

Moreover, it is the burden of the petitioner to come forward with contentions meeting the pleading rules. *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 NRC 39, 41 (1998). A licensing board is not free to supply missing information or draw factual inferences on the petitioner's behalf. *See Palo Verde*, CLI-91-12, 34 NRC at 155-56. As emphasized in the *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 22 (1998), "[a] contention's proponent, not the licensing board, is responsible for formulating the contention and providing the necessary information to satisfy the basis requirement for the admission of contentions in 10 C.F.R. § 2.714(b)(2)."

In addition to the contention pleading requirements of section 2.714(b)(2), a number of other long-established principles of NRC adjudication also limit the subject matter of contentions. For example, licensing boards have jurisdiction over those matters that the Commission commits to them in the various hearing notices and referral orders that identify the subject matters of the hearing. See Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790 (1985); Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976). A contention is therefore admissible only if it is within the scope of the proceeding outlined in the Commission's hearing notice and referral order. Wisconsin Electric Power Co. (Point Beach Nuclear Plant, Units 1 and 2), ALAB-739, 18 NRC 335, 339 (1983). Further, a contention attacking or challenging a Commission rule or regulation is inadmissible and that inadmissibility bar applies to contentions proffering, for example, additional or stricter requirements than those that are imposed by the respective regulation. See 10 C.F.R. § 2.758(a); Oconee, CLI-99-11, 49 NRC at 334; Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-8, 29 NRC 399, 416-17 (1989); Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 395 (1987); *Public* Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982).

With these standards and requirements as a backdrop, we now review the six contentions proffered by the only Petitioner with standing, WTP. Each of WTP's contentions is supported by the declaration of Dr. Kenneth D. Bergeron, who holds bachelor's, master's, and doctoral degrees in physics. His declaration

states that he is "currently a self-employed writer specializing in the social and political aspects of science and technology." WTP Contentions, Decl. of Kenneth D. Bergeron, Ph.D. (Mar. 6, 2002). Dr. Bergeron claims to have gained extensive experience "in a variety of scientific fields in [his] 25-year career at the Department of Energy's Sandia National Laboratories in Albuquerque, NM," and is "familiar with the [TVA] request for a license amendment to allow the production of tritium." *Id.* In addition, Dr. Bergeron asserts that he is familiar with and has experience in the safety analysis of the reactors at issue in this proceeding and was co-author of the NRC's most recent study of hypothetical accidents at the plants (NUREG/CR-6427, "Assessment of the DCH Issue for Plants with Ice Condenser Containments" (Apr. 2000)). His declaration states that he assisted in the preparation of and reviewed WTP's contentions. Further, Dr. Bergeron states that the technical facts in the contentions are true and correct to the best of his knowledge and that the conclusions drawn from those facts are based upon his best professional judgment.

A. Contention 1

WTP's first contention states:

- The following issue constitutes Unresolved Safety Issues [sic] per 10 CFR 50.59 and would cause Harris and Carroll great physical and economic harm by denying them access to clean water for drinking and recreation.
- 1.1 The increased tritium release from the reactors during normal operations have [sic] not been adequately evaluated based on actual case studies. Using computer models to substitute for actual data when actual data is [sic] available should not be permitted for this LAR.
- 1.2 The increased tritium releases from the reactor during normal operations have not been adequately evaluated based on and or [sic] during abnormal operations; i.e., operating with cracked tritium rods that will dramatically increase the levels of tritium release to the environment have not been adequately evaluated based on actual case studies.
- 1.3 The increased tritium releases from a reactor meltdown that would occur after an attack on the containment by terrorist piloted aircraft would be catastrophic. This type of situation would release the entire core inventory of millions of curies of tritium that would render the Tennessee River unusable and destroy any life in the river and therefore would deny Harris and Carroll, as well as large populations located on the river, opportunities for recreation and clean drinking water.¹⁰

The Licensee and the Staff both argue that this contention is inadmissible for failing to set forth a sufficient basis as required by 10 C.F.R. § 2.714(b)(2).

¹⁰WTP's contentions are referenced by the designated contention number and, where appropriate, paragraph number because the Petitioner failed to paginate its contention filing.

Specially, they assert that the contention fails to identify the particular portions of the TVA applications that WTP disputes or provide any explanation or documentation of its grounds for challenging the applications. In addition, TVA and the Staff assert that the portions of the contention dealing with terrorist threats to the facility are beyond the scope of the license amendment proceeding. *See* TVA Contention Response at 8-14; Staff WTP Contention Response at 4-6.

TVA and the Staff are correct that contention 1 is inadmissible. The portion of the contention designated paragraph 1 asserts just a generality that the "following issue constitutes Unresolved Safety Issues [sic] per 10 CFR 50.59" and would cause WTP's members "great physical and economic harm." On its face, paragraph 1 is hardly a model of clarity. To the extent paragraph 1 is interpreted as a statement of the issue WTP seeks to raise in its first contention (i.e., an unresolved safety issue under section 50.59), that asserted issue has no direct bearing on the adequacy of the TVA license amendment application. Section 50.59, titled "[c]hanges, tests, and experiments," permits a licensee to make changes to and conduct tests and experiments on a facility without first obtaining a license amendment if certain specified conditions are met. Conversely, the section generally requires a license amendment prior to implementing a proposed change, test, or experiment if those conditions are not met. Here, quite obviously, TVA has submitted amendment applications for review, so section 50.59 is irrelevant to the amendment process. Thus, paragraph 1 of WTP's first contention fails to identify a specific litigable issue as required by 10 C.F.R. § 2.714(b)(2), and this portion of the contention is inadmissible. Paragraphs 1.1, 1.2, and 1.3 of the contention stand on no better footing. This is so regardless of whether these three paragraphs are viewed as providing the putative bases for the asserted issue in paragraph 1 or whether each is regarded as raising a new issue with a supporting basis.

Paragraph 1.1 asserts that increased tritium releases from the reactors have not been adequately evaluated "based on actual case studies" and that "when actual data is [sic] available" computer models should not be permitted. This claim, however, does not identify what part of TVA's amendment applications are deficient, detail the allegedly available data, or provide such supporting data, all as required by section 2.714(b)(2). Nor does WTP explain, as the contention pleading rules require, why computer modeling is inadequate to determine the consequences of tritium releases, or how such modeling is incorrect or contravenes agency regulations. Thus, paragraph 1.1 does not provide an adequate basis for the issues sought to be raised by either paragraphs 1 or 1.1.

Paragraph 1.2 also fails to meet the requirements of section 2.714(b)(2). In that paragraph, WTP asserts that increased tritium releases during abnormal operations with cracked tritium rods have not been evaluated based upon actual case studies. Once again, WTP does not identify, as it must under section 2.714(b)(2)(iii), the portion of the license amendment applications that it claims are inadequate or

incorrect. Similarly, WTP does not explain how TVA's modeling is deficient or how it violates NRC regulations. *See*, *e.g.*, 10 C.F.R. § 20.1302(b)(1) (stating that "a licensee shall show compliance with the annual dose limit in § 20.1301 by — (1) Demonstrating by measurement or calculation"). Thus, regardless of whether paragraph 1.2 seeks to raise a new issue, it fails to provide an adequate basis for that issue or the one purportedly asserted in paragraph 1.

In paragraph 1.3, WTP posits a terrorist aircraft attack on one of the TVA facilities, causing a release of the entire core inventory of tritium, thereby rendering the Tennessee River unusable and destroying all life in the river. As both TVA and the Staff argue, this portion of WTP contention 1 raises a matter beyond the scope of the proceeding. Whether the issue WTP seeks to raise is viewed as a safety issue or an environmental one, consideration of a terrorist attack upon a reactor causing a beyond design basis accident is barred by the Commission's regulations and cannot be considered in a reactor licensing or amendment proceeding. See 10 C.F.R. § 50.13; Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 851 (1973); Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), LBP-02-4, 55 NRC 49, 112-13 (2002), review pending, CLI-02-6, 55 NRC 164 (2002); Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), LBP-02-5, 55 NRC 131, 142-45 (2002), review pending, CLI-02-5, 55 NRC 161 (2002). Thus, paragraph 1.3 neither provides a basis for the asserted issue in paragraph 1 nor raises an issue that is litigable in this license amendment proceeding. Accordingly, WTP contention 1 is inadmissible.

B. Contention 2

In its second contention, WTP alleges that ''[t]he addition of a nuclear-weapons related-role for these plants will increase the likelihood of sabotage-induced accidents that result in massive releases of radioactivity into the environment'' and that the physical protection measures of 10 C.F.R. Part 73 are inadequate to protect WTP's members. The contention then asserts that the NRC's ongoing top to bottom review of physical protection measures is prima facie evidence of the inadequacy of the agency's current requirements. The bases for WTP's second contention are set forth in five single-spaced pages, along with a number of exhibits, and are contained in paragraphs 2.1 through 2.7 with paragraph 2.2 having ten subparagraphs, 2.2.1 through 2.2.10.

In paragraph 2.1, WTP recites various indicators allegedly showing that all nuclear power plants are likely terrorist targets and then, in paragraphs 2.2 and its ten subsidiary parts, it explains why the tritium-producing TVA reactors will be particularly attractive terrorist targets. Next, in paragraph 2.3, WTP states that all three TVA reactors are ice condenser units and asserts, with references to various NRC studies, that such reactors "are characterized by exceptionally poor

performance of the containment systems in preventing release of radioactivity in the event of key categories of core melt accident." Then in paragraph 2.4, WTP claims that "there are specific and particular ways that the three TVA plants under consideration are exceptionally vulnerable to certain types of terrorist attack." Although acknowledging that its materials on plant vulnerabilities are not classified, WTP nonetheless states in paragraph 2.5 that its concern for national security prevents it from providing any of the details in a public document. Hence, it only describes them in general terms in paragraphs 2.6 and 2.7, explaining that they deal with early release frequency and core damage frequency. In light of its security concerns, WTP asks for the Board's indulgence for the vagueness of its contention and concedes that its request "appears inconsistent with the requirements of 10 CFR 2.714." Contention 2 ¶ 2.5.

TVA and the Staff both oppose admission of contention 2, arguing that the issue of a terrorist attack on the TVA facilities is barred by the Commission's regulations and, therefore, beyond the scope of the proceeding. See TVA Contention Response at 15; Staff WTP Contention Responses at 7-8. TVA also separately addresses WTP's assertions in paragraphs 2.3 through 2.7 dealing with ice condenser containments. It argues, inter alia, that the Sequoyah and Watts Bar ice condenser containment plants are already operating under NRC licenses and WTP's assertions are, therefore, a challenge to the existing design basis of the facilities that is outside the scope of the proceeding as well as an impermissible challenge to the agency's design basis regulations. See TVA Contention Response at 17. For its part, the Staff also argues that to the extent a portion of WTP's second contention is interpreted as seeking to challenge the adequacy of the physical protection measures required by 10 C.F.R. Part 73, the contention is a prohibited attack on the Commission's regulations. See Staff WTP Contention Response at 7-8.

Much like paragraph 1.3 of WTP's first contention that posits a terrorist attack on the TVA facilities resulting in catastrophic consequences, its second contention seeks to raise the issue of the increased likelihood of a terrorist attack on the Sequoyah and Watts Bar reactors because their "nuclear-weapons-related-role" and asserted exceptional vulnerability would result in massive radioactive releases. As in the case of paragraph 1.3 of contention 1, WTP's contention 2 is also barred by the Commission's regulations, 10 C.F.R. § 50.13, and is, therefore, beyond the scope of the proceeding. Regardless of the perceived attractiveness of the TVA facilities as terrorist targets or the supposed unique vulnerabilities of these facilities, the linchpin of contention 2 is a terrorist attack upon the facilities — a subject prohibited from litigation by Commission regulations. Thus, the contention is inadmissible. Because all parts of WTP's second contention clearly and directly relate to the subject of a terrorist attack on the facilities, there is no need to deal separately with any of the interrelated bases for the contention.

C. Contention 3

WTP's third contention asserts, in effect, that the NRC makes regulatory safety decisions on the basis of benefit-cost balancing and, here, the proposed plant changes will reduce safety margins without providing any benefits, so the changes are unjustified. As the bases for this contention, WTP first states that TVA has requested numerous TS changes, including decreasing the time interval between the point the spent fuel pool loses cooling and the pool inventory boils off uncovering the spent fuel, which it claims increases the risks to the surrounding population. Contention 3 ¶ 3.1. WTP then asserts there are no benefits to TVA from the proposed plant changes because (1) TVA must supply the irradiation services at cost to DOE under the Economy Act, so there is no financial benefit to TVA's ratepayers; (2) NRC lacks authority to authorize TVA to produce nuclear weapons material, so no benefit can be attributed to the changes to balance the cost to the surrounding public; and (3) DOE does not need a new tritium supply until 2016, so there is plenty of time to develop facilities with less adverse effects on the public health and welfare. See Contention 3 ¶ 3.6 to 3.11.

TVA and the Staff oppose the admission of the contention. In effect, they both argue that WTP has provided no basis for the premise of the contention that a license amendment can only be granted after a favorable benefit-cost analysis by the NRC and, in fact, there is no such statutory or regulatory requirement. This being so, TVA and the Staff also argue that, even if there are no benefits to TVA from the requested amendments, there is no relief that can be granted to WTP, and the contention is inadmissible pursuant to 10 C.F.R. § 2.714(d)(2)(ii) (2001).

As TVA and the Staff correctly argue, contention 3 is inadmissible. Contrary to the requirement of section 2.714(b)(2), WTP fails to provide any basis for the premise of contention 3 that an NRC safety benefit-cost analysis (in contrast to an environmental one) must justify the proposed license amendments. Nor could WTP provide such a basis for its contention because there is no statutory or regulatory requirement that an applicant demonstrate any benefit from a requested license amendment. Similarly, with the exception of the backfit rule, 10 C.F.R. § 50.109, which is inapplicable here, there is no requirement that the NRC make a safety benefit-cost determination in granting or denying an application. Rather, an applicant must satisfy the requirements of 10 C.F.R. § 50.90 and demonstrate that the requested amendment meets all applicable regulatory requirements and acceptance criteria and does not otherwise harm the public health and safety or the common defense and security. See, e.g., AEA § 182a, 42 U.S.C. § 2232(a) (2000); 10 C.F.R. § 50.57. As the Appeal Board stated years ago with respect to the "adequate protection to the health and safety of the public" standard in section 182a of the AEA and the derivative "reasonable assurance" standard of section 50.57(a)(3) of the Commission's regulations,

[t]he decision as to whether a threat to health and safety is posed by any particular activity obviously does entail an assessment of the nature and extent of the risks involved. But the quantum of protection to, or endangerment of, public health and safety is not dependent likewise upon how much benefit will be obtained from the activity. In the present context, a specific nuclear power facility is no safer because it is needed and, by the same token, is no more endangering to health and safety because it might be dispensable.

We might be prepared to lay the statutory terminology to one side if there were legislative history reflecting a congressional contemplation that the safety determinations mandated by the Act might, in some circumstances at least, involve a risk-benefit balancing. Our attention has been directed to no such history and, insofar as we have been able to ascertain, there is none.

Nor, to our knowledge, has the Atomic Energy Act or the Commission's regulations ever been so construed, either judicially or administratively.

Maine Yankee Atomic Power Co. (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1006-07 (1973). Because there is no safety benefit-cost analysis involved in NRC's determination to grant or deny a license amendment application, there necessarily is no relief that can be granted WTP even assuming arguendo that there is no net benefit to the requested license amendments. Thus, contention 3 also is inadmissible pursuant to 10 C.F.R. § 2.714(d)(2)(ii) (2001).

D. Contention 4

In its fourth contention, WTP asserts that "[t]he NRC's License Amendment Review process has, to date, been hurried, limited, and too narrowly focused" and as a result it does not provide adequate assurance the health of local citizens will be protected if the proposed amendments are granted. As the bases for contention 4, WTP makes two principal points in support of its contention that the NRC's review has been too limited and hurried. First, as set out in paragraph 4.1 and in an attempt to show how the NRC review has been too narrowly focused, WTP asserts (as it also did in contention 2) that the Sequoyah and Watts Bar ice condenser containments will fail under severe accident conditions when coupled with station blackout sequences. This being so, WTP indicates that the NRC has failed to conduct a risk-informed analysis of the proposed TVA amendments even though the "special circumstances" test detailed in NRC Regulatory Issue Summary 2001-02, "Guidance on Risk-Informed Decisionmaking in License Amendment Reviews," (Jan. 18, 2001) has been met. See Contention 4 ¶¶ 4.1.1 through 4.1.4. Second, as set out in paragraph 4.2 and to show how the NRC review has been hurried, WTP asserts that NRC's no significant hazards consideration determination under 10 C.F.R. § 50.92 is incomplete and premature because the agency is still in the midst of assessing the adequacy of physical protection measures for its regulated facilities following last year's terrorist attacks. Further, WTP claims that the NRC pushed ahead with its no significant hazards consideration determination and ignored the fact that most of the information needed by the public for filing timely comments on the Staff's proposed determination was unavailable on the agency's electronic library system, ADAMS, due to the NRC's actions following the terrorist attacks of September 11, 2001. According to WTP, the two most critical documents were not even placed on ADAMS until after the close of the public comment period. *See* Contention 4 ¶ 4.2.2. TVA and the Staff oppose the admission of WTP contention 4, in effect on the grounds that it raises an issue not within the scope of the proceeding. *See* TVA Contention Response at 29; Staff WTP Contention Response at 11-12.

Contention 4 is clearly inadmissible. It is a well-established principle of NRC adjudication that "contentions must rest on the license application, not on NRC Staff reviews." Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 349 (1998). As the Commission stated when it amended the contentions rule, "a contention will not be admitted if the allegation is that the NRC Staff has not performed an adequate analysis' because "the sole focus of the hearing is on whether the application satisfies NRC regulatory requirements, rather than adequacy of the NRC Staff performance." Procedural Changes in the Hearing Process, 54 Fed. Reg. at 33,171. See also Curators of the University of Missouri (Trump-S Project), CLI-95-8, 41 NRC 386, 396 (1995); Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 55-56 (1985). Here, WTP contention 4 and its asserted bases are aimed directly at the alleged hurried and limited nature of the Staff review of the proposed TVA amendments. Nowhere does the contention identify, much less address and analyze, any part of the TVA license amendment applications or, for example, demonstrate why the application is deficient for failing to conduct a risk analysis. Rather, the sole focus of WTP's contention is on the perceived inadequacies of the Staff's review — a subject that is not litigable in adjudicatory proceedings. Accordingly, contention 4 seeks to raise an issue beyond the scope of the proceeding and is, therefore, inadmissible.

E. Contention 5

In its fifth contention, WTP claims that TVA does not provide a safety-conscious work environment for plant employees to raise safety concerns without fear of retaliation in violation of the NRC's policy statement, "Freedom of Employees in the Nuclear Industry to Raise Safety Concerns Without Fear of Retaliation," 61 Fed. Reg. 24,336 (May 14, 1996). The asserted bases for this contention are long and involved, consisting of four single-spaced pages and two newspaper articles as exhibits. In essence, WTP's bases assert that adding a second mission to TVA's primary one of electricity production, as well as adding DOE as another customer, is "likely" to make maintaining an adequate safety culture more difficult and "likely" to reduce the commitment to safety at

the top levels of TVA management. Contention 5 ¶¶ 5.1, 5.1.2. Further, WTP states that the classified nature of some aspects of tritium production creates an institutional problem between security and the need to protect the public health and environment in which it is not possible to optimize one without compromising the other. See Contention 5 ¶ 5.1.3. Next, WTP asserts that recent events such as the whistleblower case at Sequoyah and the one at Watts Bar demonstrate that the working atmosphere at the TVA plants is hostile to safety consciousness and retaliatory of those who raise valid safety issues, thereby making it impossible for an adequate safety culture to be maintained. See Contention 5 ¶¶ 5.1.5 to 5.2.3. Finally, WTP claims that its safety culture concerns are amplified because the TVA reactors are at the margin of acceptability with respect to severe accidents due to their ice condenser containments, problems with components of the hydrogen control systems, and questions about the diesel generators. See Contention 5 ¶¶ 5.4 to 5.5.4. TVA and the Staff argue that WTP contention 5 is inadmissible for failing to set forth an adequate basis demonstrating a genuine factual or legal dispute as required by section 2.714(b)(2). See TVA Contention Response at 31; Staff WTP Contention Response at 13-14.

WTP's contention asserts, in effect, that TVA's failure to provide a safetyconscious work environment that allows employees to raise safety concerns without fear of retaliation violates the Commission 1996 policy statement on this subject. WTP's asserted bases, however, do not support its issue statement and neither the issue statement nor the bases show a genuine dispute of a material issue as required by the Commission's contention pleading rules. Although the cited policy statement is just that, a policy and not an enforceable regulation, disregard of the substance of the policy statement by TVA may be indicative of circumstances violating the NRC's regulation dealing with employee protection, 10 C.F.R. § 50.7. After claiming violation of the Commission's policy in the issue statement of contention, none of WTP's asserted bases even mention the policy statement, much less the applicable regulation, and show how any TVA conduct with respect to the license amendments at issue violates section 50.7. Without this indispensable connection, the bases fail "to show that a genuine dispute exists with the applicant on a material issue of law or fact' as required by section 2.714(b)(2)(iii).

Even putting to one side this glaring and fatal defect, WTP's assertions to the effect that tritium production is incompatible with TVA maintaining an adequate safety culture are highly speculative. To be given any credence and meet the requirements of section 2.714(b)(2)(ii), such claims must be based upon the opinion of an individual expert in safety culture matters — an expertise not apparent in WTP's affiant. Finally, WTP's assertions regarding two past whistleblower incidents at Sequoyah and Watts Bar also do nothing to save the contention. As the Commission recently stated in analogous circumstances, "[I]icense amendment proceedings are not a forum 'only to litigate historical

allegations' or past events with no direct bearing on the challenged licensing action." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 366 (2001). Here, WTP has merely recited two past incidents and failed to establish any direct link between those incidents and the managers involved and the current challenged license amendments. Accordingly, contention 5 is inadmissible.

F. Contention 6

In its sixth and last contention, WTP claims that the NRC lacks legal authority to grant the TVA amendment requests. As the basis for its contention, WTP asserts that section 103 of the AEA, 42 U.S.C. § 2133 (1994), only authorizes the Commission to grant licenses for "industrial or commercial purposes," not defense activities — the purpose of the amendments at issue. Further, it argues that 42 U.S.C. § 7272, enacted as part of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1981, Pub. L. No. 96-540, § 210, 94 Stat. 3197, 3202 (1980), prohibits the NRC from expending appropriated funds "for any purpose related to licensing of any defense activity or facility of the Department of Energy." Finally, WTP argues that the agency's regulations also restrict NRC licensing authority to production or utilization facilities for industrial or commercial purposes. TVA and the Staff both argue that WTP's contention ignores subsequent legislation specifically authorizing the production of tritium at Sequoyah and Watts Bar, so the contention is inadmissible for failing to raise a genuine dispute over a material issue of law or fact. See TVA Contention Response at 34-38; Staff WTP Contention Response at 15-16.

As TVA and the Staff correctly argue, contention 6 is inadmissible. In its contention, WTP primarily relies upon the prohibition enacted in 1980, 42 U.S.C. § 7272 (1994), barring the NRC from licensing defense-related activities. Absent from its issue statement and asserted bases, however, is any mention of the subsequently enacted National Defense Authorization Act for Fiscal Year 2000, Pub. L. No. 106-65, § 3134(a), 113 Stat. 512, 927 (1999) [hereinafter 2000 Act], providing that ''[t]he Secretary of Energy shall produce new tritium to meet the requirements of the Nuclear Weapons Stockpile Memorandum at the Tennessee Valley Authority Watts Bar or Sequoyah nuclear power plants'' Because DOE does not hold the licenses for the TVA reactors, it is necessarily implicit in the 2000 Act that NRC licensing action is required to accomplish the congressional direction. What is implicit in the 2000 Act, the House Armed Services Committee expressed explicitly in the House Report on its version of the legislation stating that:

The committee notes that the Nuclear Regulatory Commission (NRC) will have to issue amended licenses to the Tennessee Valley Authority's Watts Bar and Sequoyah light water

reactors, selected by the Secretary as the preferred facilities for tritium production. The committee understands that the NRC licensing process is often very lengthy and is concerned that delays in issuing amended licenses to the preferred tritium production facilities could jeopardize the ability of the Department to meet tritium requirements.

H.R. Rep. No. 106-162, at 493 (1999). See also H.R. Conf. Rep. No. 106-301, at 906-07 (1999). Thus, the 2000 Act and its legislative history clearly show that Congress intended for the NRC to entertain license amendment applications for the TVA reactors to produce tritium for DOE. Since the 1980 restriction on NRC activities contained in 42 U.S.C. § 7272 conflicts with the subsequently enacted section 3134(a) of the 2000 Act, the latter statute, even without a specific repealing clause, operates to repeal the earlier enactment to the extent of the conflict. See 1A Norman J. Singer, Sutherland's Statutes and Statutory Construction § 23.9 (6th ed. 2002). Therefore, contrary to WTP's claim, the earlier congressional enactment no longer bars the NRC from granting the requested TVA amendments.

Similarly, nothing in sections 103 or 104 of the AEA authorizing the Commission to issue a license for a production or utilization facility for commercial or industrial purposes or the Commission's regulations implementing these provisions, 10 C.F.R. §§ 50.21 and 50.22, precludes the grant of the requested TVA amendments, if otherwise appropriate. The primary and controlling commercial and industrial purpose of the TVA reactors remains the same regardless of these amendments. The addition of an incidental and secondary function such as producing tritium for DOE does not change the principal commercial and industrial purpose of the Sequoyah and Watts Barr reactors to produce electricity for sale. Accordingly, WTP's contention fails to raise a genuine dispute over a material issue of law or fact as required by section 2.714(b)(2)(iii), and the contention is inadmissible.¹¹

IV. CONCLUSION

For the foregoing reasons, the intervention petition of Mrs. Honicker is denied for lack of standing. The intervention petitions of BREDL and WTP are denied for failing to proffer at least one admissible contention as required by section 2.714(b)(1). Accordingly, the proceeding is terminated.

Pursuant to 10 C.F.R. § 2.714a, Petitioners each may appeal this decision to the Commission within ten (10) days of service of this Memorandum and Order

¹¹ In the first paragraph of its contention filing, WTP also moves to dismiss TVA's license amendment requests, essentially repeating the issue statement of contention 6. Pursuant to 10 C.F.R. § 2.730(b), a motion must, inter alia, "state with particularity the grounds' for the motion. Needless to say, a four-sentence request to dismiss these license amendment applications without any legal or factual explanation fails to meet this basic requirement and, for this reason, the motion is denied. In any event, the motion lacks merit for the reasons that underlie the inadmissibility of the contention.

on the questions whether their petitions to intervene should have been granted in whole or in part. The appeal shall be asserted by the filing of a notice of appeal and accompanying supporting brief.

It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD¹²

Thomas S. Moore, Chairman ADMINISTRATIVE JUDGE

Dr. Peter S. Lam ADMINISTRATIVE JUDGE

Dr. Thomas S. Elleman ADMINISTRATIVE JUDGE

Rockville, Maryland July 2, 2002

 $^{^{12}}$ Copies of this Memorandum and Order were sent this date by Internet e-mail transmission to (1) WTP, (2) BREDL, (3) Mrs. Honnicker, (4) TVA, and (5) the NRC Staff.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman Dr. Jerry R. Kline Dr. Peter S. Lam

In the Matter of

Docket No. 72-26-ISFSI (ASLBP No. 02-801-01-ISFSI)

PACIFIC GAS AND ELECTRIC COMPANY (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)

July 15, 2002

In this proceeding concerning the application of Pacific Gas & Electric Co. (PG&E) under 10 C.F.R. Part 72 to construct and operate an independent spent fuel storage installation (ISFSI) at the Diablo Canyon Power Plant, the Licensing Board denies motions by various hearing Petitioners and members of the public seeking a stay of the proceeding based on concerns about the impact on this proceeding of PG&E's ongoing involvement in federal bankruptcy court and other proceedings related to its planned bankruptcy reorganization.

RULES OF PRACTICE: STAY OF AGENCY ACTION (CRITERIA)

Under the Commission's rules of practice and procedure, a movant must briefly describe the reasons for requesting the stay by addressing the factors listed in 10 C.F.R. § 2.788(e). See 10 C.F.R. § 2.788(b); Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), CLI-93-2, 37 NRC 55, 58 (1993); United States Department of Energy (Clinch River Breeder Reactor

Plant), ALAB-721, 17 NRC 539, 543 (1983). These factors are (1) whether the movant would otherwise be irreparably injured in the absence of a stay; (2) whether the movant demonstrates a "strong showing" that it will succeed on the merits; (3) whether a stay would be to the detriment of other parties; and (4) what is the public interest. *See Clinch River*, ALAB-721, 17 NRC at 543 (citing, among others, *Alabama Power Co.* (Joseph M. Farley Nuclear Plant, Units 1 and 2), CLI-81-27, 14 NRC 795, 796-97 (1981)).

RULES OF PRACTICE: STAY OF AGENCY ACTION (BURDEN OF PROOF)

The movant bears the burden of persuasion relative to the four-factor stay inquiry. *See Public Service Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-493, 8 NRC 253, 270 (1978) (allocating to movant burden of persuasion regarding the four-factor stay analysis).

RULES OF PRACTICE: STAY OF AGENCY ACTION (IRREPARABLE INJURY)

Although none of the four stay factors will single-handedly determine a case, the irreparable injury factor is accorded significant attention. *See Alabama Power Co.* (Joseph M. Farley Nuclear Plant, Units 1 and 2), CLI-81-27, 14 NRC 795, 797 (1981).

RULES OF PRACTICE: STAY OF AGENCY ACTION (IRREPARABLE INJURY)

Regarding the first factor — irreparable injury — a motion for a stay must be bolstered by more than a mere allegation of irreparable harm. Rather, an irreparable injury must be "reasonably demonstrated" by the movant. *See Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-814, 22 NRC 191, 196 (1985).

RULES OF PRACTICE: STAY OF AGENCY ACTION (IRREPARABLE INJURY)

When the existence of related parallel proceedings in other tribunals ultimately is a claim based upon concerns about the use of litigation resources (i.e., being required to expend resources litigating matters in this proceeding that may be impacted by the other federal and state proceedings), that allegation does not constitute irreparable injury. See Private Fuel Storage, L.L.C. (Independent

Spent Fuel Storage Installation), CLI-02-11, 55 NRC 260, 263 (2002) (incurring litigation expenses is not irreparable injury "in the context of a stay decision").

RULES OF PRACTICE: STAY OF AGENCY ACTION (SUCCESS ON THE MERITS)

In connection with this factor, a showing of possibility of success on the merits requires more than the movant merely listing the possible grounds for reversal. *See Farley*, CLI-81-27, 14 NRC at 797. Further, if the movant fails to meet its burden on the other factors, the possibility of success on the merits must be very strong. *Id*.

RULES OF PRACTICE: STAY OF AGENCY ACTION (PUBLIC INTEREST)

While there is a public interest in having the petitioners receive a fair opportunity to present their arguments, there also is a public interest in the timely completion of adjudicatory proceedings. *See Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), LBP-98-33, 48 NRC 381, 393-94 (1998), *aff'd on other grounds*, CLI-99-11, 49 NRC 328 (1999).

MEMORANDUM AND ORDER (Denying Requests To Stay Proceeding)

Pending with the Licensing Board are three requests seeking a stay of this proceeding regarding challenges to the application of Pacific Gas & Electric Company (PG&E) for a 10 C.F.R. Part 72 license to construct and operate an independent spent fuel storage installation (ISFSI) at its Diablo Canyon Power Plant (DCPP) site. *See* E-mail from Lorraine Kitman to Richard Meserve, Chairman, Nuclear Regulatory Commission (June 11, 2002) [hereinafter Kitman Stay Request]; E-mail from Klaus Schumann & Mary Jane Adams to Richard Meserve, Chairman, Nuclear Regulatory Commission (June 12, 2002) [hereinafter Schumann/Adams Stay Request]; Petitioners' Motion for Stay of Licensing Proceeding (June 25, 2002) [hereinafter SLOMFP Stay Motion].¹ In each instance, the stay requests are footed in alleged concerns about the impact on this proceeding of PG&E's ongoing involvement in federal bankruptcy court and other proceedings related to its planned bankruptcy reorganization. In accordance

¹ The Schumann/Adams and Kitman requests, which were addressed to the Commission's Chairman, were referred to the Board by the Secretary of the Commission on June 17, 2002.

with a June 25, 2002 Board scheduling order, on July 2, 2002, both PG&E and the NRC Staff submitted responses opposing the stay requests. *See* Opposition of [PG&E] to Requests for Stay of Proceeding (July 2, 2002) [hereinafter PG&E Response]; NRC Staff's Response to Motions for Stay of the Diablo Canyon ISFSI Proceeding (July 2, 2002) [hereinafter Staff Response]. Also on that date, Mr. Schumann and Ms. Adams advised the Board they were adopting the June 25 SLOMFP filing. *See* E-mail from Klaus Schumann & Mary Jane Adams to Licensing Board Chairman (July 2, 2002).

For the reasons set forth herein, we deny the three requests to stay this proceeding.

I. BACKGROUND

In a December 21, 2001 application, PG&E asked that it be issued a 10 C.F.R. Part 72 license that would enable it to store spent nuclear fuel and other affiliated radioactive materials in a dry cask storage system at the DCPP site in San Luis Obispo County, California. PG&E wants a 20-year license to be issued by 2003 so that this ISFSI facility can be built and operating by 2006 to address anticipated spent fuel storage requirements for DCPP. See PG&E Response at 2. On April 22, 2002, a notice of opportunity for a hearing to be conducted under the "hybrid" hearing procedures in 10 C.F.R. Part 2, Subpart K, for PG&E's ISFSI license application was published in the Federal Register. See 67 Fed. Reg. 19,600 (Apr. 22, 2002). Subsequently, in mid-May 2002, three separate petitions to intervene/requests for hearing were filed by pro se petitioner Lorraine Kitman; San Luis Obispo County Supervisor Peg Pinard and the Avila Valley Advisory Council (AVAC); and the San Luis Obispo Mothers for Peace, on behalf of itself and Cambria Legal Defense Fund, Central Coast Peace and Environmental Council, Environmental Center of San Luis Obispo, Nuclear Age Peace Foundation, San Luis Obispo Chapter of Grandmothers for Peace International, San Luis Obispo Cancer Action Now, Santa Margarita Area Residents Together, Santa Lucia Chapter of the Sierra Club, and Ventura County Chapter of the Surfrider Foundation (collectively SLOMFP).² Currently,

² See Letter from Lorraine Kitman to Nuclear Regulatory Commission (May 10, 2002); Petition of San Luis Obispo County Supervisor Peg Pinard and [AVAC] for Leave To Intervene and Request for Hearing (May 14, 2002); Request for Hearing and Petition To Intervene by San Luis Obispo Mothers for Peace, Cambria Legal Defense Fund, Central Coast Peace and Environmental Council, Environmental Center of San Luis Obispo, Nuclear Age Peace Foundation, San Luis Obispo Chapter of Grandmothers for Peace International, San Luis Obispo Cancer Action Now, Santa Margarita Area Residents Together, Santa Lucia Chapter of the Sierra Club, and Ventura County Chapter of the Surfrider Foundation (May 22, 2002).

Although Supervisor Pinard and AVAC originally submitted a pro se intervention petition, accompanying the SLOMFP stay motion, which also was filed on behalf of both these Petitioners, was a notice of appearance indicating (Continued)

intervention petition supplements regarding standing and contentions are due in mid-July and an initial prehearing conference to entertain oral argument on these matters is scheduled in the San Luis Obispo area beginning on September 10, 2002.³ *See* Licensing Board Memorandum and Order (Initial Prehearing Order) (June 6, 2002) at 2 (unpublished); Licensing Board Memorandum and Order (Schedule for Initial Prehearing Conference) (June 26, 2002) at 2-3 (unpublished).

As part of its Part 72 application, PG&E noted that it filed for bankruptcy on April 6, 2001, under Chapter 11 of the United States Bankruptcy Code, and subsequently submitted a reorganization plan to the United States Bankruptcy Court for the Northern District of California on September 20, 2001. See SLOMFP Stay Motion at 3. Under that reorganization plan, PG&E, which currently is a subsidiary of PG&E Corporation (PG&E Corp.), would be separated from PG&E Corp. Further, although the licenses for DCPP and the site's potential ISFSI would be transferred to a new generating company, PG&E Corp. subsidiary Electric Generation LLC (EGen), EGen wholly owned subsidiary Diablo Canyon LLC would own the Diablo Canyon plant and lease its use to EGen. 4 See PG&E Response at 3. To accomplish this transfer, a separate 10 C.F.R. Part 50 license transfer application currently is pending with the Commission. See Diablo Canyon, CLI-02-16, 55 NRC at 331. Moreover, in addition to authorization from the Commission and the Bankruptcy Court, enactment of PG&E's reorganization plan ultimately requires permission from the Federal Energy Regulatory Commission (FERC) and the Securities and Exchange Commission (SEC). See PG&E Response

Those seeking a stay of this proceeding allege there are several other pertinent pending matters relative to PG&E's reorganization plan. In addition to a Deloitte and Touche LLP audit report provided to the Bankruptcy Court that points to

that counsel for SLOMFP is now representing these two Petitioners as well. Thereafter, in a July 8 intervention petition supplement filed on behalf of Ms. Pinard and AVAC, Ms. Pinard indicated that she now seeks to intervene as a private citizen rather than in her capacity as a member of the San Luis Obispo Board of Supervisors and that AVAC is petitioning to intervene as a private entity, not a governmental organization. Further, in that pleading the Board was advised that Ms. Kitman does not intend to participate in this proceeding as an independent party, but rather will participate as a SLOMFP member. See Petitioners' Amended Hearing Request and Petition To Intervene (July 8, 2002) at 1-3.

³ By filing dated June 20, 2002, San Luis Obispo County, California (SLOC), advised the Board that it wishes to participate in this proceeding as an interested governmental entity pursuant to 10 C.F.R. § 2.715(c) in any hearing granted regarding the PG&E Part 72 application. Both PG&E and the Staff have filed responses indicating they do not oppose that request. See Letter from David A. Repka, PG&E Counsel, to Licensing Board (July 2, 2002); NRC Staff's Response to Request of [SLOC] to Participate as of Right Under 2.715(c) (July 10, 2002). With this issuance, the Board acknowledges the SLOC request, with the caveat that SLOC "takes the proceeding as it finds it," see Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-600, 12 NRC 3, 8 (1980), and adds SLOC to its service list.

⁴ Also under the restructuring plan, PG&E's electric transmission business would be transferred to ETrans LLC and its gas transmission assets and liabilities would be transferred to GTrans LLC. ETrans and GTrans will also become indirectly wholly owned subsidiaries of PG&E Corp., which will change its name. PG&E will retain most of the remaining assets and liabilities and will continue to conduct local electric and gas distribution operations and related customer service. See Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 332 n.2 (2002).

concerns about PG&E's ongoing viability, PG&E itself submitted a Cautionary Statement to the SEC in which it outlined various unresolved items relating to the approval of its reorganization plan, including federal and state regulatory actions and the bankruptcy proceeding itself. See SLOMFP Stay Motion at 3-4. Regarding the bankruptcy proceeding, in addition to a December 2001 formal challenge by the State of California to the PG&E reorganization plan, the California Public Utility Commission (CPUC) in April 2002 submitted an alternative reorganization plan that deviates from PG&E's proposal by obviating any need for a DCPP ownership change or license transfer, which the Bankruptcy Court in mid-May approved for a mid-August creditor vote along with the PG&E plan. See id. at 4, 5-6. Further, the California Attorney General filed an action against PG&E parent PG&E Corp. in California state court claiming that prior to filing for bankruptcy PG&E improperly transferred up to four billion dollars to PG&E Corp. that allegedly is owed to the state for such items as taxes and environmental cleanup costs. In the case, the California Attorney General further charges that, by depriving PG&E of its revenues and assets, PG&E Corp. is acting counter to its stated intent of ensuring that PG&E is financially viable and that the utility has attempted to bypass various California laws and regulations. See id. at 4-5. Although SLOMFP estimates that the federal bankruptcy proceeding will be completed in a year or so, it presents no projection regarding the completion of the state court proceeding. See id. at 4-5, 10.

II. ANALYSIS

Although set forth with varying levels of detail, the essence of the concerns expressed in support of the three stay filings all involve PG&E's bankruptcy and the impacts that flow from that action vis-à-vis various other federal and state judicial and/or administrative proceedings. We consider these claims in light of the agency's requirements relating to the grant of stay requests.⁵

A. Procedural Standards Governing Stay Issuance

Under the Commission's rules of practice and procedure, a movant must briefly describe the reasons for requesting the stay by addressing the factors

⁵ Initially, we note that a procedural question arguably arises regarding the ability of any of those now before the Board to request a stay on a matter that does not concern the circumstances directly relating to issuance of the initial hearing opportunity notice, given that none of those submitting the requests have yet been granted party status to this proceeding. Further, movants Klaus Schumann and Mary Jane Adams have not previously filed intervention/hearing petitions, nor have they made any effort as part of their stay request to address the five late-intervention factors set forth in 10 C.F.R. § 2.714(a)(1)(i)-(v). See Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), CLI-93-11, 37 NRC 251, 254-55 (1993) (movant who has not sought to intervene in operating license proceeding limited in ability to stay proceeding). Although these items might provide an alternative basis for denying some or all of the stay requests, given our merits disposition of those requests, we need not reach these issues.

listed in 10 C.F.R. § 2.788(e). See 10 C.F.R. § 2.788(b); Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), CLI-93-2, 37 NRC 55, 58 (1993); United States Department of Energy (Clinch River Breeder Reactor Plant), ALAB-721, 17 NRC 539, 543 (1983). These factors are (1) whether the movant would otherwise be irreparably injured in the absence of a stay, (2) whether the movant demonstrates a "strong showing" that it will succeed on the merits, (3) whether a stay would be to the detriment of other parties, and (4) what is the public interest. See Clinch River, ALAB-721, 17 NRC at 543 (citing, among others, Alabama Power Co. (Joseph M. Farley Nuclear Plant, Units 1 and 2), CLI-81-27, 14 NRC 795, 796-97 (1981)). Further, the movant bears the burden of persuasion relative to this four-factor inquiry. See Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-493, 8 NRC 253, 270 (1978) (allocating to movant burden of persuasion regarding the four-factor stay analysis). Although none of the four factors will single-handedly determine a case, the irreparable injury factor is accorded significant attention. See Alabama Power Co. (Joseph M. Farley Nuclear Plant, Units 1 and 2), CLI-81-27, 14 NRC 795, 797 (1981).

Roughly speaking, the one-page Schumann/Adams stay request describes those individuals' concerns about the uncertainties associated with the pendency of PG&E's bankruptcy and finalization of its reorganization plan. *See* Schumann/Adams Stay Request at 1. Their stay request, however, fails to mention the impact of a stay upon the other participants, in particular Applicant PG&E, and it does not describe any irreparable injury. *Id.* The same is true relative to the one-page Kitman request. *See* Kitman Stay Request at 1. Nonetheless, because these requests substantively are of the same general stripe as the more extensive filing by movant SLOMFP, the Board analysis below applies to all three requests.

B. Application of Four-Factor Test to Pending Stay Requests

1. Irreparable Injury

Regarding the first factor — irreparable injury — a motion for a stay must be bolstered by more than a mere allegation of irreparable harm. Rather, an irreparable injury must be "reasonably demonstrated" by the movant. *See Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-814, 22 NRC 191, 196 (1985).

As its pleading appears to raise concerns relevant to this factor, SLOMFP posits claims regarding the adequacy of PG&E's financial qualifications and technical competence relating to the DCPP ISFSI, including uncertainty and possible adverse impacts associated with the identity of the applicant, its corporate relationships, its technical experience and abilities, its assets, and its ability to

raise funds. See SLOMFP Stay Motion at 7-8. Further, SLOMFP in its stay motion raises doubts about the degree to which such issues can be resolved in light of the pending federal bankruptcy, Commission license transfer, and state court proceedings involving PG&E. See SLOMFP Stay Motion at 6-9. SLOMFP's financial qualification and technical competence concerns, however, are traditionally proffered as "contentions" to be considered in the context of other substantive claims regarding the adequacy of the pending license application, rather than as grounds for a stay request. Moreover, in this instance the existence of related parallel proceedings in other tribunals ultimately is a claim based upon concerns about the use of litigation resources (i.e., being required to expend resources litigating matters in this proceeding that may be impacted by the other federal and state proceedings) that does not constitute irreparable injury. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-11, 55 NRC 260, 263 (2002) (incurring litigation expenses is not irreparable injury "in the context of a stay decision"). Accordingly, SLOMFP has failed to demonstrate the requisite irreparable injury.

2. Success on Merits

In connection with this factor, a showing of possibility of success on the merits requires more than the movant merely listing the possible grounds for reversal. See Farley, CLI-81-27, 14 NRC at 797. Further, if the movant fails to meet its burden on the other factors, the possibility of success on the merits must be very strong. Id. SLOMFP, however, has failed to make a showing regarding this factor sufficient to justify a stay. As noted by the Staff, the proceedings in federal bankruptcy court and California state court do not address the Commission's "public health and safety" regulatory focus. See Staff Response at 5-6. Further, PG&E correctly asserts that its ISFSI application facially addresses financial and technical qualifications matters, albeit with the recognition that the application process is flexible so as to take account of any change in the basis for PG&E's financial or technical qualifications that may result from the pending state and federal proceedings, including those matters that will be resolved in the Part 50 license transfer proceeding before the Commission. See PG&E Response at 5-7. Thus, SLOMFP also has failed to make the necessary showing with regard to this factor.6

⁶In connection with this factor, we also note that Ms. Kitman's argument, as framed, regarding the lack of an SLOC environmental impact report does not appear to address matters within the scope of the NRC licensing process, and so does not constitute grounds for granting a stay. *Cf. Maine Yankee Atomic Power Co. v. Bonsey*, 107 F. Supp. 2d 47, 52-55 (D. Me. 2000) (asserted application of state siting and environmental regulations to ISFSI may exceed state's authority).

3. Harm to Other Participants

In this instance, the "harm to other parties" factor requires a consideration of the impacts upon other participants of the delay occasioned by the stay relative to the benefits that may accrue to the movants. In the cover letter to its ISFSI license application, PG&E explained that, lacking a Department of Energy (DOE) repository for the permanent disposal of spent nuclear fuel, PG&E needs authorization in 2003 to begin ISFSI construction in time to support operation by 2006 when additional DCPP storage capacity will be needed. *See* Letter from Lawrence F. Womak, PG&E Nuclear Services Vice President, to NRC 3, 6-7 (Dec. 21, 2001) (DCPP ISFSI license application cover letter). When contrasted with the SLOMFP litigation expense avoidance and public interest claims that we otherwise find wanting in section II.B.1 above and section II.B.4 below, as well as the SLOMFP projections about when the various other ongoing federal and state proceedings will be completed, we again find the movant has failed to establish that this factor weighs in favor of a stay of this proceeding.

4. Public Interest

Our reading of SLOMFP's motion indicates that this, in fact, is the principal factor upon which it relies in support of its stay request, asserting that the pendency of federal and state proceedings would not allow a hearing to be conducted "in a fair, efficient or otherwise reasonable manner." SLOMFP Stay Motion at 9. While the Board does not dispute the public interest in having the Petitioners receive a fair opportunity to present their arguments, it also recognizes the public interest in the timely completion of adjudicatory proceedings. *See Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), LBP-98-33, 48 NRC 381, 393-94 (1998), *aff'd on other grounds*, CLI-99-11, 49 NRC 328 (1999).

In this regard, we find instructive the recent Commission decision in the ongoing DCPP license transfer proceeding denying a stay request. *See Diablo Canyon*, CLI-02-16, 55 NRC at 333-34. Relative to the bankruptcy proceeding, although noting the State's objections to the PG&E reorganization plan, as the Commission observed in that recent decision, it appears the bankruptcy case is progressing and there are no developments that "suggest that PG&E's plan cannot be confirmed." *Id.* at 333. As the Commission concluded there, we do not see the pendency of PG&E's bankruptcy cause as a basis for delaying the progress of this proceeding.

By the same token, as that Commission decision makes clear, the license transfer proceeding is moving forward and ultimately will result in a finding regarding the adequacy of the PG&E transfer request — a request SLOMFP asserts will put the facility in the hands of an unknown and financially unqualified transferee. Given that the "NRC's role in evaluation of the transferee's financial

qualifications is to decide whether the plan as proposed . . . will meet [its] financial qualifications regulations," *id.* at 340, that proceeding would appear to complement, rather than provide a basis for delaying, the matter in front of us to the degree that license transfer approval will not be provided unless a transferee is considered to be financially qualified.⁷

Finally, in connection with the potential state court matter, this clearly does not fall under the rubric of a matter that involves "imminent mootness" or otherwise carries the possibility of an immediate impact upon this proceeding so as to warrant putting this proceeding into abeyance. As described by SLOMFP, the federal bankruptcy court declared that the State can go forward in state court on its claims of PG&E's misrepresentation relating to the protection PG&E would provide to ensure its financial health in exchange for deregulation. *See* SLOMFP Stay Motion at 4-5. SLOMFP has, however, provided no information about when such claims will be heard or resolved, to say nothing of any indication from the tribunal involved as to the likelihood those claims will succeed, thus giving us no cause to perceive this as a matter that could impact this proceeding anytime in the near future so as to trigger the type of public interest concerns that might be cognizable under this factor.⁸

In sum, as was the case with the other three factors, we conclude the movant has failed to establish this element weighs in its favor so as to support issuance of the requested stay.

III. CONCLUSION

Finding that the requestors have failed to demonstrate that a balancing of the four factors set forth in 10 C.F.R. § 2.788(e) merit a stay of this proceeding, we deny their requests to delay this proceeding pending the resolution of PG&E's involvement in various federal and state judicial and/or administrative proceedings.

For the foregoing reasons, it is, this fifteenth day of July 2002, ORDERED that the respective June 11, 2002, June 12, 2002, and June 25, 2002 requests of

⁷ Although contentions have yet to be proffered by the Petitioners, given the pendency of the license transfer matter before the Commission (albeit under a different procedural scheme), one of the matters the Board may have to consider in ruling on contention admissibility is the degree to which it can delve into financial qualifications matters in connection with the PG&E ISFSI application.

⁸ Of course, in line with the Commission's observations in its recent license transfer case ruling, CLI-02-16, 55 NRC at 334, any developments regarding this proceeding (or the others to which the movants refer) that are believed to be pertinent to this proceeding can be brought to the Board's attention by way of new or amended issue statements or other appropriate means.

Lorraine Kitman, Klaus Schumann and Mary Jane Adams, and SLOMFP to stay this proceeding are *denied*.

THE ATOMIC SAFETY AND LICENSING BOARD⁹

G. Paul Bollwerk, III, Chairman ADMINISTRATIVE JUDGE

Dr. Jerry R. Kline ADMINISTRATIVE JUDGE

Dr. Peter S. Lam ADMINISTRATIVE JUDGE

Rockville, Maryland July 15, 2002

⁹Copies of this Memorandum and Order were sent this date by Internet e-mail transmission to counsel or the representative for (1) Applicant PG&E, (2) Petitioners Kitman and SLOMFP, (3) Klaus Schumann and Mary Jane Adams, (4) SLOC, and (5) the Staff.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS

William F. Kane, Director

In the Matter of

ENVIROCARE OF UTAH AND SNAKE RIVER ALLIANCE

December 13, 2000*

The Petitioners requested that the NRC assert jurisdiction over the disposal of mill tailings from Formerly Utilized Sites Remedial Action Program (FUSRAP) sites. As the basis for the requested action, the Petitioners argued that the statutory language of the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA) requires the NRC to regulate all mill tailings material, including FUSRAP material. Petitioners also argued that the legislative history of UMTRCA demonstrates clear congressional intent that the NRC should regulate all mill tailings material. Additionally, the Petitioners claimed that Commission regulations do not exempt FUSRAP material from NRC jurisdiction. Finally, the Petitioners argued that because Congress has preempted the states from regulation of mill tailings, the NRC's failure to assert jurisdiction would leave those tailings completely outside the scope of regulation.

The Director of the Office of Nuclear Materials Safety and Safeguards issued a Director's Decision on December 13, 2000, and the petition was closed. The Director's Decision concluded that the NRC lacks jurisdiction to regulate the disposal of mill tailings from FUSRAP sites, because the NRC's authority under UMTRCA only extends to tailings produced or possessed by a person licensed by the NRC as of the effective date of UMTRCA or thereafter. Consequently, the NRC lacks authority under Title II to regulate tailings from FUSRAP sites because those sites did not have an active license at the time of or after the enactment of UMTRCA. Finally, the Director held that state laws regulating the disposal of mill tailings were not preempted by UMTRCA or any other federal statute. For all of the above reasons, the Director denied the petitions.

^{*}This Director's Decision was inadvertently omitted from the December 2000 Issuances.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

On February 24, 2000, Snake River Alliance and, on March 13, 2000, Envirocare of Utah, Inc. (the Petitioners) filed separate petitions pursuant to 10 C.F.R. § 2.206 addressed to Dr. William Travers, Executive Director for Operations, of the U.S. Nuclear Regulatory Commission (NRC). These petitions, which have been addressed together in this decision, requested that the NRC assert jurisdiction over the disposal of mill tailings from Formerly Utilized Sites Remedial Action Program (FUSRAP) sites.

II. BACKGROUND

Beginning in 1974, the Department of Energy (DOE) initiated the FUSRAP program in order to remediate contamination at a number of sites at which the Manhattan Engineering District and the Atomic Energy Commission performed work as part of the nation's early atomic energy program. By 1997, forty-six sites were covered under the program, with remediation complete at twenty-five of those sites. Remediation of the other twenty-one sites was incomplete. In the Energy and Water Development Appropriations Act for Fiscal Year 1998, Congress transferred administration of FUSRAP to the U.S. Army Corps of Engineers (the Corps or USACE). Congress continued the Corps' responsibility for administration of the FUSRAP program by enacting the Energy and Water Development Appropriations Act for Fiscal Year 1999. The latter Act specified that remedial actions undertaken by the Corps under FUSRAP would be subject to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Similar language appeared in the Energy and Water Development Appropriations Act for Fiscal Year 2001.

Four years after the FUSRAP program was initiated by DOE, the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA) [Pub. L. No. 95-604] was

¹In addition to the two petitions, the NRC received a number of other submissions from various parties. The United States Army Corps of Engineers submitted a preliminary response to the petitions on April 11, 2000. The Corps filed a more detailed response on June 29, 2000. The Corps filed a further response on November 2, 2000. On April 10, 2000, Envirosafe of Idaho, Inc., responded to the February 24, 2000 petition submitted by Snake River Alliance. Envirosafe, joined by the Environmental Technology Council, later submitted a detailed analysis of the issues raised by both petitions on May 19, 2000. The National Mining Association submitted an argument and documents in support of the two petitions on July 18, 2000. Finally, in response to the above submissions, Envirocare filed three supplements to its petition, one on May 5, 2000, the second on August 30, 2000 (Envirocare filed a corrected version of its August 30 supplement on September 13, 2000) and the final supplement on October 18, 2000.

enacted. In enacting UMTRCA, Congress had two general goals: (1) providing a remedial-action program to stabilize and control mill tailings at various identified inactive mill sites; and (2) ensuring the adequate regulation of mill tailings at mill sites that were active and licensed by the NRC, and the cleanup of those sites after operations ceased. As then Chairman Hendrie of the NRC explained to Congress, the agency at the time did not have direct regulatory control over uranium mill tailings. The tailings themselves did not fall into any category of NRC-licensable material. As of 1978, NRC was regulating tailings at active mills indirectly through its licensing of source material milling operations under the Atomic Energy Act of 1954 (AEA), largely as a result of the enactment of the National Environmental Policy Act (NEPA). Operating uranium mill licenses were conditioned to require proper disposition and stabilization for environmental issues after operations had ceased. However, tailings were not source material licensable by the NRC. Thus once the underlying source material license terminates, there would no longer be a clear basis for regulating the tailings.²

To address the problem of existing unregulated tailings piles, Congress enacted Title I of UMTRCA, which specified inactive processing sites for remediation by the Secretary of Energy, and authorized the Secretary to designate additional sites for remediation within one year of the enactment of UMTRCA. To address the problem of tailings produced at active, NRC-licensed sites, Congress enacted Title II of UMTRCA. Title II amended the definition of byproduct material to include mill tailings and added specific authorities for the Commission to regulate this new category of byproduct material at licensed sites.

A number, but not all, of the FUSRAP sites contain tailings resulting from the processing of ores for the extraction of uranium or thorium. The residuals typically have most of the uranium or thorium removed, but still contain other radioactive elements in the decay chains for uranium and thorium, especially thorium-230 and radium. Mill tailings also can contain hazardous chemicals used in the processing to extract uranium or thorium, and these can include nitric, hydrofluoric, and sulfuric acids; ammonia; diesel fuel; and benzene. The standards applicable to the disposal of mill tailings were promulgated by the U.S. Environmental Protection Agency (EPA) and NRC conformed its regulations to these standards.³ For the nonradiological components of mill tailings, Congress directed EPA in UMTRCA to develop standards that offered the same level of protection as Resource Conservation and Recovery Act (RCRA) Subtitle C facilities.⁴

² Uranium Mill Tailings Radiation Control Act of 1978: Hearings on H.R. 11698, H.R. 12229, H.R. 12938, H.R. 12535, H.R. 13049, and H.R. 13650 (hereinafter "UMTRCA Hearings I") Before the Subcomm. on Energy and Power of the House Comm. on Interstate and Foreign Commerce, 95th Cong. 400 (1978) (statement of Joseph M. Hendrie, Chairman, NRC).

³ See 10 C.F.R. Part 40, Appendix A; 50 Fed. Reg. 41,852 (1985).

⁴ See Atomic Energy Act, § 84, 42 U.S.C. § 2114, as amended by UMTRCA, Pub. L. No. 95-604, 92 Stat. 3033.

A. Director's Decision DD-99-7

In 1999, the NRC issued a Director's Decision on an issue associated with the Corps' cleanup activities: whether the Corps needs an NRC license to conduct remediation activities at FUSRAP sites. The Natural Resources Defense Council filed a petition requesting that the NRC exert licensing authority over the Corps at FUSRAP sites. The NRC denied the petition and declined to require the Corps to obtain a license for activities conducted at FUSRAP sites. In discussing the NRC's duties under UMTRCA, the Director concluded that UMTRCA did not impose responsibilities on the NRC for remediation activities involving residual material produced in an activity not under NRC license prior to enactment of UMTRCA. "Because the residual material at many FUSRAP sites was generated in activities that were not licensed when UMTRCA was enacted, or thereafter, NRC today has no basis to assert any regulatory authority over handling of the residuals at those sites."

The Director's Decision focused on whether NRC should regulate the Corps' onsite FUSRAP activities. The decision did not address the NRC's authority in detail to require a license when FUSRAP material is moved off the site for disposal.

B. Petitioners' Arguments

Petitioners Envirocare and Snake River Alliance take issue with the NRC's interpretation of its authority under UMTRCA with regard to mill tailings that were not under license when UMTRCA was enacted or thereafter. They present a number of arguments for why the NRC should assert jurisdiction over the disposal of mill tailings from FUSRAP sites. The Petitioners argue that the statutory language of UMTRCA unambiguously requires the NRC to regulate all mill tailings material, including FUSRAP material. According to the Petitioners, the statute does not indicate that any significant category of mill tailings should be excluded from NRC regulation. Specifically, the Petitioners state that section 84 of the AEA, as amended by UMTRCA, compels the NRC to assert jurisdiction over any material that falls within the definition of byproduct material.

Petitioner Envirocare also argues that the legislative history of UMTRCA demonstrates clear congressional intent that the NRC should regulate all mill tailings material, including material from FUSRAP sites. Envirocare concedes that Congress may not have specifically intended the NRC to regulate FUSRAP material. However, according to Envirocare, since Congress intended to regulate all material that fit the definition of section 11e(2) byproduct material, Congress

⁵ United States Army Corps of Engineers, DD-99-7, 49 NRC 299 (1999).

⁶ Id. at 308.

could not have intended to exclude FUSRAP material from NRC regulation. In addition, Envirocare asserts that Congress recognized the serious health and safety problems posed by uranium mill tailings, and therefore would not have chosen to exclude a category of tailings from the control of the regulatory authority granted by UMTRCA.

Next, both Petitioners contend that the NRC's regulations, specifically 10 C.F.R. § 40.2a, do not exempt FUSRAP material from NRC jurisdiction. Additionally, the Petitioners express their concern that, absent NRC regulation, mill tailings from FUSRAP sites would go unregulated because they fall outside the jurisdiction of the EPA under RCRA and cannot be regulated by the states because Congress preempted the field of mill tailings when it enacted UMTRCA. Petitioner Snake River Alliance specifically notes that Idaho, which is not an Agreement State, lacks the authority to regulate the disposal of byproduct material, which, in the Petitioners' view, would leave the disposal of FUSRAP mill tailings at sites such as Envirosafe unregulated. In supplemental comments dated May 5, 2000, Petitioner Envirocare argues that, under the Commission's interpretation of UMTRCA, the disposal of mill tailings from FUSRAP sites is subject to neither federal nor state health and safety regulation, and therefore NRC's approach to these matters leaves the disposal of these materials entirely unregulated.

On August 30, 2000, Envirocare submitted a second supplement to its petition.⁷ This supplement largely reiterates the arguments made by Envirocare in its first two submissions. However, this supplement also seeks to rebut the arguments made by the Army Corps of Engineers and raises some new arguments. In this supplement, Envirocare argues that the NRC interpretation of UMTRCA would leave the NRC without jurisdiction over FUSRAP material even when it is disposed of at an NRC-licensed facility. Envirocare notes that, prior to 1998, when the Corps took over FUSRAP, all disposal of FUSRAP mill tailings material occurred either under DOE supervision or at an NRC-licensed facility. Additionally, Envirocare asserts that the NRC has taken inconsistent positions regarding whether mill tailings material from FUSRAP sites can be considered section 11e(2) byproduct material. Envirocare also argues that FUSRAP was not listed as one of the specific exclusions from UMTRCA, although Congress did choose to exclude other types of sites in UMTRCA section 101(6). Finally, on October 18, 2000, Envirocare submitted comments on responses provided by the NRC to questions posed by the Senate Committee on Environment and Public Works.

On September 13, 2000, Envirocare submitted a corrected version of its August 30, 2000 supplement to the petition.

C. The Corps' Response

The Corps submitted an initial response to the petitions on April 11, 2000. The Corps supplemented its response in greater detail on June 29, 2000. The Corps asserts that the NRC's interpretation of UMTRCA as only extending NRC regulatory authority over licensed activity is reasonable. First, the Corps argues that the statutory language of UMTRCA evinces a congressional intent to limit the NRC's jurisdiction over tailings to current and future licensees. The Corps points to the amended language of section 83 of the AEA, which limits the NRC jurisdiction over byproduct material to "any license issued or renewed after the effective date of this section." The Corps points out that no language in the statute contradicts the prospective language of amended section 83.

The Corps next asserts that the legislative history of UMTRCA supports the conclusion that the NRC's authority under Title II of the Act extends prospectively to licensees who held an NRC license as of the effective date of UMTRCA or thereafter. The Corps notes that, in numerous sections of the legislative history, Congress used language indicating that the NRC's authority to regulate the cleanup of residual material was limited by UMTRCA to tailings resulting from then-effective and future licensed activities. Additionally, the Corps points out that Congress considered retroactive application of Title II of UMTRCA and instead decided to impose the new requirements of section 83 of the AEA on current and future licensees. The Corps stresses that Title I and Title II of UMTRCA were originally introduced as separate legislation by the DOE and the NRC. According to the Corps, this separation and the creation of two separate programs under UMTRCA is evidence that Congress did not intend for Title II requirements to apply to sites that were inactive as of the effective date of the statute.

Next, the Corps argues that Congress has had numerous opportunities through legislation to change the FUSRAP program or UMTRCA to state that the NRC has regulatory authority over FUSRAP mill tailings material. Despite passing amendments and other legislation relating to the FUSRAP program, the Corps argues that Congress has never indicated mill tailings material from FUSRAP sites must be regulated by the NRC under the AEA.

Additionally, the Corps also argues that the preemption argument made by the Petitioners is irrelevant because preemption in the field of radioactive materials is limited to those materials over which the NRC has regulatory authority. Since the NRC lacks regulatory authority over FUSRAP material, states are not preempted from regulating the disposal of that material. The Corps notes that naturally occurring radioactive materials (NORM) and technologically enhanced NORM (TENORM) are also not regulated under the AEA. Finally, the Corps asserts that, under the Petitioner's interpretation of UMTRCA, mixed-waste FUSRAP

material containing both AEA and RCRA waste may have no authorized disposal site.

The Corps submitted a response to Envirocare's August 30, 2000 petition supplement on November 2, 2000. In this supplement, the Corps refutes Envirocare's argument that DOE always disposed of FUSRAP material at an NRC-licensed site, citing two specific occasions of disposal of FUSRAP material at hazardous waste disposal sites. Additionally, the Corps clarifies its position that the Title II program created under UMTRCA is limited to regulation of licensed or actively operating mills as of 1978, and that some of the FUSRAP material falls outside this scope.

D. Envirosafe of Idaho's Response

Envirosafe of Idaho, Inc., submitted a response to the Snake River Alliance petition on April 10, 2000. On May 19, 2000, Envirosafe, joined by the Environmental Technology Council (hereinafter Respondents), submitted a response to both petitions, requesting that the NRC deny the relief sought in the petitions. The Respondents first argue that Congress expressly decided not to include the FUSRAP sites under UMTRCA because DOE was already addressing those sites under its AEA and NEPA authority. The Respondents note that, since the passage of UMTRCA, Congress has had numerous opportunities to state its intent to place FUSRAP sites under NRC authority, but has not done so. Instead, Congress transferred FUSRAP to the Corps of Engineers and directed that remediation is subject to the provisions of CERCLA.8

Contrary to the argument by the Petitioners, the Respondents assert that the legislative history of UMTRCA demonstrates a clear congressional intent to exclude FUSRAP from the NRC's regulatory authority under UMTRCA. The Respondents claim that Congress decided to exclude the FUSRAP sites from UMTRCA and instead oversee the FUSRAP program through the appropriations process. Additionally, the Respondents note that Title I of UMTRCA was limited to the twenty-two sites listed and any other sites added within one year of enactment. Since the FUSRAP sites were not added, they do not fall under Title I of UMTRCA. Finally, the Respondents argue that the fact that tailings from FUSRAP sites may be disposed of at sites with a disposal permit under RCRA ensures that the materials will be disposed of in an environmentally sound manner.

⁸ The House version of the authorization bill for Fiscal Year 2000 stated that, in appropriating funds to the Corps for site remediation under FUSRAP, the Committee did not intend that the Corps would be required to obtain an NRC license. *See* H.R. Rep. No. 106-253, at 77 (1999). The conference report on the bill did not repeat this explanatory language, nor did it contradict it.

Ongress added additional sites through later legislation.

E. National Mining Association Comments

On July 18, 2000, the National Mining Association (NMA) submitted documents, including an Addendum to the White Paper entitled "Recommendations for a Coordinated Approach to Regulating the Uranium Recovery Industry" (Aug. 19, 1999), for consideration in connection with the Petitioners' requests. The NMA supports the Petitioners' position that the NRC should assert jurisdiction over the disposal of FUSRAP material.

First, the NMA agrees with the NRC's position that material at a FUSRAP site is not subject to regulation by the NRC, since the FUSRAP program continues to fall under the province of DOE. Therefore, any remediation or disposal of FUSRAP material *onsite* does not require an NRC license. However, the NMA argues that the NRC should regulate the disposal of FUSRAP tailings *offsite*. In the Addendum to the White Paper, the NMA reiterated many of the arguments made by the Petitioners, but also raised additional arguments for NRC jurisdiction over FUSRAP material.

The NMA asserts that the plain language of UMTRCA does not reveal any temporal limitation on the materials that qualify as section 11e(2) byproduct material. According to the NMA, Congress did not define section 11e(2) byproduct material in terms of whether it was produced prior to 1978 and pursuant to an AEA license. Additionally, the NMA claims that section 83 of the AEA does no more than prescribe certain provisions that must be included in all NRC licenses issued after the effective date of UMTRCA.

Next, the NMA argues that DOE's determination that FUSRAP tailings meet the definition of section 11e(2) byproduct material is entitled to deference. The NMA bases this argument on the fact that UMTRCA grants DOE the authority to determine what materials constitute "residual radioactive materials," a term that encompasses byproduct material. The NMA also relies upon a 1992 *Federal Register* notice, in which it claims the NRC asserted that some FUSRAP materials constitute section 11e(2) byproduct material.¹⁰

III. DISCUSSION

The Petitioners' section 2.206 petitions raise a most difficult question of statutory construction. On the one hand, UMTRCA contains ostensibly sweeping language — i.e., it directs the NRC to regulate "byproduct material" in section 84 of the AEA, and in section 11e(2), it defines "byproduct material" to include tailings "from any ore processed primarily for its source material content." This statutory language arguably covers FUSRAP material, which derives, in

¹⁰ See 57 Fed. Reg. 20,527 (May 13, 1992).

part, from processing ore for source material content. On the other hand, when enacting UMTRCA, Congress was fully aware of DOE's FUSRAP sites and nonetheless left them out of the Act, despite establishing an elaborate statutory regime for decontaminating other defunct sites under a program administered by the DOE. Moreover, in delineating the NRC's duties under UMTRCA in section 83 of the AEA, Congress focused on active or NRC-licensed sites. Congress did not purport to grant the NRC general regulatory authority over mill tailings at defunct sites.

The FUSRAP question has come up on several occasions in recent years. During this time, the NRC has consistently disclaimed NRC jurisdiction, in correspondence with the Congress and with the public. This section 2.206 proceeding is the NRC's first opportunity to fully consider and explain its position in a systematic fashion.

With the assistance of the NRC's Office of the General Counsel, I have carefully reviewed UMTRCA, its history, and the voluminous submissions of the various participants in the section 2.206 proceeding. I conclude that UMTRCA mandates no change in the NRC's current practice. Not only did Congress not include in UMTRCA clear language giving the NRC power to regulate most FUSRAP material, Congress also has been aware of the NRC's FUSRAP position for several years, and has not stepped in to override it. To my knowledge, the NRC's failure to exercise UMTRCA authority over FUSRAP material has created no public health and safety problem. State and EPA regulatory authorities are up to the task of regulating the safe disposal of FUSRAP material.

With this general outline in mind, I turn now to the Petitioners' various concerns and to my specific reasons for rejecting NRC jurisdiction over most FUSRAP material.

A. Statutory Provisions of UMTRCA

The question before the Commission is whether its regulatory jurisdiction extends to those ore processing residuals or mill tailings currently being remediated by the Corps under FUSRAP. Until 1998, the DOE had been conducting the remediation of the FUSRAP sites through annual appropriations for decontamination and remediation, not pursuant to its Title I authority under UMTRCA. Title I of UMTRCA authorized DOE to perform remedial actions at twenty-two designated processing sites. In addition, the Secretary was directed to, within one year of enactment of the Act, designate all other processing sites containing residual radioactive materials produced under federal contract, but not under license by the NRC as of January 1, 1978, which he determined required

remedial action to carry out the purposes of the Act.¹¹ As detailed below in the discussion of UMTRCA's legislative history, a large number of inactive sites, not under license by the Commission as of January 1, 1978, and containing such residual materials and subsequently remediated under the FUSRAP program, were known to both DOE and the Congress at the time of enactment of UMTRCA,¹² yet they were never designated as processing sites for remediation under UMTRCA.

Title II of UMTRCA addresses the NRC's role. Title II authorized the NRC to regulate mill tailings at sites with licenses issued or in force on or after the effective date of that part of the statute. The statutory language makes no mention of FUSRAP material in either Title I or Title II and does not indicate that the NRC has authority to require licenses for disposal of FUSRAP material. NRC regulation of FUSRAP material (mill tailings at defunct sites not licensed by the NRC) does not fit comfortably the DOE–NRC division of labor set up by UMTRCA.

The Petitioners, however, assert that section 84 of the AEA is a broad grant of authority to the NRC over all byproduct material, including tailings at FUSRAP sites. The reasoning behind this assertion is as follows: UMTRCA amended the definition of "byproduct material" in section 11e(2) of the AEA to include mill tailings. Section 84 requires the Commission to ensure that the management of section 11e(2) byproduct material is carried out in a manner that protects the public health and safety and the environment. Therefore, according to the Petitioners, the Commission must regulate all materials that share the characteristics of mill tailings, regardless of whether or not they were produced under an NRC license. We decline to read section 84 in such isolation from the other provisions of UMTRCA. A review of UMTRCA as a whole (both Title I and Title II), its legislative history, and the structure of remediation activities created by the separate titles, supports the conclusion that the NRC lacks jurisdiction over most FUSRAP material.

As noted above, UMTRCA divided the responsibility for mill tailings cleanup between DOE and the NRC. UMTRCA assigned responsibility for licensed sites to the NRC and responsibility for unlicensed (defunct) sites to DOE. Given this statutory structure, it seems unlikely that Congress *sub silentio* intended the NRC to take on responsibility for FUSRAP material at unlicensed sites. The key substantive UMTRCA provision applicable to the NRC — section 83a of the AEA — reinforces this view. Section 83a specifies particular "terms and conditions" that the NRC must include in licenses "issued or renewed after the effective date of this section," and goes on to say that any "license which is in effect on the effective date of this section and which is subsequently terminated without renewal" must contain the same terms and conditions. Section 83a's

¹¹ UMTRCA § 102, Pub. L. No. 95-604, 92 Stat. 3023.

¹² UMTRCA Hearings I at 302.

focus, in short, is on facilities "licensed" on or after UMTRCA's effective date. Neither section 83a nor any other UMTRCA provision directs the NRC to regulate unlicensed FUSRAP sites.

The NRC recognizes that the drafting of section 83a has created confusion regarding the effective date of NRC's authority. As Petitioner Envirocare correctly points out, the effective date of section 83 was 3 years after UMTRCA's enactment in 1978. As originally passed, section 83a imposed certain terms and conditions on any "license in effect on the date of enactment" of the section. This language caused severe interpretive difficulties regarding the timing of Agreement State responsibilities under the Act. These Agreement State issues were addressed in a 1979 amendment to UMTRCA, changing its effective date to 1981. The precise effective date of UMTRCA is irrelevant since the NRC has never had jurisdiction over FUSRAP material.

Questions have been raised regarding the appropriate term to use to identify the ore processing residuals that fall outside of NRC jurisdiction. Envirocare points out in its supplemental petition that, at various times, the NRC has referred to this material as section 11e(2) byproduct material, non-11e(2) material, pre-1978 11e(2) material, FUSRAP mill tailings, and FUSRAP ore processing residuals. The issue of the proper designation for this material was specifically raised in a recent Commission decision. However, the Commission did not find it necessary to address the issue at that time. From NRC's perspective, the material in question constitutes pre-UMTRCA tailings resulting from the processing of ores for the extraction of uranium or thorium not covered by the AEA. Although the material may be chemically, physically, and radiologically similar to section 11e(2) byproduct material, it is not material over which NRC has jurisdiction.

The bottom line here is that we face a statute of considerable complexity and ambiguity. Contrary to the Petitioners' view, the questions they raise about FUSRAP cannot be answered by resort to UMTRCA's alleged "plain meaning." In analyzing the meaning of a statute, the "statute is to be considered in all its parts...." Recently, the Supreme Court in *FDA v. Brown & Williamson Tobacco Corp.* held that "a reviewing court should not confine itself to examining a particular statutory provision in isolation. The meaning — or ambiguity — of certain words or phrases may only become evident when placed in context."

¹³ See Pub. L. No. 96-106, 93 Stat. 800.

¹⁴ International Uranium (USA) Corp., CLI-00-1, 51 NRC 9, 14 (2000).

¹⁵ Lexecon Inc. v. Milberg Weiss Bershad Hynes & Lerach, 523 U.S. 26, 36 (1998).

¹⁶ 120 S. Ct. 1291 (2000).

¹⁷ Id. at 1300-01. Brown & Williamson involved an attempt by the Food and Drug Administration (FDA) to regulate tobacco under the Food, Drug and Cosmetic Act (FDCA). Although the literal words of the FDCA appeared to support the FDA's position, the Court looked beyond the literal words and also examined the history and structure of the Act, as well as the FDA's prior administration of the Act, and concluded that the FDA lacked jurisdiction to regulate tobacco.

Ambiguity in a statute arises when the language is capable of more than one plausible interpretation. ¹⁸ As demonstrated by the numerous positions taken by the Petitioners, the Respondents, the Corps, and the NMA, the language of UMTRCA is far from clear and can plausibly be subject to more than one interpretation. When the plain language of a statute is "obscured by ambiguity," then "[1]egislative history can be a legitimate guide for statutory interpretation." ¹⁹ It is to that history I now turn.

B. Legislative History of UMTRCA

UMTRCA was the result of an investigation of inactive uranium mill tailings sites in western states beginning in 1974, and a followup series of engineering assessments of twenty-two sites. On the basis of these studies, the Carter Administration proposed legislation to authorize a remedial action program to clean up these inactive sites. The legislation was deemed necessary to give DOE authority to remediate these particular sites because it had been difficult to fix legal responsibility over the sites.

Historically, neither the AEC nor the NRC had regulatory jurisdiction over uranium mill tailings after mill operations were terminated because the tailings were not themselves licensable material. Regulatory control had been asserted indirectly as part of the Commission's licensing of ongoing milling operations pursuant to licensing authority over source material. However, once operations had ceased at the twenty-two inactive sites and all licensable quantities of source material were removed, the regulatory staff had no further role.²⁰

From the outset, however, the Administration made it clear that there were additional inactive sites under study for possible remediation which were not being addressed by the proposed legislation. As described in the written testimony of Dr. Liverman of the DOE before the House Subcommittee on Energy and Power:

In addition to the above mentioned studies of the 22 inactive mill tailing sites we are currently in the process of evaluating a number of sites at which a variety of materials from uranium and thorium ores to refined products were handled or processed. Most of these properties were released from Federal control in the period 1943 to 1970. However, once this survey is completed, the need for remedial action determined, and issues of legal responsibility settled, DOE will be in a position to determine which, if any, of these properties could be included in this legislation.²¹

¹⁸ See Iraola & CIA v. Kimberly-Clark Corp., 2000 U.S. App. LEXIS 27989, at * 6 (11th Cir. Nov. 9, 2000).

¹⁹ Burlington Northern Railroad Co. v. Oklahoma Tax Commission, 481 U.S. 454, 461 (1987). See also Iraola & CIA v. Kimberly-Clark Corp., 2000 U.S. App. LEXIS 27989, at * 6 (11th Cir. Nov. 9, 2000); United States v. Dauray, 215 F.3d 257 (2d Cir. 2000); Vergos v. Gregg's Enterprises, Inc., 159 F.3d 989 (6th Cir. 1998); Stiltner v. Beretta U.S.A. Corp., 74 F.3d 1473 (4th Cir. 1996).

²⁰ H.R. Rep. No. 95-1480 (II), at 29-30 (1978).

²¹ UMTRCA Hearings I at 185.

Dr. Liverman, in discussing the inactive sites further, noted that "we do not need authorization to deal with a number of those; whereas, in the case of mill tailings, we do not have the authority to move ahead in that area We will be coming back annually in the appropriations process to deal with those sites. If we find that our statutory authority is inappropriate to deal with the question, then we will be back about that issue also."22

Throughout the legislative session, as the proposed remedial legislation was refined and even as additional provisions to address mill tailings at active sites were introduced, Dr. Liverman continued to describe these former research and development sites, the FUSRAP sites, as not covered by the legislation. At the July 26, 1978, hearings in the House, Dr. Liverman informed the House Subcommittee on Energy and the Environment that DOE was "not proposing that as a part of this bill because we have not yet accurately determined what the cost may be, but I do want to mention it because it is another thing that is coming across the table, but it is not covered in this legislation."23 The sites referenced by Liverman were included in the FUSRAP program rather than in Title I of UMTRCA. Liverman reiterated upon questioning that the sites he was discussing were "not part of this legislation. They were deliberately eliminated by the Office of Management and Budget because we needed to do a more detailed study of those sites, and get a clear estimate so we could bring to the Congress a bill that made some sense."24

As Congress considered the remediation of the twenty-two inactive mill tailings sites, members were expressing their concern that any legislation should address the problem of controlling tailings at active mill sites to prevent the need for remediation grants in the future.²⁵ As of 1978, NRC was regulating tailings at active mills indirectly through its licensing of source material milling operations under the AEA of 1954, largely as a result of the enactment of NEPA. Operating uranium mill licenses were conditioned to require proper disposition and stabilization for environmental issues after operations had ceased. However, tailings were not source material licensable by the NRC. Thus, once the underlying source material license terminates, there would no longer be a clear basis for regulating the tailings.

The proposals to strengthen NRC's licensing authority over active mill sites, once added to the legislation, were viewed as complementary to the remedial plan for the inactive sites, part of a whole package. But it continued to be recognized by those testifying on the various pieces of legislation that a category

²² Id. at 301, 309.

²³ Uranium Mill Tailings Radiation Control Act of 1978: Hearings on H.R. 13382, H.R. 12938, H.R. 12535, and H.R. 13049, Before the Subcomm. on Energy and the Environment of the House Comm. on Interior and Insular Affairs, 95th Cong. 42 (1978).

24 Id. at 49.

²⁵ UMTRCA Hearing I at 325.

of inactive sites (the FUSRAP sites) was not covered. According to D. Berick of the Environmental Policy Center:

There are some 30 sites, including Middlesex, N.J., where tailings were used in construction as well as the DOE-owned mill at Monticello, Utah and Manhattan Project uranium wastes which are not covered under the remedial legislation \dots .

The House Committee Report on H.R. 13650, the culmination of the various proposals in the House, and the bill reported to the whole House described the reasons for the legislation as follows:

The lack of any control over these inactive sites under the 1954 act and other laws to require clean up of these sites is the principal basis for committee action to authorize this remedial program. This situation does not exist at active mill tailings sites. Those sites, even those with tailings derived from Federal contracts, are subject to NRC regulation as a result of the enactment of NEPA in 1970. The NRC can require these operators, as a condition to the granting of a license, to take steps to stabilize these piles, although the control is not adequate. Indeed, the NRC testified that it has obtained commitments from some licensees to cope with the problem to some degree. This bill will provide additional authority to effectively control tailings at these active and all future sites.²⁷

As the final legislation moved through the Senate, statements by the sponsors on the floor continued to recognize that Title II was to strengthen prospectively NRC's authority over currently active and future uranium mill tailings, but not inactive sites. Senator Hart noted:

This amendment addresses two separate but related issues. The first issue concerns remedial action clean up of abandoned uranium mill tailings. The provision to deal with this problem was drafted by the Energy and Natural Resources Committee. The second issue concerns the regulatory and licensing authority of the Federal Government and the States over currently active and future uranium milling activities. The provision concerning this issue was drafted by the Senate Committee on Environment and Public Works. I would like to take a few minutes to explain the rationale behind the Environment Committee's provision, and its relation to the rest of the amendment we are offering.

Mr. President, under present law, the Nuclear Regulatory Commission has the authority and responsibility to regulate uranium milling and milling operations, and the Commission is currently exercising that authority over 11 active sites. An additional 14 sites are regulated by individual States. Under the authority of the Atomic Energy Act, these States developed approved regulatory programs and assumed regulatory responsibility from the NRC.

Although the NRC licenses active uranium mining and milling activities, existing law does not permit the Commission to regulate the disposal of mill tailings once milling and mining

²⁶ Id. at 429.

²⁷ H.R. Rep. No. 1480 (II), at 30 (1978).

operations cease and the operating license expires. It is this authority to regulate tailings after milling operations cease, that we propose be given to the NRC.²⁸

We are led to conclude that the statutory language finally adopted as the UMTRCA implements this division in approach between inactive and active mill tailing sites: Title I gave DOE the authority to remediate twenty-two named processing sites, authority that the federal government otherwise lacked. Title II strengthened NRC's authority over currently active sites by giving it authority under the AEA, not just NEPA, to regulate tailings at these sites once milling ceased.

The Findings and Purposes section of the legislation bear this out:

(b) The purposes of this Act are to provide —

- (1) in cooperation with the interested States, Indian tribes, and the persons who own or control inactive mill tailings sites, a program of assessment and remedial action at such sites, including, where appropriate, the reprocessing of tailings to extract residual uranium and other mineral values where practicable, in order to stabilize and control such tailings in a safe and environmentally sound manner and to minimize or eliminate radiation health hazards to the public, and
- (2) a program to regulate mill tailings during uranium or thorium ore processing at active mill operations and after termination of such operations in order to stabilize and control such tailings in a safe and environmentally sound manner and to minimize or eliminate radiation health hazards to the public.²⁹

Since no additional authority was needed by DOE to address the FUSRAP sites, they were not included among the processing sites enumerated in section 102 of the Act and thus not included within the scope of UMTRCA.

Title II, addressing the second purpose of the Act, is consistent with this prospective authority of the Commission to adequately condition the licenses of all existing and future uranium milling licenses. New section 83 described the new conditions that are to be part of any license in existence on the date of enactment or of any license issued after the date of enactment.

While new section 84 appears to sweep broadly beyond those current and future licensees described in section 83 to authorize management of any of the newly defined byproduct material, the language, properly understood in the context of the complementary programs authorized by Title I and Title II for inactive and active sites respectively, simply authorizes the NRC to implement and enforce the standards to be promulgated by EPA at those sites it licenses as well as at the sites to be remediated by DOE under Title I.³⁰

²⁸ 124 Cong. Rec. S18,748 (Oct. 13, 1978).

²⁹ UMTRCA § 2, Pub. L. No. 95-604, 92 Stat. 3021.

³⁰ UMTRCA § 104(f)(2), 92 Stat. 3027.

The section-by-section analysis for section 205 in the House Report on the bill confirms that

Section 205 authorizes the Commission to promulgate, implement and enforce regulations governing permanent Federal custody of uranium mill tailings disposal sites and governing the activities of the Department of Energy under Title I of the act.³¹

It would be inconsistent for Congress, while acknowledging as a reason Title I was needed to authorize remediation of inactive sites that the regulatory staff had no further role at the inactive site where milling operations had ceased, to then reinstate a regulatory role over a group of inactive sites knowingly excluded from Title I by language in Title II. If a broad regulatory role at inactive sites were reinstated by section 84 beyond that contemplated over Title I sites by sections 104 and 84b, Title I presumably would have been structured differently to give greater prominence to a reinstated regulatory basis for those remedial actions.

In sum, consistent with congressional intentions, the two titles of UMTRCA are best understood as companion titles to address two distinct categories of mill tailings. As stated in House Report I:

This remedial program will affect 26 million of the 140 million tons of tailings now located at various mill sites. The committee, however, is also convinced that it would be a generous and costly mistake to authorize a remedial program for *inactive* mill sites without also enacting regulatory legislation to control the even more serious problem at *active* mill sites. This portion of the bill will control about 120 million tons of the tailings at *active* operations (emphasis added).³²

This structure of UMTRCA and the legislative history demonstrate that Congress did not intend to provide the NRC with jurisdiction over FUSRAP material. Additionally, the legislation that transferred FUSRAP from DOE to the Corps indicates the Congress did not intend for the NRC to regulate remediation of FUSRAP sites.

As part of the nation's early atomic energy program, the Manhattan Engineering District and the Atomic Energy Commission performed work during the 1940s through the 1960s at a number of sites throughout the United States. The radiological contaminants at these sites involved primarily low levels of uranium, thorium, and radium, with their associated decay products. Congress appropriated funds to DOE, which began FUSRAP in 1974 to study these sites and take appropriate remedial action. DOE managed the program under its AEA authority. The AEA provided that the NRC did not regulate these sites or have any oversight role as to their remediation. On October 13, 1997, Congress passed the Fiscal

³¹ H.R. Rep. No. 95-1480 (II), at 45.

³² H.R. Rep. No. 95-1480 (I), at 29.

Year 1998 Energy and Water Development Appropriations Act, which transferred administration of FUSRAP to the Corps and appropriated funds to the Corps for the completion of FUSRAP activities. Pursuant to a provision of the Fiscal Year 1999 Energy and Water Development Appropriations Act, the Corps is executing FUSRAP in accordance with CERCLA. Under CERCLA, the federal lead agency is exempt from licensing and permitting regulations for work done onsite, but not from the substantive requirements of any applicable or relevant and appropriate regulations.

The legislative history of the Fiscal Year 2000 appropriations for the FUSRAP program lends additional support to the conclusion that the NRC does not have jurisdiction to regulate the disposal of FUSRAP material. In the committee report on the FY 2000 appropriations bill, the House Committee states:

In the Energy and Water Development Appropriations Act for FY 1999, Public Law 105-245, Congress directed that the response actions by the Corps of Engineers under FUSRAP shall be subject to the administrative, procedural, and regulatory provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan. In appropriating funds to the Corps of Engineers for the cleanup of contaminated sites under FUSRAP, the Committee does not intend that licensing of the Corps by the U.S. Nuclear Regulatory Commission shall be required for the implementation by the Corps of the responsibility for the cleanup of contaminated sites under FUSRAP.³³

This history suggests that Congress considered NRC authority over FUSRAP remediation and disposal, and instead chose to place health and safety regulation of the FUSRAP material under CERCLA and the NCP.

C. Prior Statements and NRC Regulations

I recognize that, in the 20 years since the enactment of UMTRCA, the NRC has sometimes taken ambiguous positions regarding what materials fall under its jurisdiction under UMTRCA. However, over the last few years, the NRC has repeatedly articulated the position that it lacks jurisdiction over disposal of tailings from FUSRAP sites. The NRC has consistently told Envirocare, the Corps, the Utah Department of Environmental Quality, and Congress that UMTRCA does not provide the NRC with the statutory authority to regulate the disposal of tailings not created by activities licensed by the NRC in 1978 or thereafter.³⁴ I

³³ H. Rep. No. 106-253, at 77.

³⁴ See Letter from Robert Fonner, Special Counsel for Fuel Cycle and Safeguards Regulation, NRC, to Ann Wright, U.S. Army Corps of Engineers, dated March 2, 1998; Letter from Shirley Ann Jackson, Chairman, NRC, to Charles Judd, Envirocare, dated March 26, 1999. Additionally, over the past few years, the NRC has testified before Congress and provided written testimony and responses to congressional inquiries on this subject numerous times.

will discuss, briefly, two prior NRC statements and actions that NMA and the Petitioners claim contradict the NRC's current view.

In its comments submitted on the petitions, the NMA quotes from a 1992 request for comments on revised guidance related to the regulation of mill tailings, in which it claims that the NRC states that FUSRAP material is section 11e(2) byproduct material. In that notice, the NRC indicated that:

Government contracts were issued for thorium source material used in the Manhattan Engineering District and early Atomic Energy Commission programs. Wastes resulting from that processing and disposed of at these [FUSRAP] sites would qualify as 11e.(2) byproduct material.³⁵

However, a different excerpt from the same guidance refers to FUSRAP material as non-11e(2) material. The discussion of the FUSRAP wastes cited above falls under section 4 of the notice entitled "Types of Wastes Being Proposed for Disposal in Tailings Piles." The introductory paragraph states:

The NRC and the Agreement States continue to receive requests for the direct disposal of non-11e.(2) byproduct material into uranium mill tailings piles. *The following general categories of non-11e.*(2) *byproduct material* illustrates the requests submitted to NRC and the Agreement States for disposal into uranium mill tailings piles licensed under authority established by title II of UMTRCA ³⁶

FUSRAP is one of four general categories that follow the introductory paragraph. Elsewhere, the notice indicates that "the term 'non-11e.(2) byproduct material" will be used to refer to radioactive waste that is similar to byproduct material, as defined in the AEA in section 11e.(2) but is not legally considered to be 11e.(2) byproduct material." Tailings from FUSRAP sites meet the definition of non-11e(2) byproduct material provided by the above guidance, since it is similar to byproduct material, but falls outside of the NRC's jurisdiction under the AEA and UMTRCA. Since the guidance refers to FUSRAP material as both non-11e(2) material and 11e(2) material, the guidance does not provide any assistance in determining the appropriate status of FUSRAP material.

The NMA also claims that DOE's apparent view that FUSRAP materials include section 11e(2) byproduct material is entitled to deference. The NMA bases this argument on the DOE's authority under UMTRCA section 101(7) to determine what materials constitute "residual radioactive materials" subject to regulation under Title I and DOE's role as the permanent custodian of decommissioning section 11e(2) byproduct material disposal sites. This argument

^{35 57} Fed. Reg. 20,525, 20,527 (May 13, 1992).

³⁶ *Id.* (emphasis added).

³⁷ *Id.* at 20,526.

is faulty for three reasons. First, as NMA points out, DOE's determination extends to what constitutes residual radioactive material subject to its own jurisdiction under Title I. Section 11e(2) material may fall under DOE's Title I authority; this does not, however, automatically mean that all material radiologically similar to section 11e(2) byproduct material falls within the NRC's Title II authority. Second, the NMA fails to explain why DOE should be given deference over the determination of a sister agency's jurisdiction. The only agency that should be given deference in its determination of whether the NRC has regulatory authority over FUSRAP material is the NRC itself. Finally, although some of the material the Secretary could designate as "residual radioactive material" would likely fall within the definition of byproduct material, that term is not used in defining residual radioactive material. Congress distinguished between the "residual radioactive material" subject to DOE authority under Title I of UMTRCA, and "section 11e(2) byproduct material" subject to NRC authority under Title II of UMTRCA, even though some of the residual radioactive material is physically and chemically identical to section 11e(2) byproduct material.

The Petitioners argue that the NRC is contradicting its own regulations by refusing to require a license for disposal of FUSRAP mill tailings materials. According to the Petitioners, 10 C.F.R. § 40.2a provides the NRC with the authority to regulate all mill tailings material, including FUSRAP material. Section 40.2a states:

- (a) Prior to the completion of the remedial action, the Commission will not require a license pursuant to 10 CFR chapter I for possession of residual radioactive materials as defined in this part that are located at a site where milling operations are no longer active, if the site is covered by the remedial action program of Title I of the Uranium Mill Tailings Radiation Control Act of 1978, as amended. The Commission will exert its regulatory role in remedial actions primarily through concurrence and consultation in the execution of the remedial action pursuant to Title I of the Uranium Mill Tailings Radiation Control Act of 1978, as amended. After remedial actions are completed, the Commission will license the long-term care of sites, where residual radioactive materials are disposed, under the requirements set out in § 40.27.
- (b) The Commission will regulate byproduct material as defined in this part that is located at a site where milling operations are no longer active, if such site is not covered by the remedial action program of Title I of the Uranium Mill Tailings Radiation Control Act of 1978. The criteria in appendix A of this part will be applied to such sites.³⁸

The Petitioners claim that this regulation is inconsistent with the position that the NRC lacks jurisdiction over FUSRAP material, since the regulation does not contain an exemption for FUSRAP material. We disagree and believe that the regulation's scope is appropriate in light of the licensed sites that were covered by Title II of UMTRCA.

³⁸ See 45 Fed. Reg. 65,521 (Oct. 3, 1980), as amended at 55 Fed. Reg. 45,598 (Oct. 30, 1990).

While the regulations do not specifically address the issue, the legislative history of UMTRCA makes it clear that the scope of 10 C.F.R. § 40.2a is necessary to implement that part of section 83a of the AEA, which applies to licenses in effect, but not issued or renewed, after the effective date of section 83a. This part of the statute and the implementing regulation ensure that sites that continue to hold an NRC license, but which have ceased engaging in milling operations, meet the decommissioning and decontamination standards required by section 83. UMTRCA's legislative history demonstrates that at least one such site, if not more, existed. In his testimony before a Senate subcommittee, Dr. Livermore indicated that, although DOE had studied an inactive site at Edgemont, South Dakota, DOE excluded this site from its list of Title I sites because the site remained under license by the NRC.39 The status of the Edgemont site was further addressed in section 21 of NRC's appropriations legislation for fiscal years 1982 and 1983. The Conference Report for the legislation explained that "[a]lthough the Edgemont site is an inactive uranium mill site, it was not included in the remedial action program established by [UMTRCA] because TVA [the Tennessee Valley Authority] held a current license from NRC for the mill."40

By adopting this regulation, the NRC ensured that all classes of sites that contained tailings would be covered by either the NRC's authority under UMTRCA, or DOE's authority under UMTRCA and FUSRAP (later, the Corps' authority under FUSRAP). First, inactive, Title I sites could be remediated by DOE under its UMTRCA authority. Second, active and future licensees of mill tailings sites could be regulated by the NRC under its UMTRCA Title II powers. Third, FUSRAP sites could be remediated by DOE (and later by the Corps of Engineers). Section 40.2a is intended to address another type of site: the inactive, but still licensed, site.

D. Regulation of FUSRAP Mill Tailings at an NRC-Licensed Site

Envirocare argues that, under the NRC's interpretation of UMTRCA, the NRC would lack the authority to regulate FUSRAP mill tailings material disposed of at an NRC-licensed site. This argument is misguided. Tailings produced in an activity not licensed by the NRC in 1978 or thereafter may nevertheless be subject to NRC regulatory authority under certain limited conditions. If the tailings are sent to a licensed milling facility where they are processed primarily

³⁹ See Uranium Mill Site Restoration Act and Residual Radioactive Materials Act: Hearings on S. 3008, S. 3078, and S. 3253 Before the Subcomm. on Energy Production and Supply of the Senate Comm. on Energy and Natural Resources, 95th Cong. 43 (1978). Additionally, the State of New Mexico submitted testimony to the Senate committee in which it identified four inactive sites which were then under New Mexico Agreement State license, but which were excluded from the list of Title I sites. Id. at 115. While two licensed New Mexico sites were eventually included in the Title I program, it appears that the other licensed, inactive sites were covered under the regulatory program created by Title II.

⁴⁰H. Rep. No. 97-884, at 49 (1982).

for the extraction of their source material content, such processing would convert the tailings into material that is under NRC jurisdiction, because it is serving as source material. If the tailings are sent to an NRC licensee for direct disposal without processing, the tailings themselves would not be under NRC jurisdiction at the time of the transfer. The mere transfer of tailings not produced in an activity licensed by the NRC in 1978 or thereafter cannot convert the tailings into section 11e(2) byproduct material over which the NRC has direct authority. However, if the tailings are sent to an NRC-licensed disposal facility, the NRC would have jurisdiction over the licensee and the licensed disposal activities and site. In such a case, the NRC would have authority to ensure that the licensee complies with all license requirements and that the proposed disposal of material not under NRC jurisdiction will not undermine or adversely affect the safety of the disposal site. Under these circumstances, the NRC is regulating the *site*, not the individual materials disposed of at the site.

NRC licensees seeking to dispose of non-11e(2) material in an NRC-licensed disposal facility should follow the guidance set forth in "Uranium Mill Facilities, Notice of Two Guidance Documents: Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments; Final Position and Guidance on the Use of Uranium Mill Feed Materials Other than Natural Ores." The Commission modified this guidance July 26, 2000, in a Staff Requirements Memorandum (SRM). Under the modified guidance, an NRC licensee may accept non-11e(2) material in a mill tailings impoundment if it meets the following criteria: (1) there is adequate protection of the public health and safety and environment; (2) the long-term custodian of the site has indicated its willingness to accept responsibility for maintenance of the site prior to NRC approval of the disposal; and (3) necessary approvals of other affected regulators (e.g., States, EPA) have been obtained.

Finally, Envirocare points to UMTRCA section 101(6) as evidence that Congress did not exclude FUSRAP sites from UMTRCA. Section 101(6) defines the term "processing site," and specifically identifies certain types of sites that are excluded from coverage under Title I of UMTRCA. Envirocare correctly notes that FUSRAP sites are not listed as a specific exclusion. However, Envirocare fails to recognize the logical reason for the FUSRAP sites not appearing as an exclusion in this section: some FUSRAP sites may have qualified for designation by DOE as a Title I site pursuant to UMTRCA section 102(a)(1). Congress left DOE a window of opportunity to designate these sites under Title I, but DOE opted not to include any FUSRAP sites in its Title I remediation activities. The section 101(6) exclusions are limited to Title I of UMTRCA, and have no impact upon the NRC's Title II regulatory authority. As noted above, the NRC lacks

⁴¹ 60 Fed. Reg. 49,296 (Sept. 22, 1995).

authority under Title II to regulate tailings from FUSRAP sites because those sites did not have an active license at the time or after the enactment of UMTRCA. Since the FUSRAP sites fall under neither Title I nor Title II, the NRC has no authority to require the Corps to dispose of tailings from those sites at an NRC-licensed facility.

E. Preemption

Petitioner Envirocare argues that States lack the authority to regulate the disposal of mill tailings because Congress preempted the field of mill tailings when it enacted UMTRCA. An analysis of federal preemption in the field of radioactive materials reveals that the Petitioner's assertion is incorrect.

State law may be preempted by Congress in three ways. First, Congress may explicitly state in legislation that federal authority over a particular subject is exclusive. Second, courts may infer federal preemption from the language of a statute, its legislative history, or the objects of its federal regulatory scheme. Finally, state law will be preempted if it is impossible to comply with both the state law and the federal law.⁴²

In drafting UMTRCA, Congress did not explicitly state that the NRC or any other federal agency would have exclusive control over all tailings. Instead, the Commission's new regulatory authority under UMTRCA only extends to tailings produced or possessed by a person licensed by the NRC as of the effective date of UMTRCA or thereafter. Additionally, neither the language of the statute nor the legislative history of UMTRCA suggests that states would lack the authority to regulate tailings not covered by either Title I or Title II of UMTRCA. Finally, any state law regulating the disposal of FUSRAP material would not be inconsistent with federal law, because the AEA as amended by UMTRCA and the NRC's regulations do not address disposal of FUSRAP material.

The Corps argues in its response that preemption by the NRC in the field of radioactive materials is limited to those materials over which the NRC has regulatory authority. This argument has support in federal case law. In *Illinois v. Kerr-McGee Chemical Corp.*, ⁴³ the Court of Appeals stated that "the Commission has exclusive authority to regulate radiation hazards associated with the materials and activities *covered by the Atomic Energy Act*" ⁴⁴ As noted above, we believe the legislative history makes it clear that the ore processing residuals from FUSRAP sites are not covered by the AEA. Therefore, the NRC does not

⁴²See Silkwood v. Kerr-McGee Corp., 464 U.S. 238 (1984); Pacific Gas and Electric Co. v. State Energy Resources Conservation and Development Commission, 461 U.S. 190 (1983).

⁴³ 677 F.2d 571 (7th Cir.), cert. denied, 459 U.S. 1049 (1982).

⁴⁴677 F.2d at 581 (emphasis added).

have exclusive authority to regulate the radiation hazards posed by the disposal of FUSRAP ore processing residuals.

In discussing the NRC's authority to regulate radiation hazards, the Court of Appeals in *Kerr-McGee* determined that Congress did not "intend to create a situation in which some hazards could go unremedied. Congress's concern was to avoid dual regulation of radiation hazards. We can find no expression of a congressional intent to leave certain hazards beyond the scope of any control whatsoever." Based on this conclusion, the Court held that, if the NRC lacked jurisdiction over the material at the Kerr-McGee site, then the city of West Chicago was not preempted from applying city laws to the site. The same principle applies to FUSRAP sites and materials. Since the NRC lacks jurisdiction over the disposal of FUSRAP mill tailings material that were not licensed in 1978 or thereafter, there is no bar of federal preemption under the AEA with respect to this material and nothing in the AEA prohibits the states from regulating the disposal of FUSRAP mill tailings material.

F. Health and Safety Issues

Tailings that were produced in activities under NRC license at the time of the enactment of the UMTRCA in 1978, or that were licensed thereafter, fall under Title II of UMTRCA. Under Title II, if a license for the activity was issued or in effect in 1978 or thereafter, cleanup of the site is regulated by NRC. Tailings produced in activities not under an NRC license at the time of enactment of UMTRCA, or thereafter, are not regulated by NRC because the agency has concluded that its authority does not extend to such material. For these reasons, the NRC does not require the Corps to dispose of this material at NRC-licensed facilities. The Corps has used hazardous waste facilities permitted under RCRA for the disposal of ore processing residuals from FUSRAP sites. According to the Corps, the use of RCRA Subtitle C facilities in the FUSRAP program for disposal of certain kinds of radioactive wastes fosters competition, avoids capacity limitations, and minimizes schedule delays.

The Petitioners argue that NRC's current interpretation of UMTRCA results in significant and unjustifiable health and safety risks by leaving large quantities of radioactive material unregulated. The NRC is not aware of any significant public health and safety concern with the Corps' disposition of the mill tailings from the FUSRAP sites. We recognize that, for the purposes of radiological protection, mill tailings not licensed on the effective date of UMTRCA have the same radiological characteristics as mill tailings at licensed sites. However, in regulation of radioactive material across the nation at the state and federal

⁴⁵ *Id.* at 583.

level, it is not unusual for similar materials to be regulated differently. This is the result of the sometimes fragmented statutory regime governing radioactive materials. As noted above, we believe that Congress has clearly indicated, through appropriations legislation and the history of that legislation, that the Corps has authority for remediation of FUSRAP sites pursuant to CERCLA in a manner that protects the public health and safety.

There are many types of radioactive wastes that are similar to mill tailings because of their radioactivity levels, and the presence of long-lived radionuclides such as uranium, thorium, and radium. Some of these include naturally occurring and accelerator-produced radioactive material (NORM and NARM), exempt source material, technologically enhanced naturally occurring radioactive material (TENORM), and low-level waste. These similar materials with comparable hazards may or may not be regulated, and, if regulated, may be regulated by other agencies or the states under programs that require disposal in specific kinds of facilities.

Low-level waste (LLW), NARM, TENORM, and mill tailings are characterized by wide ranges of radioactivity, from background or near background soil levels to levels that are 100 million times more concentrated than soil. TENORM is material whose radioactivity has been enhanced (i.e., increased or concentrated) as a result of human intervention. It includes coal ash from coal-fired power plants, uranium mining overburden, phosphate ore, pipe scale from oil and gas production, and water treatment sludge. In addition, the mineral extraction industry produces large volumes of TENORM with some of the characteristics of uranium mill tailings, including processing chemical residues. The EPA reports that TENORM volumes produced annually in the U.S. may be in excess of one billion tons. By comparison, the annual amount of LLW produced for disposal under the Low-Level Radioactive Waste Policy Amendments Act of 1985 is approximately 60,000 tons, or one ten-thousandth as much as TENORM. If uranium mill tailings were not defined as section 11e(2) byproduct material by the AEA, they would be considered to be TENORM.

The range in radioactivity found in mill tailings, LLW, exempt source material, and TENORM has significant overlap. These four groups of wastes are also similar in that they contain or may contain (in the case of LLW) the long-lived isotopes of uranium, thorium, and/or radium. Thus, from a risk perspective, LLW, exempt source material, TENORM, and mill tailings are similar in that each contains very long-lived radionuclides, often in the same range of concentrations. However, from a legal perspective, they are regulated differently.

Different laws and programs that apply to these different materials affect how they are regulated, even though they may pose a similar risk. A number of laws apply or may apply to such materials and to other forms of TENORM, including the Clean Air Act, Clean Water Act, Safe Drinking Water Act, CERCLA, and Toxic Substances Control Act. None of these acts provide EPA with explicit

authority over TENORM, but EPA is working to establish standards for TENORM under these statutes.

In the absence of more definitive EPA regulations, most States have adopted their own regulations for TENORM. In practice, TENORM waste that is disposed of (as opposed to remaining in place at the site of generation or stored) may be placed in an RCRA Subtitle D landfill, a Subtitle C hazardous waste facility, or an NRC- or Agreement State-licensed LLW facility, depending on the State and the hazard of the TENORM.

Because FUSRAP mill tailings material is outside the regulatory authority of the NRC, the Corps has additional options for disposal of this material, instead of just placing it in an NRC-licensed tailings impoundment or disposal facility. As with TENORM, the Corps has allowed some FUSRAP material to be disposed of in RCRA hazardous waste landfills. FUSRAP material also has been disposed of in an NRC-licensed section 11e(2) disposal facility (Envirocare). The Corps has indicated that none of this material has been disposed of in a Subtitle D landfill.

Mill tailings produced under an NRC license are required to be disposed of in special impoundments that meet detailed requirements. The NRC requirements are based on the EPA standards for mill tailings, which, in turn, are based on the EPA hazardous waste standards applicable to RCRA disposal cells. State-ofthe-art mill tailings impoundments, like RCRA hazardous waste disposal cells, rely, in part, on a system of liners and leachate detection and collection systems to prevent releases of hazardous and radioactive materials to the environment, monitoring, inspection, site selection, and other detailed requirements. Because mill tailings impoundments and hazardous waste cells are based in large part on the same EPA requirements, the NRC believes that both RCRA disposal cells and NRC-licensed disposal facilities are fully protective of the public health and safety. It should be noted that NRC mill tailings regulations include requirements not found in EPA's RCRA regulations, such as eventual government ownership of the tailings piles, and designs that provide for long-term (1000 years, to the extent practicable, but in no case less than 200 years) stability. EPA's regulations, however, have requirements for enduring institutional controls that achieve a similar level of protection.

Practices at RCRA facilities vary depending upon the permit conditions for radioactive materials imposed by EPA or the State permitting agency, and the radioactivity of the waste for disposal. The Buttonwillow hazardous waste facility in California, for example, accepts TENORM that is less than 2000 picoCuries/gram in radioactivity concentration. The 2000 pCi/g threshold derives apparently in part from Department of Transportation regulations on shipment of radioactive material. Under those regulations, material with concentrations of radioactivity below 2000 pCi/g is not considered radioactive material for purposes of transportation. The Envirosafe facility in Idaho, which accepts NORM and FUSRAP waste, is subject to permit conditions that specify limits for uranium,

thorium, and other isotopes, and impose the same radioactivity concentration limit as specified for the Buttonwillow facility in California.

While the NRC does not have authority over pre-UMTRCA mill tailings from FUSRAP sites, we believe that the RCRA and state permitted facilities that the Corps is using for disposal of this material provide sufficient health and safety protection for both workers and the public.

IV. CONCLUSION

For the reasons stated above, the petitions of Envirocare and Snake River Alliance are denied. The NRC will continue to refrain from imposing disposal requirements for the mill tailings generated at FUSRAP sites because this material is outside of the agency's jurisdiction. However, if Congress determines that the disposal of such material warrants NRC oversight, the NRC stands ready to implement new legislative directives in that regard.

A copy of the Decision will be filed with the Secretary of the Commission for the Commission's review in accordance with 10 C.F.R. § 2.206(c). As provided for by that regulation, the Decision will constitute the final action of the Commission 25 days after the date of issuance of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

William F. Kane, Director Office of Nuclear Material Safety and Safeguards

Dated at Rockville, Maryland, this 13th day of December 2000.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr.

In the Matter of Docket Nos. 50-275-LT

50-323-LT

PACIFIC GAS AND ELECTRIC COMPANY (Diablo Canyon Nuclear Power Plant, Units 1 and 2)

August 1, 2002

MEMORANDUM AND ORDER

This proceeding arises from an application seeking the Commission's authorization for Pacific Gas and Electric Co. ("PG&E") to transfer its licenses for the Diablo Canyon Nuclear Power Plant, Units 1 and 2, to a newly established generating company. The license transfer application resulted from a comprehensive Plan of Reorganization which PG&E filed under Chapter 11 of the United States Bankruptcy Code. In a recent order, we described the reorganized corporate structure PG&E proposed and the nature of the five intervention petitions we received. We denied the petitions of the California Public Utilities Commission, the County of San Luis Obispo, and the Official Committee of Unsecured Creditors of PG&E, and we reserved ruling on the petitions of the Northern California Power Agency ("NCPA") and the following group: the Transmission Agency of Northern California; M-S-R Public Power Agency;

¹ See CLI-02-16, 55 NRC 317, 331-32 (2002).

Modesto Irrigation District; the California Cities of Santa Clara, Redding, and Palo Alto; and the Trinity Public Utility District (collectively, "TANC").²

The NCPA and TANC petitions raise antitrust concerns. The petitions are unusual because they do not challenge PG&E's license transfer application as such. Rather, they dispute the NRC Staff's notice that it may reject PG&E's suggested treatment of the antitrust conditions in its current licenses.³ The PG&E application proposes to continue these conditions in effect for PG&E itself and for a newly created transmission company, even though after the transfer these companies no longer would own or operate the Diablo Canyon plants or otherwise engage in activities requiring an NRC license. Consequently, we recently invited the Petitioners and the Applicant to submit briefs on the following question:

What is the Commission's authority under the Atomic Energy Act to approve the proposed license transfers and related license amendments where the current licensee (PG&E) as well as a company engaged solely in transmission activities would not, after the transfer, be engaged in activities at Diablo Canyon requiring a license, yet would remain or become named licensees on the Diablo Canyon licensees?⁴

During our review of the briefs the parties submitted, a fundamental issue of NRC authority has come to the Commission's attention. Specifically, the Diablo Canyon units were licensed under section 104b of the Atomic Energy Act ("AEA"),⁵ a licensing statute used in the early days of commercial power reactor development but containing no antitrust provisions. Section 105 of the AEA,⁶ enacted in 1970, granted the Commission certain antitrust powers and responsibilities for facilities licensed under section 103 of the Act.⁷ But PG&E holds no section 103 license for Diablo Canyon.

The Petitioners and the Applicant did not, in their earlier submissions, address the question whether the Commission has statutory authority to retain or impose antitrust conditions for commercial nuclear power plants licensed under section 104b. Accordingly, we now seek briefs from the Petitioners and the Applicant on this question. The briefs should not exceed twenty-five pages and should be filed by August 22, 2002.

 $^{^2}$ See id. at 332.

³ See 67 Fed. Reg. 2455, 2456 (Jan. 17, 2002).

⁴CLI-02-12, 55 NRC 267, 268 (2002).

⁵ 42 U.S.C. § 2134.

⁶⁴² U.S.C. § 2135.

⁷42 U.S.C. § 2133.

⁸ The California Public Utilities Commission and the County of San Luis Obispo may also file briefs. Earlier, we gave these entities participant status if we subsequently grant a hearing to another petitioner. *See* CLI-02-16, 55 NRC at 345, 349. In addition, we invite the Department of Justice to submit its views if it so chooses.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 1st day of August 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. Richard F. Cole
Dr. Charles N. Kelber

In the Matter of

Docket No. 50-423-LA-3 (ASLBP No. 00-771-01-LA-R) (Facility Operating License No. NPF-49)

DOMINION NUCLEAR CONNECTICUT, INC. (Millstone Power Station, Unit 3)

August 8, 2002

In a proceeding subject to the hybrid hearing procedures of 10 C.F.R. Part 2, Subpart K, involving expansion of the capacity of the spent fuel pool (SFP) of Millstone Unit 3, which had been reopened to explore the consequences of missing fuel rods at Millstone Unit 1, a reactor on the same site as Millstone-3, the Licensing Board issued a Memorandum and Order concluding: (1) that there are no significant factual disputes concerning administrative controls at the Millstone-3 SFP that would warrant a further evidentiary hearing on the missing fuel rods; (2) that although disputed issues of fact do exist concerning the reporting to NRC and the Licensing Board of the missing fuel rods, these are not the type of factual disputes that would warrant a hearing in this proceeding (but rather are the subject of an ongoing enforcement proceeding); (3) that the amended license authorizing the expanded SFP should remain in effect; and (4) that this proceeding should be terminated.

ATOMIC ENERGY ACT: REPORTING REQUIREMENTS

Formal requirements for licensees' reporting of information to the NRC appear in 10 C.F.R. § 20.2201 ("Reports of theft or loss of licensed material"). In addition, with respect to licensing boards, parties to an adjudicatory proceeding are expected to advise the adjudicator (licensing board) and all parties of "new information which is relevant and material to the matters being adjudicated." *Duke Power Co.* (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623, 625 (1973); *see also Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387, 1394 (1982).

RULES OF PRACTICE: HYBRID HEARING PROCEDURES

A dispute of fact concerning reporting of information to the Licensing Board is not the type of dispute that would warrant the evidentiary hearing contemplated under Subpart K, 10 C.F.R § 2.1113.

TECHNICAL ISSUES

The following technical issues are discussed: Administrative controls on SFP storage, Independent verification procedures for SFP fuel movements, Analysis of heavy-load drops.

APPEARANCES

- David A. Repka, Esq., Donald F. Ferraro, Esq., Charles Thebaud, Esq., Washington, D.C., and Lillian M. Cuoco, Esq., Berlin, Connecticut, for Dominion Nuclear Connecticut, Inc. (DNC), Licensee.
- Nancy Burton, Esq., Redding Ridge, Connecticut, for the Connecticut Coalition Against Millstone and the Long Island Coalition Against Millstone (CCAM/CAM), Intervenors.
- Ann P. Hodgdon, Esq., and Sara Brock, Esq., for the Nuclear Regulatory Commission Staff.

MEMORANDUM AND ORDER

(Denying Request for Evidentiary Hearing on Reopened Contention 4 and Terminating Proceeding)

This proceeding concerns the application by Dominion Nuclear Connecticut, Inc. (DNC or Licensee), to expand the capacity (through the use of additional high-density storage racks) of the spent fuel pool (SFP) at the Millstone Power Station, Unit 3 (Millstone-3), a pressurized water reactor located near New London, Connecticut. In response to the request of the Licensee, the proceeding is subject to the hybrid hearing procedures of 10 C.F.R. Part 2, Subpart K (10 C.F.R. §§ 2.1101-2.1117).

Based upon our review of the written presentations of each of the parties, and following an oral argument conducted in Mystic, Connecticut, on April 2, 2002 (Tr. 698-859), the Atomic Safety and Licensing Board, for the reasons set forth below, hereby concludes that there are no significant factual disputes that would warrant a further evidentiary hearing concerning the lack of accountability of certain missing spent fuel rods; that, although disputed issues of fact do exist concerning the reporting of the missing fuel rods to both NRC and this Board, these are not the type of factual disputes that would warrant a hearing here (but, rather, are the subject of an ongoing enforcement proceeding); that the amended license authorizing the SFP expansion at Millstone-3 should remain in effect; and that this proceeding should be terminated.

A. Procedural Background

On October 26, 2000, this Licensing Board, following an oral argument conducted on July 19-20, 2000, issued a Memorandum and Order that (1) adopted a license condition sought by Connecticut Citizens Against Millstone and Long Island Citizens Against Millstone (CCAM/CAM or Intervenors) (former Contention 5, concerning required concentrations of boron in the SFP); (2) denied CCAM/CAM's request for a full evidentiary hearing on other issues or contentions (including Contention 4); and (3) terminated the proceeding. *Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Unit 3), LBP-00-26, 52 NRC 181 (2000). CCAM/CAM appealed that Memorandum and Order. During the pendency of that appeal, it was reported to the NRC Staff by Northeast Nuclear Energy Co. (NNECO) (the then-licensee) that two fuel rods from Millstone Nuclear Power Plant, Unit 1 (Millstone-1), a reactor also operated by NNECO and then being decommissioned, could not be accounted for.

¹ Effective March 31, 2001, the ownership of Millstone-3 was transferred from Northeast Nuclear Energy Co. (NNECO) to Dominion Nuclear Connecticut, Inc. (DNC), the current operating licensee.

CCAM/CAM thereafter filed a motion to reopen the record and to vacate our decision on CCAM/CAM Contention 4.2 By such motion, CCAM/CAM sought to incorporate the issue of the missing fuel rods into our decision on CCAM/CAM Contention 4, which concerned whether or not the Licensee has the ability or willingness to carry out properly a program for the safe placement of fuel bundles (groups of fuel rods) in the SFP. By Memorandum and Order (Denying Motion To Reopen Record on Contention 4), LBP-01-1, 53 NRC 75 (2001), the Licensing Board initially denied the motion to reopen on the ground that the newly discovered information, as presented, would not likely have changed the result reached in LBP-00-26. (In particular, CCAM/CAM had failed to spell out the relationship of the new information concerning the Millstone-1 fuel rods to any of their previously admitted contentions.)

CCAM/CAM thereafter filed a motion for reconsideration of LBP-01-01.³ On May 10, 2001, the Licensing Board granted CCAM/CAM's motion and reopened the record with respect to CCAM/CAM Contention 4. LBP-01-17, 53 NRC 398 (2001). We defined the reopened issue as the extent to which the lack of accountability of the missing fuel rods at Millstone-1 bears upon both the adequacy of administrative controls at the Millstone-3 SFP and DNC's ability or willingness to implement such controls successfully. The scope of reconsideration was limited to the procedures or controls for management of the two SFPs and their modes of execution that may be common to Millstone-1 and Millstone-3. *Id.* at 408.

B. Technical Issues Presented

1. Presentations by the Parties

In support of its position on reopened Contention 4, and in accord with the requirements of 10 C.F.R. § 2.1113(a), DNC offered a written summary, together with the sworn testimony and exhibits of Hugh McKenney, a nuclear engineer serving as a supervisor responsible for the reactor engineering team at Millstone-3, Affidavit dated March 14, 2002 (McKenney Aff.); Daniel J. Meekhoff, Supervisor, Nuclear Operations Support for Millstone-3, Affidavit dated March, 2002 (Meekhoff Aff.); a DNC outside expert panel consisting of Robert V. Fairbank, Jr., Richard N. Swanson, and Hugh L. Thompson, Jr., Affidavits dated March 14, 7, and 14, 2002, respectively (DNC Panel Aff.); and Joseph J. Parillo, a DNC nuclear engineer serving as a Senior Engineer in the Reactor Analysis Section at Millstone, Affidavit dated March 13, 2002 (Parillo

² [CCAM/CAM] Motion To Reopen and To Vacate Decision, dated December 18, 2000.

³[CCAM/CAM] Motion for Reconsideration, dated January 29, 2001.

Aff.).⁴ Further, DNC's witnesses relied in part on (1) a report of an investigation undertaken by NNECO concerning the loss of the two fuel rods ([Millstone-1] Fuel Rod Accountability Project (FRAP Report)), approved by NNECO on October 1, 2001 (DNC Exh. 4); and (2) a Root Cause Analysis (RCA) of the FRAP Report, approved by NNECO on October 25, 2001 (DNC Exh. 5).

CCAM/CAM for its part presented written testimony which was supported by the declaration dated March 18, 2002, of Joseph H. Besade, a member of CCAM who also serves as its Secretary and formerly worked at the Millstone Power Station (Tr. 821) (Besade Decl.). Included with Mr. Besade's declaration was (1) NRC Inspection Report 05000245/2001013, dated February 26, 2002 (CCAM/CAM Exh. 1, transmitted by NRC to DNC by letter dated February 27, 2002); (2) a report by NRC's Office of Investigations, Case No. 1-2001-007, "Failure To Report Missing or Lost Radioactive Fuel Rods in a Timely Manner," dated September 28, 2001 (OI Report) (CCAM/CAM Exh. 2, previously transmitted to the Board and parties by the NRC Staff on October 31, 2001); (3) a copy of a newspaper article authored by Andrew Quinn, titled "Data Show World Awash in Stolen Nuclear Material," Reuters News Service, March 6, 2002 (CCAM/CAM Exh. 3); and (4) a copy of DNC Licensee Event Report (LER) 2001-007-00, "Movement of Heavy Loads not Addressed in Procedure," dated December 17, 2001 (CCAM/CAM Exh. 4).

The NRC Staff also presented written testimony, relying on affidavits and exhibits.⁶ The Staff offered the affidavits of Ronald R. Bellamy, Chief of the Decommissioning and Laboratory Branch, Division of Nuclear Materials Safety and Safeguards, NRC Region I, dated March 18, 2002 (Bellamy Aff.); Antone C. Cerne, Senior Resident Inspector (SRI) at Millstone-3, dated March 18, 2002 (Cerne Aff.), Anthony C. Attard, a Physicist/Engineer in the Reactor Systems Branch, NRC Office of Nuclear Reactor Regulation (NRR), dated March 19, 2002 (Attard Aff.); and Anthony P. Ulses, Nuclear Engineer, Safety Margins and Systems Assessment Branch, NRC Office of Research, dated March 18, 2002 (Ulses Aff.).

2. Location of Fuel Assemblies in SFP

In its initial form, as accepted by the Board, Contention 4 challenged the safety of the expanded SFP for allegedly trading reliance on physical separation of fuel assemblies (in the non-expanded SFP) for administrative controls "to an extent

⁴Summary of Facts, Data, and Arguments on Which [DNC] Will Rely at the Reopened Proceeding Subpart K Oral Argument, dated March 18, 2002.

⁵ [CCAM/CAM] Detailed Written Summary Pursuant to 10 C.F.R. Section 2.1113, dated March 18, 2002.

⁶NRC Staff Brief and Summary of Relevant Facts, Data and Arguments upon Which the Staff Proposes To Rely at Oral Argument on Contention 4 in the Reopened Proceeding, dated March 18, 2002.

that poses an undue and unnecessary risk of a criticality accident." LBP-00-2, 51 NRC 25, 34 (2000). This was said to be so in particular because of the then-licensee's past history of not being able (or willing) to abide by administrative controls with respect, *inter alia*, to spent fuel configuration. *Id.* In rejecting this claim in LBP-00-26, we acknowledged CCAM/CAM's demonstration that fuel misplacements can, and indeed do, occur in SFPs, but found that "[s]afety margins [relative to a criticality event] are maintained by the regulatory requirement that rack reactivity be less than [a limit ($K_{\rm eff}$) of] 0.95," LBP-00-26, 52 NRC at 200, and that, with respect to the numerous incidents of misplacements cited by CCAM/CAM, the 0.95 limit had not been breached. *Id.* at 197, 200.

The reopened Contention 4 reflects the Licensee's discovery in 2000 of its inability to account for two fuel rods at Millstone-1 (then in the process of being decommissioned) and its report of this circumstance to the NRC Staff following the date of our issuance of LBP-00-26. This proceeding was then reopened to explore whether there is any commonality between procedures involved in the Unit 1 event and the Unit 3 procedures supporting the revised Unit 3 SFP storage configuration, including reactivity limits authorized by the license amendment granting expansion of the SFP storage capacity.

3. Description of Event Circumstances

A brief description of the background of the missing fuel rods has been presented by DNC and is summarized here for clarity. *See* DNC Panel Aff. ¶¶ 15-16, 19, 22, 30-32. In September 1972, Millstone-1 condenser tubes failed and seawater leaked into the reactor coolant system. In October 1972, in order to evaluate the effects of the seawater on fuel, GE personnel disassembled fuel assembly MS-557 and stored all of its forty-nine fuel rods in seven specifically designed eight-rod containers. In April 1974, GE personnel reassembled MS-557 but did not include one of the eight tie rods (because it had been slightly damaged during handling) or the center spacer capture rod (which could not be reinstalled because of its unique physical characteristics). Neither GE records nor Unit 1 Reactor Engineering records mentioned the two rods at the time of the reassembly of MS-557 in April 1974.

In May 1979, the Unit 1 Reactor Engineer (RE) asked GE personnel to read the serial numbers of two fuel rods in an eight-rod container in the Unit 1 SFP. Using the information obtained, the RE and GE personnel concluded that the rods were the two rods previously removed from MS-557. The RE created a data card for the two rods in May 1979, and SFP maps dated February and April 1980 show the two fuel rods from MS-557 in the northwest corner of the SFP. A September 1980 SFP map does not, however, display the two MS-557 fuel rods. In late 1980, the Unit 1 RE who, with GE personnel, had identified the two rods in May 1979 left Millstone and another engineer assumed the RE's responsibilities. The two

REs did not recall having discussed the two rods during their turnover. No one interviewed had a clear recollection of actually seeing the two MS-557 fuel rods in the SFP after this turnover in late 1980.

As a hypothetical explanation of the fuel rods' disappearance, NNECO theorized that, because material other than fuel rods are present in an SFP, the rods in question may have been removed from the SFP in the belief that they were in fact those other materials, some of which resemble fuel rods when viewed under water, as is the case with the Local Power Range Monitors (LPRMs) discussed below.

To reduce radiation levels to which plant personnel are exposed, SFPs throughout the industry are used to store a variety of irradiated components in addition to spent fuel. Examples include inspection equipment, refueling tools, and irradiated hardware to be processed and shipped as radiological waste. The Millstone-1 SFP accumulated substantial irradiated hardware over time, requiring a number of cleanup campaigns beginning in the late 1970s and continuing through the 1990s.

LPRMs — reactor core instruments that require replacement as they are expended during plant operation — comprised a substantial portion of the irradiated hardware inventory in the Unit 1 SFP, particularly through the mid-1980s. They are approximately 43 feet in length and consist of a "hot" section and a "cold" section. The "hot" section consists of that portion located within the active region of the core and incorporating detectors (i.e., fission chambers containing small amounts of special nuclear material (SNM)).

The "cold" section is that portion outside the active region of the core. Disposal of LPRMs requires separation of the "hot" and "cold" segments, with the hot ends then cut into segments to fit into shielded casks for shipment to licensed low-level radioactive waste facilities. To minimize radiation doses to workers, the LPRM cutting operations are performed several feet under water using remote tools.

When separated from the associated "cold" section, LPRM "hot" sections were between 12 and $13 \, \text{H}_2$ feet in length and about 0.7 inch in diameter. The two Unit 1 fuel rods from MS-557 were about 13 feet 2 inches long and about H_2 inch in diameter. Radiation levels of the fuel rods and LPRM "hot" sections are both very high and could be mistaken for each other when subjected to radiation monitoring. Moreover, given their similar dimensions, the Unit 1 fuel rods and LPRM "hot" sections are difficult to tell apart visually when being handled under several feet of water.

In September and October 1979, contract workers with limited experience in identifying reactor components were hired to cut numerous LPRMs that were stored in the Unit 1 SFP. They did not use visual aids such as borescopes or periscopes to enhance component identification underwater. Nor were they advised to expect to find individual fuel rods stored outside the fuel racks in

close proximity to irradiated LPRMs. Their training, experience, equipment, supervision, and task assignment did not equip them to distinguish an LPRM "hot" section from a fuel rod several feet under water. Although the FRAP report did not find conclusive evidence that fuel rods were mistaken for LPRM "hot" sections, it concluded that the Unit 1 rods could have been inadvertently cut in 1979, as if they had been LPRMs.⁷

The analysis in the FRAP report (upon which DNC witnesses have relied, as noted above) was reviewed, and its adequacy confirmed, by the NRC Staff. As set forth by Ronald R. Bellamy, a branch chief from NRC Region I, and the manager responsible for NRC's special inspection conducted onsite to review the thoroughness and completeness of the NNECO FRAP investigation and the RCA, the NNECO investigation was "thorough and complete, and the conclusions were reasonable and supportable." Bellamy Aff. ¶ 5.

4. Administrative Controls at Millstone Units 1 and 3

The record reflects that the controls used in the Unit 3 SFP are clearly more complex and sophisticated than those previously used in the Unit 1 SFP. McKenney Aff. ¶¶9-11; Bellamy Aff. ¶7. For example, the Millstone-1 procedures had no expectation that fuel assemblies would ever be disassembled, so the SNM procedures at the time did not call for specific accountability over individual fuel rods. In contrast, at Millstone-3 the procedures have always called for individual fuel rods that have been permanently removed from their assembly to be tracked as an item of SNM. Further, at the Millstone-1 SFP there never was a clearly defined inventory of record serving as the basis for periodic surveys, whereas at the Millstone-3 SFP there has been an inventory of record. See McKenney Aff. ¶¶30, 49. We find no evidence to indicate that the Millstone-3 procedures are insufficient to serve their intended purpose. Indeed, insofar as we are aware, they were used successfully at Millstone-3 during refueling outage ("RFO") 7 in early 2001 (id. ¶¶12-15).

The central issue raised by CCAM/CAM's reopened Contention 4 is the reliability of human efforts in adhering to administrative controls. The loss or misplacement of fuel rods at Millstone Unit 1 reflects the potential for human error. When the administrative controls have no provision for independent checks or redundancy, a single error can, as the FRAP and RCA reports show, propagate over long periods of time. It is important, therefore, to note that the controls on fuel inventory at Millstone-3 provide for a redundant set of inventory data through a computer-generated record which echos the information maintained on

⁷ If this is, indeed, what happened, the fuel rods could have been included in the shipments to Barnwell in May 1988 as part of the effort to clean up the Unit 1 SFP, including the LPRMs, in advance of the 1989 reracking. See DNC Panel Aff. ¶ 19.

index cards (the Kardex file) (id. ¶ 20-22; Cerne Aff. ¶ 7, 10). Thus, the loss of information that occurred at Unit 1 is less likely to occur at Unit 3 because of the need to reconcile the computer-generated and "Kardex" data files. To be sure, the computer record is itself generated by human input and it is certainly conceivable that the same error could be entered in both records. That is, both records could be reconciled and both be wrong.

The main provision against such error, and the central reason for our assessment of the adequacy of current procedures, is the required independent verification of SFP fuel movements. That verification begins with the requirement that independent observers ascertain the serial number identifying each fuel assembly when it is ready to be moved. This serial number is assigned according to the standard ANSI/ANS-57.8-1978, "Fuel Assembly Identification" (McKenney Aff. ¶ 57). Independent observers verify the serial number and, subsequently, the placement, of the fuel assembly being moved (*id.* ¶ 41). This procedure has been satisfactorily implemented at Millstone-3, according to the NRC Senior Resident Inspector:

I inspected and supervised other NRC inspectors in the review and observation of Millstone Unit 3 refueling activities during the refueling outage in May–June 1999, and again during the last refueling outage in February–March 2001. During licensee preparations for the latter refueling activities, I reviewed the licensee's administrative controls and witnessed the transfer of a number of new fuel assemblies from their dry storage locations to the new Region 1 fuel racks in the spent fuel pool (SFP). Even though any new fuel assembly could have been stored in any designated (3 out of 4) new fuel storage rack location without adverse impact upon criticality margins, I observed the use of the licensee's administrative controls, including double verification, to assure the proper placement of each new fuel assembly into the rack location where it was designated to be placed. Likewise during both aforementioned refueling outages, I witnessed the movement of fuel assemblies in the spent fuel pool, verifying the adequate use of administrative controls and the required double verification of fuel assembly placement into the designated SFP rack locations. For special nuclear material accountability, I verified that such fuel assembly transfers were documented, as procedurally prescribed, on a ''Material Transfer Form.'' [Cerne Aff. ¶7.]

And,

[t]he entire body of administrative controls employed in the refueling operations that I have inspected contains both the procedural specificity and the redundancy necessary to preclude a single human error from presenting a challenge to nuclear safety at Millstone Unit 3. The administrative controls at Millstone Unit 3 also possess sufficient rigor and defense in depth that, when implemented by trained and properly supervised workers, criticality in the spent fuel pool will be precluded. [Id. ¶14.]

The independent verification procedure involves two observers viewing the same monitor, the second observer having to either concur or not with the first (Tr. 787). The Board inquired whether an automated inventory control, such as

the uniform bar code system commonly employed in the distribution of retail goods, could be used to supplement human observation. The answer is that bar codes are used in the manufacture of individual fuel pins, but that these codes get obscured by corrosion and crud deposition during operation (McKenney Aff. ¶55). The intense radiation environment might make use of a radio-frequency tag infeasible, though such tags are used in applications where some radiation is present.⁸

Further, the Board inquired whether the independent verification procedure should include at least one third-party independent observer (Tr. 790). In that connection, the Board noted that the procedure followed by DNC during RFO-7 (which the Staff found to be satisfactory, *see* Cerne Aff. ¶¶ 7, 13) was subject to verification by a Staff inspector. Neither DNC nor the Staff found such independent verification requirement to be necessary or useful. Tr. 791, 809.

As part of their written presentation, as well as at oral argument (Tr. 739-742), CCAM/CAM relied on a Licensee Event Report (LER) (designated number 2001-007-00)⁹ filed by NNECO (with respect to Millstone Unit 2) in December 2001, and reporting a development discovered in October 2001, as demonstrating NNECO's inability or unwillingness to abide by applicable programmatic procedures. The LER states, in pertinent part, that

(ABSTRACT) It has been identified that no safe load path exists for lifts of new fuel shipping containers . . . in the area of the cask washdown pit and the associated lifting device is not single failure proof. . . .

1. Event Description. [H]eavy loads have been historically moved at Millstone Unit No. 2 without appropriate procedural guidance Historically this issue has been addressed via the guidance provided in NUREG-0612, "Control of heavy loads at Nuclear Power Plants. . . . "

The [Millstone-2] Spent Fuel Pool Area . . . is addressed by procedure MP 2712B1, "Control of Heavy Loads." The procedure shows the Spent Fuel Pool as a restricted area for lifts, with a safe load path adjacent to the pool. Historically, loads such as new fuel, spent resin casks, and other items have been lifted from the railroad access bay . . . over a safety related pipe trench. Most recently, a spare reactor coolant pump [P] motor [MO] was lifted into the cask washdown pit. However, these loads have been lifted over the safety related pipe trench using a crane [CRN] that is not "single failure proof" as described in NUREG-0612."

2. Cause

The root cause for the failure to identify heavy load paths is *inadequate engineering work* practices in the Millstone engineering department in the area of programs [emphasis supplied].

During the oral presentation, DNC stated that the determination to file an LER reflected the discovery that the crane was not single-failure-proof, as required by the guidelines set forth in NUREG-0612. Those guidelines premised the

⁸ See further discussion, infra, in Section B.6.c of this Memorandum and Order.

⁹ See CCAM/CAM Presentation, Exh. 4.

single-failure-proof crane requirement on the likelihood of a cask drop into safety-sensitive areas, such as an SFP. NNECO had revised its earlier determination that the estimated frequency of a heavy-load drop in the area under consideration was of the order of 10^{-12} per reactor year (Tr. 773). A review of the NRC guidance document on the control of heavy loads, NUREG-0612, "Control of Heavy Loads at Power Plants," shows that the guidance in that document was based on a probabilistic risk analysis performed by the Staff. At the time of the writing of the report (1980), suitable data were sparse — the Staff relied for the most part on data retrieved from the U.S. Navy.

CCAM/CAM have, in our view, pointed to an acknowledged failure of NNECO management to have abided by governing programmatic standards affecting cranes. But, at most, that failure of NNECO appears to represent a technical violation, commencing long before the plants' shutdown and later restart in the period 1996-1998. NNECO and later DNC management have, however, taken voluntary steps to identify and correct the technical error. Thus, given the guidance (rather than binding regulatory) status of NUREG-0612, it would not have been unreasonable for a licensee to rely on plant-specific data for a plant-specific determination. Data used in the analysis of heavy-load drops are continually acquired and risk reassessments made. The latest such appraisal is dated April 4, 2001 (ADAMS Accession number ML011010385). This reassessment lowers the estimated frequency of load drops, perhaps to the point where a single-failure crane would not be required.

A revision of prescribed procedures by NNECO/DNC on the basis of a systematic review does not constitute support for the view espoused by CCAM/CAM that the Licensee is chronically unable or unwilling to follow administrative controls, notwithstanding its failure to do so in that particular instance. On the contrary, it may be regarded as an example of good practice by current management, fully consistent with proper implementation of administrative controls.

In sum, the procedures used at Millstone-3, implemented in the fashion described by the Senior Resident Inspector, are sufficient to preclude, with high reliability, an accidental criticality in the SFP. A further evidentiary hearing is not necessary for us to reach this conclusion.

5. Reporting of Missing Millstone-1 Fuel Rods to NRC and This Board

One of the issues raised before the Board in this reopened proceeding was whether NNECO had reported the missing fuel rods to NRC, as well as to this Board, in a timely fashion and, if not, should the failure be regarded as an example why DNC may lack the ability or willingness to administer the SFP controls adequately. *See* CCAM/CAM Presentation at 5-7. According to the Licensee, the circumstance that two fuel rods from Millstone-1 were apparently missing

was identified by NNECO through a visual inspection of the Millstone-1 SFP on or about September 12, 2000 (Meekhoff Aff. ¶17). After special inspections in mid-November 2000 failed to locate the rods in likely SFP locations, the issue was documented in an internal Condition Report. NRC was advised by telephone on November 16, 2000, and a formal call to the NRC Operations Center was made on December 14, 2000. *Id.* NNECO filed its LER concerning the missing fuel rods on January 11, 2001. *Id.* NNECO advised the Licensing Board of the missing fuel rods by a letter dated January 16, 2001, forwarding to the Board and parties a copy of the LER filed on January 11. Earlier, however, in December 2000, the Board and parties had become aware of the allegedly missing fuel rods through CCAM/CAM's filing of its motion to reopen the record.

Formal requirements for licensees' reporting of information to the NRC appear in 10 C.F.R. § 20.2201 ("Reports of theft or loss of licensed material"). For material of the type represented by the missing fuel rods, telephone notification of the loss or misplacement or theft must be made "[i]mmediately *after its occurrence becomes known* to the licensee." 10 C.F.R. § 20.2201(a)(i) (emphasis supplied). Licensees required to make the above telephone notification must make a written report (LER) to NRC within 30 days. 10 C.F.R. § 20.2201(b).

In addition, with respect to licensing boards, it has long been expected that, irrespective of the formal regulatory reporting requirements to NRC (described above), all parties to an adjudicatory proceeding are expected to advise the adjudicator (here this Licensing Board) and all parties of "new information which is relevant and material to the matters being adjudicated." *Duke Power Co.* (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623, 625 (1973); *see also Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387, 1394 (1982). Any uncertainty with regard to the relevancy and materiality of new information is to be decided by the adjudicator. *McGuire*, ALAB-143, 6 AEC at 625 n.15.

To determine the adequacy of the reporting of the missing fuel rods, both to NRC (under Part 20 reporting requirements) and to this Board (pursuant to the *McGuire* requirements), we must determine when NNECO had, or should have had, adequate knowledge of the loss or potential loss of the fuel rods to have engendered either reporting requirement. If NNECO had such knowledge by September 2000, a report to this Board prior to October 26, 2000 (the issuance date of LBP-00-26) should have been made. If such report had been tendered, it could very well have had an impact on the timing of our issuance of LBP-00-26.

DNC claims that NNECO had not yet determined in September 2000 that the two fuel rods were actually missing; the most they knew was that there was a records discrepancy that had to be investigated. Assuming adequate knowledge by NNECO, however, and given the pendency of reopened Contention 4, it appears that, during September or October 2000, the Board should at least have been alerted to the initiation of this investigation.

Currently, however, the record is insufficient for us to determine NNECO's degree of knowledge of the missing fuel rods. A further evidentiary hearing would likely be necessary for us to make a definitive determination on whether DNC should have advised the Board at an earlier date (in September or October 2000) of the investigation as to the location of the fuel rods. But is this the type of dispute of fact that would warrant the evidentiary hearing contemplated under 10 C.F.R. § 2.1113? We think not. As set forth in the rule itself (10 C.F.R. § 2.1115), as well as in the Statement of Considerations for Subpart K (50 Fed. Reg. 41,662, 41,667 (Oct. 15, 1985)), there must not only be specific facts that are in genuine and substantial dispute but the decision of the Commission, including this Board, must likely be dependent on the resolution of the dispute. In our view, the factual difference that would warrant an evidentiary hearing would have to relate to the technical sufficiency of the license-amendment proposal.

CCAM/CAM claim that the reporting or notification failure bears directly on the Licensee's ability or willingness to implement satisfactorily the administrative controls attendant to the SFP expansion. The Board instead views the alleged failure to file with it a timely report as the result of mere confusion as to what had occurred and an uncertainty about the need to confirm doubts as to whether there was any outstanding information that would warrant a litigation-related report. The information is peripheral at best to the Licensee's ability or willingness to carry out SFP administrative controls adequately. As such, it does not rise to the type of disputed fact that would cause us to authorize a full evidentiary hearing.

This is not to denigrate the importance of the alleged reporting delays by the Licensee to either this Board or the Staff. The delay in reporting to the Staff is currently the subject of a Notice of Violation and proposed enforcement remedies. *See* Notice of Violation and Proposed Imposition of Civil Penalty (NOV), EA No. 02-014, dated June 25, 2002. Although the obligation to report to this Board is separate and distinct from the obligation to report to the Staff, litigation of the facts before us would appear to be essentially duplicative of the determination presently under review by the Staff. Thus, clarification of the facts in dispute, as described above, may preferably be carried out in that context, rather than here. In our view, no separate penalty to be imposed by us would be warranted in the context of this case, particularly in view of the OI recommendation (CCAM/CAM Exh. 2) that the failure to report was not intentional. In the future, however, we

¹⁰ Given the ongoing civil penalty proceeding, we need not, and do not, discuss whether the alleged (DNC Panel Aff.) failure to advise the Licensing Board in a timely manner of the potentially missing fuel rods might constitute a material false statement by NNECO, within the meaning of § 186 of the Atomic Energy Act, 42 U.S.C. § 2236. Cf. Virginia Electric and Power Co. (North Anna Power Station, Units 1 and 2), LBP-75-54, 2 NRC 498, 532-34 (1975), aff'd on this issue, CLI-76-22, 4 NRC 480, 489-92 (1976).

¹¹ We are not aware of whether or not DNC has formally requested an enforcement hearing or, instead, has acceded to the remedies proposed by the Staff in its NOV.

would advise DNC in similar situations to report both to the Staff and to this Board.

6. Other Matters

During the course of the reopened proceeding, during telephone conference calls on May 24, 2001, and February 28, 2002, the Licensing Board posed several questions related to the proceeding. In their presentations, DNC and the Staff responded to these inquiries. These responses adequately dealt with the subject of the inquiries, as set forth below:

- a. The Board requested a description of Millstone-1 and Millstone-3 Technical Specifications and regulations governing SFP inventory and corresponding plant implementing procedures. DNC advised that there are no Technical Specifications for either unit that govern SFP inventory. Rather, the respective operating licenses are subject to the requirements of 10 C.F.R. Part 70, which requires licensees to establish procedures and records for SNM inventory controls. (DNC listed the key procedures for Millstone-3.) *See* McKenney Aff. ¶53.
- b. In response to a Board inquiry concerning computer-generated core and SFP inventories for Millstone-1 and Millstone-3, DNC reiterated its previously stated testimony to the effect that both units now use the Shuffleworks program. This program was adopted at the Millstone Station in the 1990s and did not exist at the time DNC asserts that accountability over the two Millstone-1 rods was lost. An illustrative Unit-1 SFP map was provided to the Board and parties as DNC Exh. 1; copies of illustrative maps for the Unit-3 core and SFP were provided as DNC Exhs. 2 and 3. *See* McKenney Aff. ¶54.
- c. In response to inquiries from the Board regarding industry practices in maintaining fuel inventory, and the possible utility of modern inventory control techniques such as uniform bar code markers, DNC explained why there was not any use in the nuclear industry of bar codes as a means to control SNM inventory. DNC described several types of identification numbers but explained why the use of any of them would likely be not feasible. *See* McKenney Aff. ¶¶ 52-58. From these responses, it appears that DNC is following standard industry practice in maintaining its inventory of fuel at Millstone-3. 12

¹² With respect to these practices, the Board encourages the NRC Staff to confer with industry representatives about possible use of Radio Frequency Tags as a means of fuel assembly identification, and whether such an automated inventory control system is technically and economically feasible. These tags (which have been developed by a number of organizations including DOE) offer the possibility of remote identification, allowing fuel assembly identification with greater efficiency and accuracy and less worker exposure than the current practice. The survival of such tags in an intense radiation environment is an obvious problem that must first be resolved.

We note that automated inventory procedures are hardly error free, as anyone who has been in a supermarket checkout line can attest. But, the point is that the errors are different from, and independent of, those that are made by humans.

- d. In response to how corrective actions resulting from the Unit-1 issue were addressed for Units 2 and 3, DNC stated that it reviewed and adopted the RCA Report (DNC Exh. 5). According to DNC, the RCA Report was treated as "an important self-assessment DNC document" under the Millstone Corrective Action Program. The Staff indicated that none of the corrective measures are specifically directed at Millstone-3 but that, to the extent the overall corrective action plan provides an enhancement to the programmatic station controls, future Unit-3 activities could be affected. The Staff adds that, with respect to Millstone-3, such measures would be regarded as improvements and not as required corrective actions. *See* Cerne Aff. ¶ 12.
- e. In response to an inquiry regarding the applicability to Millstone-3 of Regulatory Issue Summary (RIS) 2001-12, "Nonconservatism in Pressurized Water Reactor Spent Fuel Storage Pool Reactor Equivalency Calculations," dated May 18, 2001, and particularly the Oak Ridge National Laboratory (ORNL) report referenced therein, DNC advised that it had reviewed the ORNL report and evaluated it for applicability to Millstone-3, and documented such evaluation through the Millstone Corrective Action Program. DNC concluded that, of the two circumstances where the nonconservatisms mentioned in the report would be applicable, one ("geometric configurations") did not apply to Millstone-3, whereas the other ("soluble boron credit"), although applicable at Millstone-3, does not change the soluble boron concentration previously found to govern at Millstone-3. See Parillo Aff. ¶¶4-10. The Staff indicated that any errors introduced into the final Region-3 $K_{\rm eff}$ would be more than offset by various conservatisms in either the configuration analyzed or the actual plant configuration. See Ulses Aff. ¶ 5. The Board accepts these analyses.

C. Conclusion and Order

1. We commend CCAM/CAM for its persistence in bringing to light the Licensee's demonstrated lack of ability to account for the two fuel rods at the Millstone-1 facility. That deficiency, however, appears to us to be a product of unusual circumstances. Moreover, deficiencies in fuel-rod management at Millstone-1 have been taken into account with respect to the SFP at Millstone-3. Although the missing fuel rods have never been located, the Licensee has demonstrated, to the satisfaction of the NRC Staff, both that the rods are unlikely to cause a problem regarding the public health and safety, and that the current Millstone-3 program is adequate to ensure adequate implementation of the requirements for properly locating SFP fuel bundles. Further, as set forth above, DNC and the Staff have responded satisfactorily to the various other questions on related matters posed by the Board.

That being so, based on the foregoing discussion we conclude that, with respect to CCAM/CAM Reopened Contention 4, the Intervenors have not demonstrated

any significant factual disputes of a type that would warrant an evidentiary hearing under 10 C.F.R. § 2.1113. Thus, the amended license authorizing expansion of the SFP remains in effect and this proceeding is *terminated*.¹³

2. This Memorandum and Order is *effective immediately* and, absent appeal, will become the final order of the Commission forty (40) days after date of issuance. *See* 10 C.F.R. §§ 2.760, 2.764. As provided by 10 C.F.R. § 2.786(b), within fifteen (15) days after service of this Memorandum and Order, any party may file a petition for review with the Commission on the grounds specified in 10 C.F.R. § 2.786(b)(4). Any such petition must conform to the requirements set forth in 10 C.F.R. § 2.786(b)(2). Any other party, within ten (10) days after service of a petition for review, may file an answer supporting or opposing Commission review and conforming to requirements specified in 10 C.F.R. § 2.786(b)(3).

IT IS SO ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD

Charles Bechhoefer, Chairman ADMINISTRATIVE JUDGE

Dr. Richard F. Cole ADMINISTRATIVE JUDGE

Dr. Charles N. Kelber ADMINISTRATIVE JUDGE

Rockville, Maryland August 8, 2002

[Copies of this Memorandum and Order have been transmitted this date by e-mail to counsel for each of the parties.]

¹³ Our termination of this proceeding does not foreclose a remand from the Commission of proposed CCAM/CAM Contention 12, concerning potential effects of terrorist acts on the SFP. We rejected that contention but referred our ruling to the Commission because of outstanding policy questions concerning the litigability of that type of contention. LBP-02-5, 55 NRC 131 (2002). The Commission accepted our referral (CLI-02-5, 55 NRC 161 (2002)), provided a briefing schedule for the parties, but has not yet ruled in this and in other proceedings raising similar issues.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman Dr. Richard F. Cole Thomas D. Murphy

In the Matter of

Docket No. 30-35870-EA (ASLBP No. 02-800-01-EA) (EA 02-103)

UNITED EVALUATION SERVICES, INC. (Beachwood, New Jersey)

August 14, 2002

In this proceeding regarding a challenge by Licensee United Evaluation Services, Inc., to an NRC Staff immediately effective enforcement order suspending its byproduct materials license authorizing the possession and use of the material to conduct industrial radiography, the Licensing Board approves the parties' joint settlement agreement and terminates the case.

MEMORANDUM AND ORDER

(Approving Settlement Agreement and Terminating Proceeding)

Before the Licensing Board is an August 5, 2002 joint request by the NRC Staff and United Evaluation Services, Inc. (UES), to approve an agreement to settle this case and terminate this proceeding. Finding the settlement agreement consistent with the public interest, we approve their accord and terminate this cause.

At issue in this proceeding is the validity of a May 14, 2002 Staff order suspending, effective immediately, the 10 C.F.R. Parts 30 and 34 license held

by UES that authorizes the possession and use of certain byproduct material to conduct industrial radiography. *See* 67 Fed. Reg. 36,038 (May 22, 2002). In its order, the Staff asserted that an immediately effective suspension was necessary because of problems identified as a result of a September 25, 2001 event in Baltimore, Maryland, in which a UES radiographer was exposed to radiation in excess of regulatory limits. In response to this incident, the Staff initiated an investigation that resulted in the suspension of UES's NRC Byproduct Materials License No. 29-28385-02. The bases for the suspension included allegations of deficiencies in radiographer training and recordkeeping, use of a radiographic device without the required end cap, providing inaccurate information regarding the status and use of the radiographic equipment, and allowing an assistant radiographer to perform the duties of a radiographer even though UES management knew the assistant was not certified to perform such duties.

In a May 17, 2002 filing submitted by UES Radiation Safety Officer (RSO) Joseph J. Ferenc, in accordance with 10 C.F.R. § 2.202(b), (c)(2)(i), UES both requested a hearing to contest the Staff's May 2002 order and challenged the Staff's determination to make the license suspension immediately effective. After receiving a May 22, 2002 Staff filing opposing this challenge to its immediate effectiveness determination and a May 30, 2002 UES reply to this Staff opposition, on June 6, 2002, the Board conducted an oral argument to provide an opportunity for the parties to explain further their positions on UES's recission request and for the Board to obtain clarification regarding the information provided by the parties. See Tr. at 1-50. Thereafter, in a June 14, 2002 ruling, the Board denied the UES motion, concluding that the requisite "adequate evidence" existed for the Staff's charges and its immediate effectiveness determination. See LBP-02-13, 55 NRC 351 (2002).

As part of its June 14 decision, the Board also asked that by July 15, 2002, the parties provide a joint prehearing report outlining their views on the legal and factual issues involved in the case and a proposed schedule for dealing with those matters. Acting on the parties' July 15, 2002 joint request, by Board order issued July 16, 2002 (unpublished), this date was extended to August 5, 2002, to permit ongoing settlement negotiations to continue. On August 5, the parties submitted the joint motion now pending with the Board.

¹ Acknowledging that the activity in question occurred in Maryland, an Agreement State, the Staff nonetheless pursued the investigation because UES was utilizing equipment it was authorized to possess and use pursuant to its NRC license, which UES holds by reason of its location in the non-Agreement State of New Jersey.

² From the time of the first UES pleading, Mr. Ferenc, initially labeled as UES President and now identified as UES Vice President, has appeared on behalf of UES. Although advised that counsel could be retained to aid in this proceeding, *see* Tr. at 6, 45, UES has chosen not to do so.

Under the terms of the settlement agreement, UES is to properly transfer all licensed material and request termination of its NRC license within 30 business days of the Board's approval of the settlement agreement. Further, Mr. Ferenc has agreed, among other things, that (1) until May 14, 2003, he will not act in the capacity of a radiographer as defined in 10 C.F.R. Part 34; (2) for a period of 5 years from the date of Board approval of the settlement agreement, he will not manage or oversee NRC-licensed activities (i.e., activities that are conducted pursuant to a specific or general license issued by the NRC, including, but not limited to, those activities of Agreement State licensees conducted in areas of NRC jurisdiction pursuant to the authority granted by 10 C.F.R. § 150.20) or individuals while they are engaging in NRC-licensed activities, including performing the duties of an RSO; and (3) the UES hearing request is withdrawn.

Pursuant to section 81 and subsections (b) and (o) of section 161 of the Atomic Energy Act of 1954, 42 U.S.C. §§ 2111, 2201(b), (o), and 10 C.F.R. § 2.203, we have reviewed the parties' joint settlement accord to determine whether approval of the revised agreement and termination of this proceeding are in the public interest. Based on that review, and according due weight to the position of the Staff, we have concluded that both actions are consonant with the public interest. Accordingly, we grant the parties' joint motion to approve the settlement agreement and dismiss this proceeding.

For the foregoing reasons, it is, this fourteenth day of August 2002, ORDERED that:

1. The August 5, 2002 joint motion of the parties is *granted* and we *approve* their August 5, 2002 "Settlement Agreement," which is attached to and incorporated by reference in this Memorandum and Order.

2. This proceeding is dismissed.

THE ATOMIC SAFETY AND LICENSING BOARD³

G. Paul Bollwerk, III, Chairman ADMINISTRATIVE JUDGE

Dr. Richard F. Cole ADMINISTRATIVE JUDGE

Thomas D. Murphy ADMINISTRATIVE JUDGE

Rockville, Maryland August 14, 2002

 $^{^3}$ Copies of this Memorandum and Order are being sent this date by Internet e-mail transmission to Joseph J. Ferenc and Staff counsel.

ATTACHMENT 1

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

Docket No. 30-35870-EA (ASLBP No. 02-800-01-EA) (EA 02-103)

UNITED EVALUATION SERVICES, INC. (Beachwood, New Jersey)

August 5, 2002

SETTLEMENT AGREEMENT

On May 14, 2002, the Staff of the Nuclear Regulatory Commission (Staff) issued an Order Suspending License (Effective Immediately) and Demand for Information (Order) to United Evaluation Services, Inc. (Licensee). 67 Fed. Reg. 36,038. This Immediate Suspension Order was deemed necessary based upon NRC inspections and an NRC Office of Investigations investigation which indicated that inaccurate information was deliberately provided to the NRC and that there were numerous additional violations of NRC's safety requirements, some of which were also deliberate. Additionally, the inspections and investigation revealed that the Licensee's Radiation Safety Officer (RSO) did not ensure that NRC safety requirements were given the necessary priority. With such indications, the Staff could not ensure that the health and safety of the general public or of the Licensee's employees would be adequately protected without issuing the Immediately Effective Order. On May 17, 2002, pursuant to 10 C.F.R. § 2.202(c)(2)(i), the Licensee requested that the immediate effectiveness of the Order be set aside. Following an oral argument, on June 14, 2002, the Board denied the Licensee's request to set aside the immediate effectiveness of the Order.

The parties to the above-captioned proceeding, the Staff and Mr. Joseph J. Ferenc, as Vice President and RSO of United Evaluation Services, Inc. ("UES") have engaged in negotiation and agree that it is in the public interest to terminate this proceeding without further litigation and without reaching a conclusion on the merits of the Order, subject to approval of the Atomic Safety and Licensing Board.

NOW THEREFORE, IT IS STIPULATED AND AGREED AS FOLLOWS:

- 1. Mr. Ferenc agrees to withdraw UES's request for a hearing, dated May 17, 2002, and otherwise waive his right to a hearing in connection with this matter, both as a licensee and as an individual, and waive any right to contest or otherwise appeal this Settlement Agreement once approved by the Atomic Safety and Licensing Board ("the Board").
- 2. Mr. Ferenc agrees that he and UES have violated a number of Commission regulations, including those identified in the attached Notice of Violation (Attachment A).
- 3. Mr. Ferenc agrees that he will properly transfer all licensed material and request termination of Byproduct Materials License No. 29-28358-02 within thirty (30) business days of the Board's approval of this Settlement Agreement.
- 4. Mr. Ferenc agrees that he will not act in the capacity of radiographer as defined in 10 C.F.R. § 34.3 until, at the earliest, May 14, 2003 (one (1) year from the date of the May 14, 2002 NRC Staff's Immediately Effective Order Suspending License). Mr. Ferenc further agrees that he will not manage or oversee NRC-licensed activities or individuals while they are engaged in licensed activities, including (but not limited to) the duties of a Radiation Safety Officer, for five (5) years from the date the Board approves this Settlement Agreement, except that Mr. Ferenc may supervise an assistant radiographer when acting as a radiographer after the one-year period agreed to in the first sentence of this section. NRC-licensed activities are those that are conducted pursuant to a specific or general license issued by the NRC, including, but not limited to, those activities of Agreement State licensees conducted in areas of NRC jurisdiction pursuant to the authority granted by 10 C.F.R. § 150.20.
- 5. Mr. Ferenc agrees that for a period of one (1) year after the one-year period referenced in paragraph 4 has expired, within 20 days of acceptance of each employment offer involving radiographer duties, he will provide notice to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, of the name, address, and telephone number of the employer where he is, or will be, involved in NRC-licensed activities. In the first notification, Mr. Ferenc shall include a statement of his commitment to comply with regulatory requirements and the basis why the Commission should have confidence that he will comply with applicable requirements.
- 6. In consideration of Mr. Ferenc's agreement to the conditions of paragraphs 1 through 5, the Staff agrees that it will take no further enforcement action against UES or Mr. Ferenc based on (i) the facts outlined in the May 14, 2002 Order; (ii) the 2001 and 2002 NRC inspections of UES, or (iii) any other facts disclosed, assertions made, or conclusions reached as a result of the NRC's Office of Investigations' investigation, Case No. 1-002-031, relating to UES and/or Mr. Ferenc. In the event that either UES or Mr. Ferenc fails to comply with any term or condition set forth in paragraphs 1 through 5 above, the Staff expressly

reserves the right to take whatever action is necessary and appropriate to enforce the terms of this Settlement Agreement.

- 7. Mr. Ferenc acknowledges that he has had the opportunity to seek counsel and to discuss the terms of this agreement with counsel if he so chose.
- 8. The Staff and Mr. Ferenc understand and agree that this Settlement Agreement, and any releases under this Settlement Agreement, are limited to the parties to the above-captioned proceeding. This Settlement Agreement does not resolve matters, civil or criminal, currently pending, or which could be pending in the future, with the U.S. Department of Justice or with the States of Maryland or New York over any issue, including issues specifically made part of this Settlement Agreement.
- 9. Mr. Ferenc and the Staff (hereinafter collectively referred to as "the parties") agree to file a joint motion requesting the Board to approve this Settlement Agreement and terminate the proceeding, pursuant to the Commission's regulations in 10 C.F.R. § 2.203. If this Settlement Agreement is not approved or is changed in any substantive manner by the Board, this Settlement Agreement may be voided by any party giving written notice to the parties and the Board. The parties agree that under these circumstances and upon request they will negotiate in good faith to resolve differences.

IN WITNESS WHEREOF, Mr. Ferenc and the Staff have caused this Settlement Agreement to be executed by the parties or their duly authorized representatives on this 29th day of July, 2002.

Respectfully submitted,

Angela B. Coggins Counsel for NRC Staff

Joseph J. Ferenc Vice President, United Evaluation Services, Inc.

ATTACHMENT A

NOTICE OF VIOLATION

Accurate Technologies, Inc. United Evaluation Services, Inc. Tinton Falls, NJ Beachwood, NJ Docket Nos. 03031045 03035870 License Nos. 29-28358-01 29-28358-02

During an NRC inspection conducted on October 10, 11 and 16; November 8 and 29, 2001; May 6, 10, 13 and 15, 2002 violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy), NUREG-1600, the violations are listed below:

- 1. 34.43(a) requires, in part, that the licensee not permit any individual to act as a radiographer until the individual is certified through a radiographer certification program by a certifying entity in accordance with the criteria specified in appendix A of this part.
 - Contrary to the above, UES permitted an individual to act as a radiographer who had not been certified in accordance with the criteria in 10 C.F.R. Part 34. Specifically, on September 8, 2001, two individuals employed by the licensee performed radiographic operations at a temporary job site in Paulsboro, New Jersey, and neither individual was a certified radiographer.
- 2. 10 C.F.R. 34.31(a) requires that the licensee perform visual and operability checks on radiographic exposure devices before use on each day the equipment is to be used to ensure that the equipment is in good working condition, that the sources are adequately shielded, and that required labeling is present. If equipment problems are found, the equipment must be removed from service until repaired.
 - 10 C.F.R. 34.20(c)(3) states that the outlet fittings, lock box, and drive cable fittings on each radiographic exposure device must be equipped with safety plugs or covers which must be installed during storage and transportation to protect the source assembly from water, mud, sand or other foreign matter.

Contrary to the above, on September 25, 2001, and October 2, 2001, the licensee failed to perform adequate visual and operability checks on

radiographic exposure devices before use on each day the equipment was used to ensure that the equipment is in good working condition, and failed to remove the equipment from service when problems were found. Specifically, on September 25, 2001, the licensee determined that the model 660A radiography camera, serial number 4955, did not have its required end cap and the licensee did not remove the camera from service. The licensee used and transported the camera on September 25, 2001, and on October 2, 2001 without the required end cap, and the licensee did not remove it from service until October 10, 2001.

3. 10 C.F.R. 30.9(a) requires, in part, that information provided to the Commission by a licensee be complete and accurate in all material respects.

Contrary to the above, on October 8, 2001, and October 10, 2001, the licensee provided information to the Commission that was not complete and accurate in all material respects.

In a letter to the NRC, dated October 8, 2001, responding to a Confirmatory Action Letter, dated October 4, 2001, the licensee stated that inspection and maintenance was performed on all of the licensee's radiographic exposure equipment. That statement was not accurate because inspection and maintenance had not been performed on approximately 20 additional pieces of radiographic equipment that were available for use.

During an inspection at the licensee's facility on October 10, 2001, the Radiation Safety Officer informed the inspector that an end cap for one of the radiographic devices had been missing for three weeks prior to the inspection, but that the device had not been used during that time. This statement was inaccurate in that the device with the missing end cap had actually been used twice during the three week period.

This information was material to the NRC because it was used to determine whether the licensee's radiation safety program was operating effectively and whether the licensee was operating safely and in compliance with NRC requirements.

- 4. 10 C.F.R. 30.9(a) requires, in part, that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.
 - 10 C.F.R. 34.43(d) requires the licensee to provide annual refresher training for each radiographer and radiographer's assistant at intervals not to exceed 12 months. 10 C.F.R. 34.79(b) requires the licensee to maintain

records of annual refresher safety training for each radiographer and each radiographer's assistant for 3 years.

Condition 18 of License No. 29-28358-01 requires, in part, that licensed material be possessed and used in accordance with statements, representations and procedures contained in an application dated December 27, 1988. Item 8 of the application dated December 27, 1988 requires that all radiographic personnel shall have refresher training and examinations annually to their hire date, or date a radiographer's assistant became a radiographer.

Contrary to the above, the licensee did not maintain accurate records of annual refresher safety training for each radiographer. Specifically, the certification of training for one radiographer was not accurate because the certification indicated that the radiographer had received the annual refresher training, and had taken and passed an examination on the topics covered by the annual refresher training, when that radiographer had not received annual refresher training and had not taken the examination. Specifically, that radiographer last received annual refresher training on September 4, 2000, and was required to obtain the same training by September 4, 2001. In fact, the radiographer did not receive the required refresher training by September 4, 2001 nor had he taken the required test.

- 5. 10 C.F.R. 34.42 requires the RSO to ensure that radiation safety activities are being performed in accordance with approved procedures and regulatory requirements in the daily operation of the licensee's program.
 - Contrary to the above, the licensee's RSO failed to oversee all phases of the training program for radiographic personnel, ensure that radiography was performed only by properly certified and trained individuals, that radiographers received annual refresher training, that radiographic equipment was properly checked and maintained, that damaged radiographic equipment was removed from service until it was repaired, and that required records were accurate.
- 6. Condition 17 of License No. 29-28358-01 requires that the licensee transport licensed material in accordance with the provisions of 10 C.F.R. Part 71, "Packaging and Transportation of Radioactive Material."
 - 10 C.F.R. 71.5(a) requires that licensees who transport licensed material outside the confines of their plants or deliver licensed material to a carrier for transport comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 C.F.R. Part 170–189.

49 C.F.R. 173.475 requires, in part, that prior to each shipment of any package, the shipper ensure by examination or appropriate test that: (b) the packaging is in unimpaired physical condition, and (c) each closure device of the packaging is properly installed and secured and free of defects.

Contrary to the above, on October 11, 2001, the licensee transported a package containing licensed material and did not ensure by examination or appropriate test that: the packaging was in unimpaired physical condition, and each closure device of the packaging was properly installed and secured and free of defects. Specifically, the licensee transported a 36.6 Ci Ir-192 sealed source to a temporary job site in Garwood, New Jersey, in a OPL-660 Type B package. That package design incorporates an ammo box that is used as an overpack. The lid to the ammo box is designed to be held in place by four "ears" on two latches. One of the "ears" was bent so that it could not perform its intended function. Therefore, the lid was not properly secured during transport to the site.

7. 10 C.F.R. 20.1201(a)(1)(i) requires that, with exceptions not applicable here, that the licensee control the occupational dose to an individual adult to 5 rems, total effective dose equivalent.

10 C.F.R. 20.1001(b) states, in part, that it is the purpose of the regulations to control the possession, and use of licensed material by any licensee in such a manner that the total dose to an individual (including doses resulting from licensed and unlicensed radioactive material and from radiation sources other than background radiation) does not exceed the standards for protection against radiation including those in 10 C.F.R. 20.1201.

Contrary to the above, during 2001, through a combination of doses received in NRC and Agreement State jurisdiction, an individual received a total effective dose equivalent of 5.7 rem.

8. Condition 18 of License No. 29-28358-02 requires that within 30 days of the issuance of that license, the licensee insure that an audit of the licensee's entire radiation safety program is conducted by a third party. This audit must include field evaluations of all radiographers operating under the license. It also requires that, within 30 days of completion of the audit, the licensee provide a report containing a description of the audit and the conclusions of the audit to the Director, Division of Nuclear Material Safety, NRC Region I.

Contrary to the above, the licensee did not insure that an audit of its entire radiation safety program had been conducted by a third party within 30

days of the issuance of the license. Specifically, the license was issued on December 20, 2001, and the required audit was not conducted until March 6, 2002, a period greater than 30 days.

9. 10 C.F.R. 30.34(h)(1)(i) requires licensees to notify the appropriate NRC Regional Administrator, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any Chapter of Title 11 (Bankruptcy) of the United States Code by or against the licensee.

Contrary to the above, as of October 16, 2001, the licensee had not notified the appropriate NRC Regional Administrator, in writing, of their bankruptcy filing under Chapter 11 on May 18, 2001.

10. 10 C.F.R. 34.47(g)(1) requires, in part, that pocket dosimeters be checked at periods not to exceed 12 months for correct response to radiation.

Contrary to the above, from January 9, 2001 to May 10, 2002, an interval exceeding 12 months, a pocket dosimeter which was used during the performance of radiography had not been checked for correct response to radiation.

11. 10 C.F.R. 34.47(g)(1) requires that each alarming ratemeter must be checked to ensure that the alarm functions properly (sounds) before using at the start of each shift.

Condition 18 of License No. 29-28358-01 requires, in part, that licensed material be possessed and used in accordance with statements, representations and procedures contained in a letter dated September 27, 1995.

Appendix B of the letter dated September 27, 1995, requires that users of the NDS Products Model RA-500, an alarming ratemeter, check the battery and audio tone by pressing the push button at the arrow.

Contrary to the above, on October 11, 2001, a radiographer and a radiographer's assistant at a temporary job site in Bayonne, New Jersey did not check the battery and the audio tone of their NDS Products Model RA-500 alarming ratemeters by pressing the push button at the arrow before using them at the start of that day's shift.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Michael C. Farrar, Chairman Dr. Richard F. Cole Dr. Charles N. Kelber

In the Matter of

Docket No. 50-247-OLA (ASLBP No. 02-798-01-OLA)

ENTERGY NUCLEAR INDIAN
POINT 2, LLC, and
ENTERGY NUCLEAR OPERATIONS, INC.
(Indian Point, Unit 2)

August 22, 2002

ORDER

(Terminating Proceeding)

The organization Riverkeeper, Inc., having filed last evening a notice withdrawing its petition to intervene in this license amendment proceeding (in which notice and accompanying cover letter Riverkeeper indicated its reasons for taking that step), there are no petitions before the Board opposing the issuance of the amendment. Accordingly, there is no longer any occasion to conduct the prehearing conference previously scheduled for next Tuesday, August 27, and that conference is hereby CANCELLED. In the absence of any formal opposition to the amendment, the proceedings before this Licensing Board are hereby TERMINATED.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND LICENSING BOARD

Michael C. Farrar, Chairman ADMINISTRATIVE JUDGE

Rockville, Maryland August 22, 2002

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Alan S. Rosenthal, Presiding Officer Dr. Richard F. Cole, Special Assistant

In the Matter of

Docket No. 40-8681-MLA-11 (ASLBP No. 02-795-02-MLA)

INTERNATIONAL URANIUM (USA)
CORPORATION
(White Mesa Uranium Mill)

August 28, 2002

In this Initial Decision upholding the issuance of a materials license amendment in a Subpart L proceeding, the Presiding Officer concluded that the Petitioner's challenges to the license amendment in question were not shown to be meritorious.

RULES OF PRACTICE: STANDARD OF REVIEW

A successful challenge to a materials license amendment must demonstrate (a) that prior activities under the license in question produced significant environmental harm that would likely be exacerbated by the activity here under scrutiny; (b) that the monitoring of the effects of those activities was so deficient as to preclude an informed determination as to the existence of such harm; and/or (c) the amendment in question presents a threat of harm not associated with prior activities under the existing materials license.

ATOMIC ENERGY ACT (OR AEA): INTERPRETATION

The legislative history of both the Atomic Energy Act of 1954 and the Uranium Mill Tailings Radiation Control Act of 1978 disclose a clear purpose to leave the

NRC as the lead agency in regulation, oversight, and management of uranium mill tailings-related activities. Thus, when regulating in this realm, a court clearly would give considerable deference to the Commission's interpretation of the Acts.

NEPA: REQUIREMENT FOR IMPACT STATEMENT

A materials license amendment does not come within the list of specified licensing actions, included in 10 C.F.R. § 51.20(b), that must receive an EIS. An EIS, therefore, is mandated by that section if, but only if, the grant of the license amendment is determined by the Commission to be a major action on its part significantly affecting the quality of the human environment.

RULES OF PRACTICE: BURDEN OF GOING FORWARD

Mere speculation and conjecture with regard to the effect upon the environment that the activity authorized by the license amendment in question might have is not sufficient to warrant denying the issuance of the license amendment.

INITIAL DECISION

(Upholding Issuance of License Amendment)

This proceeding involves challenges to the issuance of an amendment to an outstanding source materials license. As such, it is subject to the informal hearing procedures set forth in Subpart L of the Commission's Rules of Practice, 10 C.F.R. § 2.1201 *et seq.* In accordance with the provisions of that subpart, written presentations were submitted by each of the participants in the proceeding.

On the basis of a full consideration of the content of those submissions, and for the reasons set forth in this Decision, in consultation with Judge Cole I have determined that the challenges to the license amendment in question have not been shown to be meritorious. I conclude therefore that there is no reason in either law or fact why the issuance of the license amendment should now be ordered withdrawn.

¹ While the ultimate decisional responsibility in Subpart L proceedings may lie with the Presiding Officer, the Rules of Practice also contemplate that a member of the Licensing Board Panel with technical expertise will participate actively in the adjudication of any proceeding to which assigned as a Special Assistant. See 10 C.F.R. § 2.722. In this instance, Judge Cole played an important role in the assessment of the record pertaining to the several presented environmental issues. Each of the determinations reached in this Decision on those issues has his endorsement.

I. BACKGROUND

The International Uranium (USA) Corporation (Licensee) is the owner of the White Mesa Mill (Mill), a uranium recovery facility located near Blanding, Utah. For over 20 years, it has operated the Mill under the aegis of a source material license (SUA-1358) that was issued in 1980 and then renewed in 1985 and again in 1997.

Because the basic license covers only the receipt and processing of natural ores, whenever the Licensee has desired authority to receive and process alternate feed materials it has been required to apply for a license amendment. In recent years, a substantial number of license amendment applications have been filed in connection with the receipt and processing at the Mill of alternate feed materials having their origin in locations across the country from New Jersey to California. Several of those applications have drawn requests for a hearing in response to *Federal Register* notices providing an opportunity to seek such relief. With the exception of the hearing requests hereinvolved, all were denied on the principal ground that the requestor lacked standing to challenge the proposed activity.²

The hearing requests at bar are addressed to the proposed shipment to the Mill of alternate feed material originating at the Molycorp site in Mountain Pass, California. The proposal first came to public attention in a *Federal Register* hearing opportunity notice published on January 9, 2001. 66 Fed. Reg. 1702. As described therein, the Molycorp material is the result of the extraction of lanthanides and other rare earth metals from bastnasite ores and, at the time of the publication of the notice, was stored in ponds as lead sludge, with an estimated uranium content of approximately 0.15% or better. According to the license amendment application, the Licensee proposed to process the material for its uranium content by the utilization of an acid leach that would serve to dissolve the uranium. The byproduct material would then be stored in the Mill's tailings cells.

The January 2001 *Federal Register* notice produced a hearing request on the part of the Glen Canyon Group of the Utah Sierra Club (Group). That request received, however, the same fate that had befallen previous such requests in connection with this license. On a determination that the Group had not asserted an injury-in-fact beyond that associated with the previously authorized Mill activities, the request was denied for lack of standing. LBP-01-15, 53 NRC 344 (2001), *aff'd*, CLI-01-21, 54 NRC 247 (2001).

Although customarily a second opportunity to seek a hearing is not afforded by it relative to a particular license amendment request, in this instance the NRC Staff provided such an opportunity. Upon the completion of its appraisal of the

² See, e.g., LBP-01-8, 53 NRC 204 (2001), aff d, CLI-01-18, 54 NRC 27 (2001); LBP-99-24, 49 NRC 495 (1999); LBP-99-20, 49 NRC 429 (1999); LBP-99-8, 49 NRC 131 (1999); LBP-99-5, 49 NRC 107 (1999).

environmental impacts associated with the proposed activity, the Staff recorded in a *Federal Register* notice published on December 11, 2001, its determination on that score in the form of a Finding of No Significant Impact (FONSI).³ The notice went on to extend a new "opportunity for a hearing on the license amendment." As it happened, on the same date that the notice was published, the Staff issued the license amendment.

In response to this second opportunity to seek a hearing, three separate hearing requests were filed. In LBP-02-6, 55 NRC 147 (2002), those of William E. Love and the Utah Sierra Club (Sierra) (collectively Petitioners) were granted and the third rejected. The grant of the two requests rested on a determination that, unlike the hearing request denied almost a year earlier, they adequately alleged the injury-in-fact requisite to a finding of standing. More specifically, both requests focused on the alleged fact that, because of its significant lead content, the Molycorp material posed an environmental threat above and beyond that associated with the receipt, processing, and storage of the materials covered by the previous license amendments and thus posed a threat of incremental harm. On the Licensee's appeal, the Commission affirmed this outcome in CLI-02-10, 55 NRC 251 (2002).⁴

Pursuant to a schedule established in the wake of the grant of their hearing requests, written presentations were filed by the Petitioners, as well as by the Ute Mountain Ute Tribe, a federally recognized Indian Tribe that was given nonparty participational status pursuant to 10 C.F.R. § 2.1211(b). *See* March 18, 2002 Memorandum (unpublished). For its part, the Tribe's March 28, 2002 submission raised principally a claim that the license amendment had been issued in violation of two Executive Orders and, therefore, should be immediately ordered withdrawn. I elected to single out this narrow, purely legal and possible dispositive, issue for expedited consideration and disposition prior to addressing the other issues presented by the various presentations. After receipt of the responses of the Licensee and NRC Staff,⁵ the Tribe's claim was rejected in LBP-02-11, 55 NRC 301 (2002) on the ground that neither of the cited Executive Orders had the effect that the Tribe attributed to it.

The responsive submissions of the Licensee and Staff are now in hand, as are the replies thereto that were authorized in an May 21, 2002 order (unpublished). Examination of the totality of the filings by the respective participants has disclosed that the numerous issues presented by the Petitioners and the Tribe

³66 Fed. Reg. 64,064. The significance of a FONSI is that it relieves the Staff of the obligation to prepare an environmental impact statement. See 10 C.F.R. § 51.32(a)(2).

⁴In CLI-02-10, the Commission also upheld the denial in LBP-02-9, 55 NRC 227 (2002), of the endeavor of Petitioners to obtain a stay *pendente lite* of the effectiveness of the issued license amendment.

⁵ The Staff initially exercised its option under 10 C.F.R. § 2.1213 to remain on the sideline. By an April 1, 2002 order (unpublished), however, and as authorized by the same section of the Rules of Practice, I directed that it become a full party to the proceeding.

have been thoroughly and satisfactorily ventilated. As a consequence, I have concluded (and Judge Cole agrees) that there is no need to call for supplemental oral presentations as authorized (but not required) by 10 C.F.R. § 2.1235. Rather, we deem the existing record to be adequate to allow an informed decision on the matters in controversy.

Accordingly, in the next portion of this Decision, those matters will be explored.

II. ANALYSIS

The starting point of any appraisal of the record developed in this proceeding through the various written submissions and supporting documentation must be a recognition that the Petitioners (along with the Tribe) were not confronted with a tabula rasa in mounting their challenge to the Molycorp license amendment. To the contrary, as seen, the source material license in question was issued over two decades ago and, under one or another of several amendments, in recent years the Mill has received and processed alternate feed material of differing compositions originating in various locations. It is true that, because the hearing requestors were found to lack standing, the "merits" of the various challenges to those amendments were not placed under adjudicatory scrutiny. It is also true that the grant of a hearing to these Petitioners was founded upon assertions that, because of its lead content, the Molycorp material differs significantly in composition from that of the alternate feed materials previously received and processed. Neither of those considerations can detract, however, from the fact that it is at least relevant, albeit not dispositive, whether (and if so to what extent) the prior Mill activities involving the receipt and processing of alternate feed materials in actuality have given rise to environmental harm such as Petitioners fear will be occasioned if the license amendment in issue is allowed to stand.

In the totality of circumstances, three broad lines of inquiry appear to be warranted in the course of the appraisal of the adduced record:

- 1. Have the Petitioners (including the Tribe) established (without compelling refutation by the Licensee and NRC Staff) the existence of a decisive legal impediment to the issuance of the license amendment in issue; i.e., that that issuance was in direct violation of the provisions of an applicable statute or NRC regulation?
- 2. Have the Petitioners established (without compelling refutation by the Licensee and Staff) that either (a) prior activities under this license have resulted in significant environmental harm that is essentially the same as that which might be expected also to occur in the receipt, processing, and residue storage of the Molycorp material; or (b) the monitoring of the

- effects of the prior activities was so deficient as to make it impossible to determine whether such harm has been experienced?
- 3. Have the Petitioners established (without compelling refutation by the Licensee and Staff) that, irrespective of what might have occurred with regard to the handling and disposition of prior alternate feed materials received at the Mill, because of the particular composition of the Molycorp material (specifically its lead content), there is cause to believe that its receipt, processing, and residue storage present a significant threat of environmental harm?

If any one or more of these questions should require an affirmative answer, it would follow that the license amendment would have either to be ordered withdrawn or to be subjected to the imposition of conditions designed to combat the disclosed environmental threat.⁶

A. Legal Issues

Although neither Sierra nor Mr. Love is represented by counsel in this proceeding, both insist that there are several reasons why the issuance of the Molycorp license amendment must be deemed to have been in violation of either a statute or a Commission regulation. Indeed, were the Petitioners correct in their assertions in this regard, it would necessarily follow that not only was the issuance of this amendment unlawful, but also, none of the prior amendments involving the receipt and processing at the Mill of alternate feed material could withstand legal muster.

A review of the various challenges on this score has led to the conclusion that five of them merit discussion. They will be considered *seriatim*.

- 1. Mr. Love asserts that, because the Licensee is wholly owned by a holding company incorporated in the State of Delaware, which holding company is in turn wholly owned by a foreign (i.e., Canadian) corporation, the issuance of its basic license (and therefore of the amendments thereto) was in direct violation of 10 C.F.R. § 40.38.⁷ That regulation provides in relevant part that a source material license "may not be issued to the Corporation" if the Commission determines that:
 - (a) The Corporation is owned, controlled or dominated by . . . a foreign corporation.

⁶ In its May 20 written presentation, the Staff sets forth the limitations it believes to exist with respect to the permissible inquiry in this proceeding. Although not in entire agreement with the claimed limitations (which do not appear to enjoy in full the support of the precedent cited for them), I do not pause to discuss them here. In all events, I am satisfied that the inquiry outlined in the text above is well within the bounds of the authority and responsibility conferred upon Presiding Officers by the Rules of Practice and the Commission's jurisprudence.

⁷ Petitioner William Love's 10 C.F.R. § 2.1233 Written Presentation for Suspension and or Revocation of Amendment 20 to License SUA-1358 and License SUA-1358 (Apr. 1, 2002) at 24 [hereinafter Love Petition].

Undergirding Mr. Love's claim is the premise that the Licensee comes within the ambit of the term "Corporation" as that term is employed in section 40.38. That premise is, however, wide of the mark. For the purposes of Part 40 of the Commission's regulations concerned with the domestic licensing of source material, the definitional section of the Part makes clear that "Corporation" embraces exclusively the United States Enrichment Corporation or a successor thereto. *See* 10 C.F.R. § 40.4.

In short, section 40.38 has no applicability whatever to corporations such as this Licensee. Nor does there appear to be any other regulatory provision that broadly confines the issuance of source material licenses to entities that are totally free of foreign ownership or control.

2. Sierra contends that the Atomic Energy Act of 1954, Pub. L. No. 83-703, 68 Stat. 919 (1954) (AEA), as amended by the Uranium Mill Tailings Radiation Control Act of 1978, Pub. L. No. 95-604, 92 Stat. 3021 (1978) (UMTRCA), does not authorize the NRC to license uranium mills to process and dispose of alternate feed materials such as the Molycorp material. Specifically, according to Sierra, the Act permits the processing and disposition at such mills of natural ores alone.

The AEA places the responsibility for regulation of byproduct material in the hands of this Commission. As amended by the UMTRCA, that Act defines byproduct material to include "(2) the tailings or waste produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content." In 1995, due to concerns about potential confusion regarding the regulation of byproduct tailings piles created by the processing of alternate feed material in NRC-licensed uranium mills, the Commission promulgated a guidance document to clarify its jurisdiction and to guide potential licensees respecting this matter. In it, the Commission defined "ore" as "matter from which source material is extracted in a licensed uranium or thorium mill." This new guidance document was intended to put to rest any uncertainty concerning Commission jurisdiction over the byproduct tailings piles produced from the processing of the alternate feed material.

In attacking this guidance, Sierra maintains that the legislative history of the UMTRCA demonstrates that Congress intended the term "ore," as employed in

⁸ Sierra Club's Reply to International Uranium (USA) Corporation's May 20, 2002, Response to Written Presentation of Glen Canyon Group of the Sierra Club (June 14, 2002) at 8-32 [hereinafter Sierra Reply].

⁹ *Id*. at 6.

¹⁰42 U.S.C. § 2111 (2000).

¹¹ *Id.* § 2014(e) (2000).

¹² Those concerns were first ventilated in 1992. See Position and Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores, 57 Fed. Reg. 20,525, 20,531 (May 13, 1992) [hereinafter Draft Guidance].

¹³ Final Position and Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores, 60 Fed. Reg. 49,296 (Sept. 22, 1995).

¹⁴Draft Guidance at 20,531.

that Act, to include only natural ores. ¹⁵ Sierra also claims that, historically, the Commission and its predecessor (the Atomic Energy Commission) have adopted similar positions in the regulation of the uranium milling process. ¹⁶ Moreover, Sierra asserts, neither the Commission nor the Environmental Protection Agency (EPA) considered the processing of alternate feed materials for their source material content when promulgating rules to regulate mill tailings piles pursuant to the UMTRCA. ¹⁷

A review of the legislative history of both the AEA and the UMTRCA reveals little about congressional intent concerning the term "ore" as used in the context of uranium milling. That history does, however, disclose a clear purpose to leave the NRC as "the lead agency in regulation, oversight and management of uranium mill tailings-related activities." In these circumstances, a court clearly would give considerable deference to the Commission's interpretation of the Act. Given that its reading of the term "ore" can hardly be dismissed as unreasonable, the same result should obtain here. ²⁰

There is an equal lack of merit with regard to Sierra's other attacks upon the guidance. It is entirely irrelevant whether or not the Commission or the EPA considered the processing of alternate feed material when promulgating regulations for mill tailings piles. At the time that those regulations were promulgated, the processing of alternate feed materials was not an issue.²¹ When it became an issue, the guidance in question was forthcoming.²²

3. Mr. Love contends that the EPA has concurrent jurisdiction over the "non-radionuclide lead component" of the Molycorp material and, therefore, the receipt and processing of the material was subject to that agency's regulations promulgated under the Resource Conservation and Recovery Act of 1976, Pub. L. No. 94-580, 90 Stat. 2795 (1976) (RCRA).²³ In support of that assertion, he points to what he represents to be the provisions of the Low-Level Radioactive

¹⁵ Sierra Reply at 13, 29-31.

¹⁶ *Id.* at 10-13.

¹⁷ *Id.* at 20.

¹⁸ H.R. Rep. No. 95-1480, pt. I, at 15 (1978), reprinted in 1978 U.S.C.C.A.N. 7433, 7438.

¹⁹ See Chevron U.S.A., Inc., v. Natural Resources Defense Council, Inc., 467 U.S. 837, 842-43 (1984); SEC v. Chenery Corp., 318 U.S. 190 (1943).

²⁰When reviewing a prior Commission interpretation of the AEA's definition of byproduct material, the Court of Appeals for the District of Columbia Circuit found that the term "ore" could have more than one meaning and that there was clear implication in the UMTRCA that residual radioactive material bearing source material could be treated as "ore." See Kerr-McGee Chemical Corp. v. NRC, 903 F.2d 1 (D.C. Cir. 1990).

²¹ Draft Guidance at 20,531.

²² Ibid. On August 19, 2002, Sierra requested that an August 9, 2002 letter sent by Edgar D. Bailey, an official of the California Department of Health Services, to Sarah M. Fields be made a part of the record of the proceeding. Among other things, the letter is said by Sierra to bolster its claim that the Molycorp material is not "ore" for present purposes. In fact, however, the letter has no such effect. Although (at 2) it characterizes the material as "source material pursuant to the definition of [such] material" contained in the Commission's regulations, that characterization scarcely goes to the question of the material's status as "ore."

²³Love Petition at 38.

Waste Policy Amendments Act of 1985, Pub. L. No. 99-240, 99 Stat. 1842 (1986) (LLRWAA), which provide a means for states to establish general disposal facilities for low-level radioactive waste.²⁴

In actuality, the document that he cites is not the statute to which he alludes but, rather, appears to be a joint policy guidance issued by the NRC and EPA.²⁵ Moreover, apart from the fact that it, in terms, states that it is without binding effect, it has no application here. Instead, it was created to provide guidance to "generators of commercial [low-level waste]" and has no ascertainable application to the uranium milling process.²⁶ Therefore, this document provides no support for the assertions put forth by Mr. Love with regard to EPA jurisdiction.²⁷

4. Sierra points to the provisions of 10 C.F.R. § 40.51(b)(5) to the effect that source material may not be transferred to a facility other than one "authorized to receive such source . . . material under terms of a specific license . . . issued by the Commission or an Agreement State." Insisting that the Mill is not such a facility, Sierra maintains that it is not authorized to receive the Molycorp material hereinvolved.²⁸

That argument might have had some substance had not the Licensee sought the amendment in issue. That is because the basic license issued in 1980 authorized the Mill's receipt and processing of natural ores alone. The specific purpose of this license amendment application, however, was to obtain the necessary authority to be a possessor of the thorium material. A grant of the application, and the issuance of the sought amendment, had the necessary effect of qualifying the Mill as an authorized recipient within the meaning of section 40.51. Therefore, absent a showing that, for some other reason, the issuance of the amendment violated a statutory or regulatory provision, section 40.51 is of no assistance to Petitioners.²⁹

5. Both Petitioners insist that 10 C.F.R. § 51.20 and 40 C.F.R. § 1502.9(c)(ii) require a supplemental environmental impact statement (EIS) if there "are

²⁴ Id. at 37.

²⁵ See id., Attach. O.

²⁶ Ibid.

²⁷ On August 5, 2002, the NRC Staff supplied a copy of a July 9, 2002 letter sent to Mr. Love by Sonya S. Pennock of EPA's Office of Public Affairs and Involvement. Responding to his request that EPA require the NRC and the Licensee to prepare a supplemental environmental impact statement prior to the shipment of the Molycorp material to the Mill, the letter observed that such a requirement could not be imposed because responsibility for regulating the receipt of the material was vested in the NRC. The letter also pointed out that EPA had authorized California and Utah to implement state RCRA programs in lieu of the federal RCRA program, making them primarily responsible for oversight within their state, and it is EPA's understanding that both states have concluded that the Molycorp material is not a solid or hazardous waste under its program.

²⁸Petitioner Sierra Club's 10 C.F.R. § 2.1233 Written Presentation Requesting Suspension, Modification, or Revocation of Amendment 20 to License SUA-1358 (Apr. 1, 2002) at 6 [hereinafter Sierra Written Presentation].

²⁹ Sierra seems to deem it of significance that, as the August 9, 2002 letter from the California Department of Health Services (*see* note 22, *supra*) confirms, the Molycorp material has not as yet been licensed in that State. That consideration is, however, entirely irrelevant here. Once again, it is enough for section 40.51(b)(5) purposes that the Mill has been licensed by *this* Commission to receive the material. In that connection, Sierra has pointed to no statutory or regulatory provision requiring the Commission to withhold the grant of such authority unless the material has acquired a license in the state of origin.

significant new circumstances or information relevant to environmental concerns bearing on the proposed action." According to them, the license amendment in issue will produce significant new circumstances, and the potential environmental impact of these new circumstances were not addressed in either the original EIS prepared for the White Mesa facility in 1979 or any subsequent environmental reviews.

Further, Sierra asserts that the processing of alternate feed material as ore requires an EIS to address its cumulative environmental impacts. According to Sierra, the original materials license issued to the White Mesa Mill in 1979 was to process natural uranium ore from the Colorado plateau region. Since that time, Sierra continues, the Licensee has received roughly eighteen license amendments allowing the Licensee to process alternate feed material that would otherwise require disposal as waste.³¹ These eighteen prior amendments, however, did not require an environmental review, because they were exempted pursuant to 10 C.F.R. § 51.22(c)(11). The cumulative impacts of each of these amendments, Sierra contends, therefore have not been considered. Thus, Sierra reasons that an EIS is now necessary to address the cumulative impacts upon the environment of processing alternate feed material at the Mill.³²

Finally, both Sierra and Mr. Love argue that the NRC Staff has incorrectly relied upon policy guidance, namely the Interim Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores (Interim Guidance), rather than Commission regulations or the AEA to guide their review of the Licensee's amendment application.³³ In their view, the Staff relied upon the Interim Guidance to "avoid doing the in-depth environmental review" mandated by the National Environmental Policy Act (NEPA) and reliance upon this Interim Guidance to avoid these requirements "is contrary to law." Thus, they insist that the Staff must prepare an EIS as required by NEPA to address the environmental impacts of the proposed license amendment.

None of these claims is meritorious. To begin with, 10 C.F.R. § 51.21 makes it quite clear that an environmental assessment (such as that done here) will suffice unless the licensing action in question is one "identified in § 51.20(b) as requiring an environmental impact statement." Turning to section 51.20(b), the license amendment at bar plainly does not come within the list of specified licensing actions that must receive an EIS. Thus, an EIS was mandated by that

³⁰ Second Supplement to Petitioner Sierra Club's 10 C.F.R. § 21.1233 Written Presentation Requesting Suspension, Modification, or Revocation of Amendment 20 to License SUA-1358 (Apr. 14, 2002) at 12 [hereinafter Sierra Second Supplement]. See also Love Petition at 16-17 (asserting that the Staff must conduct an EIS).

³¹ Sierra Second Supplement at 23.

³² Ibid.

³³ *Id.* at 24-26; Love Petition at 16-17.

³⁴Love Petition at 16. *See* Sierra Second Supplement at 26.

³⁵ 10 C.F.R. § 51.21.

section if, but only if, the grant of this license amendment were determined by the Commission to be a "major" action on its part "significantly affecting the quality of the human environment."

As reflected by its issuance last December of its FONSI, the Staff determined that the grant of the proposed license amendment would not significantly affect the quality of the human environment with the consequence that an EIS was unnecessary. Although the Petitioners challenge that conclusion, as will be later seen they have not provided credible evidence establishing that the proposed activity might have such an effect.

Sierra's cause is not advanced by its insistence that, because the Licensee has been exempted from environmental reviews of its previous requests to process alternate feed material at White Mesa, the cumulative environmental impacts of this process have not been adequately considered. In presenting this claim, Sierra provides no evidence of adverse impacts resulting from the processing of alternate feed material under the previous license amendments. Further, as previously noted, we do not write upon a clean slate: consistent with Commission regulations, absent a demonstration that prior Mill activities have resulted in a significant harm that might be expected to occur again with, or be exacerbated by, the processing of the Molycorp material, the NRC Staff review is limited to the impact of the processing of the Molycorp material.

Although the Staff has not reviewed the potential impacts of each of the previous license amendments, its latest EA examined the potential impacts of the processing of the Molycorp material. In doing so, the Staff assessed the impact of the Molycorp material upon the present environment, an environment that includes the cumulative impacts of all of the previous material that has been processed at the White Mesa facility. Although Sierra objects to this approach, it has provided nothing to refute the Staff's claim that its review was sufficient.

Finally, there is a lack of substance to the Petitioners' claim that the Staff improperly substituted its Interim Guidance for NEPA requirements in concluding that an EIS was not required here. Although the Staff used the Interim Guidance in its evaluation of the Licensee's application, the decision to grant the requested license amendment was based upon an application of the Commission regulations in 10 C.F.R. Part 40 that govern materials licenses. In addition, as previously discussed, the Staff's decision to perform an EA instead of an EIS was clearly founded upon 10 C.F.R. §§ 51.20-.21.

³⁶ Id. § 51.20(b)(14).

B. Environmental Issues

1. As earlier noted, Petitioners' hearing requests were granted on the strength of their allegation that, because of its significant lead content, the Molycorp material posed an environmental threat above and beyond that associated with the receipt, processing, and storage of the materials covered by the previous license amendment. Although, at that preliminary stage of the proceeding, the mere assertion of the claim was enough, once the claim passed to the next stage — namely, the consideration of it on the merits — the Petitioners assumed a much more substantial responsibility. Particularly given the 20-year history of the processing at the Mill of, first, natural ores and, more recently, alternate feed materials, Petitioners had the initial burden of establishing that the claim had a solid footing. As outlined above, the discharge of that burden required a credible showing (a) that the prior activities under the license in question produced significant environmental harm that would likely be exacerbated by the activity here under scrutiny; (b) that the monitoring of the effects of those activities was so deficient as to preclude an informed determination as to the existence of such harm; and/or (c) that the particular composition of the Molycorp material presents a threat of harm not associated with the prior Mill activities.

The voluminous written presentations and supplemental filings submitted by Petitioners are rife with assertions, speculation, and conjecture on each of those issues. Totally absent, however, from the wealth of paper placed before Judge Cole and me for consideration is any concrete demonstration that might lend support to one facet or another of Petitioners' assault upon the license amendment.

A few examples of the failure to provide some evidentiary foundation for broad speculative assertions should suffice. To begin with, Sierra maintains that the tailings cell that will be used to store the Molycorp material residue is improperly constructed and, as a result, "may be leaking now, and will certainly leak in the future." Sierra points to nothing, however, to support its conjecture as to past leakage from that cell. Nor does it offer any evidentiary basis for its further speculation that, should it escape the tailings cell, the Molycorp residue will "eat its way through the underlying strata to the groundwater."38

No greater footing can be discerned for Sierra's hypothesis that the Molycorp residue stored in an aboveground tailings cell will become "an immediate source of lead poisoning to both resident and migratory waterfowl." ³⁹ Sierra would have it that the birds will land upon the cell and either ingest or absorb lead through their feathers. Thereafter, according to this scenario, the infected birds might be

³⁷ Third Supplement to Petitioner Sierra Club's 10 C.F.R. § 2.1233 Written Presentation Requesting Suspension, Modification, or Revocation of Amendment 20 to SUA-1358 (Apr. 15, 2002) at 5 [hereinafter Sierra Third Supplement]. 38 *Ibid*.

³⁹ *Id.* at 20.

eaten by one of the many species of endangered predatory birds that reside in the White Mesa area, which might in turn occasion the death of the predator as a consequence of lead poisoning.⁴⁰

Were the Mill just now commencing operation, this supposition might possibly have been worthy of exploration. Given, however, that both natural ores and alternate feed materials of various composition have been stored in the Mill's tailings cells for a number of years without (insofar as this record reflects) the occurrence of any avian activity such as that which Sierra now visualizes, there is little reason why further consideration of it might be warranted. This is certainly so given that, as will later be seen, there is currently a considerable amount of lead in the Mill's tailings cells as a result of prior processing activities. Thus, in any event, the addition of the Molycorp residue would not pose a threat of harm to birds that is not already present.

Section 40.9 of 10 C.F.R. requires that all information provided to the Commission by licensees such as that at bar be "complete and accurate in all material respects." Both Sierra and Mr. Love claim broadly that the Licensee's amendment application hereinvolved did not comply with this requirement. The principal difficulty with this assertion is that it fails to take into account that the application was addressed to the NRC Staff, and the section 40.9 requirement obviously was imposed for the Staff's benefit in its appraisal of the proposed amendment. Inasmuch as it has issued the requested license amendment, the Staff apparently did not perceive any lack of section 40.9 compliance that might call for a rejection of the application. That being so, there is scarcely room for reaching a different result here simply because these Petitioners would have preferred the application to have said more than it did on what they deem to be the environmental threat presented by the proposed activity.

For his part, Mr. Love advances several arguments based upon the asserted high lead content of the Molycorp material, but supports none of them with more than the same conjecture that undergirds the Sierra assertions. One of his complaints goes to the asserted failure of the Licensee's application to address the likelihood of an adverse chemical reaction between the stored Molycorp material and the components already contained in the tailings cells.⁴² An insufficient basis is provided, however, for the premise that such a likelihood exists.

Mr. Love also makes much of the Licensee's asserted failure to have taken corrective measures in connection with a chloroform plume that was discovered in the groundwater below the Mill. Believing that the plume was associated with Mill activity, more specifically the result of a leak in one of the tailings cells, he

⁴⁰ *Id.* at 13.

⁴¹ Supplement to Petitioner Sierra Club's § 2.1233 Written Presentation Requesting Suspension, Modification, or Revocation of Amendment 20 to License SUA-1358 (Apr. 10, 2002) at 8-33; Love Petition at 28-35.

⁴²Love Petition at 9-10.

maintains that the Licensee was obliged both to clean up the plume and to address the leak before being allowed to proceed with the processing of the Molycorp material.⁴³ Not only, however, is there nothing in Mr. Love's presentation that might tie the discovered plume to Mill activity but, as will be seen later in this Decision, there is a solid basis for concluding that the plume was entirely unrelated to any such activity.⁴⁴

2. The short of the matter is that neither Petitioner has come close to fulfilling its or his burden of demonstrating in the first instance that there is reason for concern that the receipt and processing of the Molycorp material poses a genuine incremental environmental threat. To be sure, petitioners in Subpart L adjudicatory proceedings do not have the benefit of formal discovery (see 10 C.F.R. § 2.1231(d)). Nonetheless, these Petitioners had not only the advantage of the extensive hearing file maintained by the NRC Staff, but also presumably could have obtained access through other means to records pertaining to the prior operation of the Mill. This being so, it is not without significance that they seemingly have been unable to offer more than speculation and conjecture with regard to the effect upon the environment that the activity authorized by the license amendment in question might have. In this connection, despite the heavy emphasis that both Petitioners place throughout their submissions on the asserted exceptional toxicity of the Molycorp material, the fact remains that, as noted above (note 27), the States of both California and Utah have concluded that the material is not a solid or hazardous waste under their RCRA programs.

In light of these considerations, the adjudicatory inquiry might appropriately stop here. The Licensee's presentation (and to a lesser extent that of the NRC Staff) contain, however, considerable factual information bearing directly upon the ultimate issue of whether the receipt and processing of the Molycorp material poses an undue environmental threat. In the interest of completeness, that information will now be summarized.⁴⁵

Specifically, what will be covered includes (a) the lead content of both the Molycorp material and what is now to be found in the Mill's tailings cells; (b) the transport, receipt, and storage of the Molycorp material prior to processing; (c) the processing activity itself; (d) the storage of the residue in a tailings cell; (e) the relevant features of the geology and groundwater hydrology of the Mill site; (f) the likely behavior of the Molycorp tailings liquid in the event of cell liner leakage; (g) the Mill's ongoing detection monitoring program; (h) the present relevance of the

⁴³ *Id.* at 35-37.

⁴⁴ See p. 139, infra. In common with Mr. Love, the Tribe is concerned with the chloroform plume. It thus, likewise, requests that measures be taken to ascertain the "travel of pollutants in the perched aquifer" prior to permitting activity under the granted license amendment. Ute Mountain Ute Tribe Initial Presentation in Informal Hearing and Request for Withdrawl of License Amendment #20 (Mar. 20, 2002) at 2. As with Mr. Love, however, the Tribe fails to tie the discovered plume activity to Mill activity.

⁴⁵ It bears emphasis that, although provided with an opportunity to respond to each of the Licensee and NRC Staff submissions, the Petitioners failed to controvert the factual representations contained in those submissions.

detected chloroform that is of particular concern to the Petitioners; and, lastly, (i) the cooperative studies with the State of Utah. Although set forth in memorandum form, what follows on these several subjects is intended to constitute findings of fact going to the ultimate issue of whether the activities contemplated by the grant of the Molycorp license amendment pose a serious threat of incremental harm to the environment.

The Lead Content and Chemical Form of Lead

The total amount of lead in the Molycorp material is considerable. As stored in the Mountain Pass Pond, the material has an estimated lead content of 132,000 parts per million (13.2 weight %). Assuming that the maximum projected amount of that stored material (17,750 tons) is processed at the Mill, 2343 tons of lead would be added to the tailings system.⁴⁶ That system already contains approximately 1400 tons of lead based upon the average lead concentrations of materials already processed at the Mill.⁴⁷

According to affiant Jo Ann S. Tischler, and contrary to the Petitioners' claim, the Molycorp material has never contained lead oxide.⁴⁸ Rather, the lead present in the material initially took the form of lead sulfide and, if the material is exposed to atmospheric oxygen, the lead sulfide converts to lead sulfate.

In the tailings cell, following processing through the Mill for removal of the uranium content, the overwhelming bulk of the lead will remain water soluble but in undissolved form. Owing to the high dissolved solids content of the current cell liquid, solubility considerations limit the amount of lead that could be dissolved in solution to about 20 milligrams per liter (mg/L). The current lead content of tailings solution is approximately 17 mg/L, so that almost none of the Molycorp lead added to cell #3 will go into solution. 49 Any migration from the cell through the polyvinyl chloride (PVC) liner would be via tailings solution liquids. In short, even were there to be the leak in the cell liner postulated by the Petitioners, the presence of the Molycorp residue in the cell would have little effect upon the toxicity of the released liquid. This is because there does not appear to be an

⁴⁶Response of International Uranium (USA) Corporation to Written Presentations of Mr. William E. Love and the Glenn Canyon Group of the Sierra Club (Docket No. 40-8681-MLA-11) (May 20, 2002) [hereinafter IUSA Response], Exh. 1, Aff. of Jo Ann S. Tischler at 4-5 [hereinafter Tischler Aff.].

Id. at 5.

⁴⁸ *Id.* at 5-6. Ms. Tischler is a chemical engineer who has performed process engineering design, hazardous waste status evaluations, and waste management planning, under the regulatory frameworks of 28 states and 6 foreign

⁴⁹IUSA Response, Exh. 5, Aff. of Roman Z. Pyrih at 2 [hereinafter Pyrih Aff.]. Dr. Pyrih holds a doctorate in geochemistry with in excess of 25 years of industry experience in managing mining and industrial waste, and in dealing with soils and groundwater contaminated by heavy metals and radionuclides.

appreciable difference, in terms of possible environmental impact, between 17 mg/L and 20 mg/L of lead. 50

b. Transport, Receipt, and Storage Prior to Processing

As previously noted, the Molycorp material consists essentially of 17,750 tons of lead sulfide sludge currently stored in ponds at Molycorp's Mountain Pass, California facility. In addition, a relatively insignificant amount of similar material is contained in thirty-five drums.⁵¹ (The material in the drums originated after the lead sulfide storage ponds were taken out of service but is from the same uranium-bearing lead sulfide stream that had previously been transferred to the ponds.) The average uranium content is approximately 0.15% or greater.⁵² The transportation of the material involves the use of a transportation contractor who will be responsible for utilizing appropriate transportation containers in accordance with the U.S. Department of Transportation and state regulatory requirements and for the safe and effective remediation of any potential spills that may occur as a result of an accident during transport. The employed transportation contractor will be equipped with fully trained emergency response personnel capable of handling a spill of radioactive or hazardous material within a short period of time and without leaving residual or hazardous material at a spill site.⁵³ The material will be shipped by truck in closed, sealed containers and, as shipped, will contain no free liquids that could leak or flow out of the transport containers.54

As to traffic volume, it is estimated that there will be an increase of ten trucks (2.0%) per day for 3 months. The environmental impact of this small increase in traffic is deemed by the NRC Staff to be negligible.⁵⁵

Licensee affiants Chambers and Tischler looked at potential radiological and nonradiological impacts that might result from an accidental spill and each concluded that the worst-case transportation spill (the overturning and loss of the

⁵⁰In promulgating the national primary drinking water regulations for lead, EPA has established an action level for water systems containing concentrations of lead greater than 0.015 mg/L. See 40 C.F.R. § 141.80 et seq. Water systems that exceed the established level are required to take additional steps to reduce the lead in their system. *Ibid.* Because the solution contained in the tailings cells already contains 17 mg/L (more than 1100 times greater than the drinking water action level), increasing the amount in solution by 3 mg/L will have little effect on the solution's overall toxicity.

⁵¹ NRC Staff's Response to Written Presentations Filed by Intervenors Sierra Club and William Love [hereinafter Staff Response], Aff. of William Von Till at 3 [hereinafter Von Till Aff.]. Mr. Von Till is the NRC project manager responsible for managing the safety and environmental reviews for the White Mesa Mill. His academic degrees are in geology.

⁵² Environmental Assessment for International Uranium (USA) Corporation's Uranium Mill Site White Mesa, San Juan County, Utah, in Consideration of an Amendment to Source Material License SUA-1358 for the Receipt and Processing of the Molycorp Alternate Feed (Nov. 30, 2001) at 2 [hereinafter EA].

⁵³ See IUSA Response at 88-93.

⁵⁴ Tischler Aff. at 2.

⁵⁵EA at 4.

contents of a full truckload, 23 tons, on the highway in or near Moab) would not be a significant issue.⁵⁶ Their conclusion in this regard was based upon their knowledge and familiarity with the transportation contractor's response teams and the characteristics of the Molycorp material. That material is a moist solid with no free liquid. In the event of a truck spill, there would be: no windborne dust, no emitted gases, and no free liquid flow from the spill site. The cleanup of 23 tons of soil-like solid material (a full truckload) could be accomplished within several hours.⁵⁷ The potential spill of Molycorp material would not present any significantly different potential for closure of the highway than would be presented by a spill of any other licensed alternate feed materials. Indeed, the risk might be lower than that associated with a possible spill of many of the chemicals that are currently transported by others along the Highway 191 corridor.⁵⁸

The prime responsibility for response and cleanup lies with the transportation contractor, not the City of Moab as Petitioners appear to believe. Once again, the contractor will have fully trained emergency response personnel and equipment capable of fully remediating a spill of radioactive or hazardous material in a timely manner.⁵⁹ Moreover, Moab is located in Grand County and the county's emergency response personnel are familiar with the characteristics of the Molycorp material and other alternate feed material, as well as with the emergency response plans of transportation contractors with whom they will collaborate in the event of an emergency. 60 Doug Squire, the county's emergency manager, is also Chief Deputy of the Office of the Grand County Sheriff. The resources of that office are part of the emergency response capability that is available to provide assistance to the transportation contractor, if necessary, to protect citizens (including Petitioners) from any effects of an accidental spill of the Molycorp material within the City of Moab's or Grand County's boundaries. 61 The Licensee and Molycorp's transportation contractor are currently planning a "table top" transportation exercise with members of Grand County's Emergency Response Committee during the month of August 2002.62

The EA and Technical Evaluation Report also addressed the transportation aspects of the activity. ⁶³ In the EA, the NRC Staff announced its determination that

⁵⁶ Tischler Aff. at 10; IUSA Response, Exh. 2, Aff. of Douglas Chambers at 6-7 [hereinafter Chambers Aff.]. Dr. Chambers holds a doctorate in physics and is the Director, Risk and Radioactive Studies, for a Canadian consulting firm. He has worked in the area of environmental radioactivity and risk assessment for more than 25 years.

⁵⁷ Tischler Aff. at 10.

⁵⁸ Ibid.

⁵⁹ IUSA Response at 93.

⁶⁰ See IUSA Response, Exh. 6, Letter from Doug Squire, Grand County Emergency Manager, to Ron Hochstein, President and Chief Executive Officer of IUSA (May 20, 2002).

⁶¹ IUSA Response at 93-94.

 ⁶² International Uranium (USA) Corporation's Status Report to the Presiding Officer Regarding Activities Under
 Its Molycorp License Amendment (Docket No. 40-8681-MLA-11) (Aug. 2, 2002).
 63 Technical Evaluation Report Request to Receive and Process Molycorp Site Material (Dec. 3, 2001) at 4-5

⁶³Technical Evaluation Report Request to Receive and Process Molycorp Site Material (Dec. 3, 2001) at 4-5 [hereinafter TER]; EA at 4-5.

there were no significant environmental impacts associated with the movement of the Molycorp material to the Mill.⁶⁴

At the Mill site, material received in the sealed drums will remain in those drums until processed. The pond material will be stored on a bermed concrete pad until processing so there is virtually no chance of any Molycorp material leaching through the concrete pad to the ground below. The Licensee will utilize water sprays, as required, to minimize dusting during dumping operations and storage piles will be inspected and, if necessary, kept moist by water sprays to eliminate windborne dust creation.⁶⁵

c. Processing Through the Mill

The material will be processed in existing Mill equipment utilizing an acid leach (sulfuric acid) system. Because the material is processed as an aqueous stream, there will be no opportunity for generation of airborne dust (including lead dust). 66 If sulfuric acid is added to a lead sulfide sludge in a nonoxidizing (reducing) environment, hydrogen sulfide gas can be generated. In the acid-leach process, oxidants are added with the sulfuric acid, thus creating an oxidizing environment that improves the solubility and leaching efficiency of uranium and minimizes the possibility of hydrogen sulfide gas generation. 67

Independent laboratory tests confirmed that the Molycorp material does not generate hydrogen sulfide gas.⁶⁸ Further, in an oxidizing environment, metal sulfides (such as the lead and iron sulfides present in the Molycorp material) are oxidized to metal sulfates. The conversion to the sulfate form that is currently occurring in the Mountain Pass ponds will continue during storage at White Mesa, both prior to processing and through the Mill process.⁶⁹ Lead sulfate is a less toxic and less environmentally hazardous lead compound than lead sulfide and lead oxides.⁷⁰ In passage through the Mill process, which involves oxidizing the uranium so as to put the uranium product back into solution, the lead sulfide sludge will be converted into lead and sulfate ions, which are water soluble. After extracting the uranium, the spent leachate with the water-soluble iron, lead sulfate, and any residual lead sulfide will be discharged to tailings cell #3 as an acidic, spent-leachate solution.

According to Tischler's uncontroverted testimony, there is no lead oxide in the Molycorp material and, thus, Mr. Love's assertion that the reaction of lead

⁶⁴EA at 4.

⁶⁵ *Id.* at 5.

⁶⁶ Tischler Aff. at 2.

⁶⁷ Id. at 6-7.

⁶⁸ Id. at 7.

⁶⁹ Ibid.

⁷⁰ Ibid.

oxide with chlorine to form halides will pose a processing hazard is irrelevant. Additionally, as Tischler goes on to point out, no chlorine or fluorine is used in the Mill process, so there is no mechanism for contact with either chemical.⁷¹

The Mill is a zero-discharge facility and must evaporate all of the liquids used during processing. In addition to natural evaporation, spray systems are used at various times to enhance evaporation rates and for dust control.⁷² Rainfall in the area is approximately 12 inches per year⁷³ while evapotranspiration rates have been estimated to be over 60 inches per year.⁷⁴

d. Storage in Tailings Cell #3

Waste from the processing of the Molycorp material will be placed in existing cell #3, a 70-acre lined tailings cell equipped with a leak detection system and groundwater monitoring. In the cell, the residual sulfide will be oxidized to sulfate in a short time. No additional reaction between the spent leachate and the material already in the cell is likely to occur. The acidic tailings already in cells contain elevated concentrations of iron, lead, and sulfate, and recent sampling of the tailings solution showed concentrations of up to 10,000 mg/L iron, up to 289,000 mg/L sulfate, and 17 mg/L lead. The high level of iron and sulfate concentration along with other dissolved constituents limits the amount of additional materials that can be dissolved in solution. As mentioned previously, it is estimated that the amount of lead that can be in solution is limited to about 20 mg/L or just slightly higher than the amount presently in solution (17 mg/L) regardless of the total inventory of lead in the tailings cell.

Cell #3 has a 6-inch compacted sandstone bedding layer, an overlying 30-mm layer of PVC, and a leak detection system (LDS) consisting of: (a) a 12-inch-thick compacted sand layer on the upstream face of the downstream retention dike, and (b) a 3-inch-diameter perforated pipe at the toe of the sand layer, connected to (c) a 12-inch-diameter access riser pipe.⁷⁷ The LDS serves the dual purpose of preventing hydrostatic head buildup on the upstream face of the embankment and

⁷¹ Id. at 6. Nonetheless, sodium chlorate may be used as an oxidizing agent in the Mill process and might or might not be a source of chlorine. See Environmental Assessment for Renewal of Source Material License No. SUA-1358 (Feb. 1997) at 12 [hereinafter EA for Renewal]. Because there are no lead oxides in the Molycorp material, even were chlorine to be produced it would be of no practical significance.

⁷² Ground Water Information Report White Mesa Uranium Mill Blanding, Utah (May 1999) at A-13 [hereinafter GWI Report].

⁷³ NUREG-0556, "Final Environmental Statement Related to the Operation of White Mesa Uranium Project, Energy Fuels Nuclear, Inc." (May 1979) at 2-1.

⁷⁴ IUSA Response at 34.

⁷⁵ Von Till Aff. at 2. See also IUSA Response, Exh. 4, Aff. of Michael J. Taylor, P.E. [hereinafter Taylor Aff.], for a complete description of the Tailings Management System. Mr. Taylor is a registered professional engineer with academic degrees in civil engineering.

⁷⁶Pyrih Aff. at 2.

⁷⁷EA for Renewal at 15.

detecting major leakage from the cells. There is also a process for removing fluids from the cell itself that consists of a drain system on top of the PVC liner that (a) assists in tailings consolidation by drawing tailings fluids down through the tailings, (b) creates a low-permeability area of tight fine particles over the liner, and (c) minimizes the hydrostatic head directly on top of the liner. The system also removes free liquids from the top of the cells and, along with the liquid from the drain system, pumps them to cell #1, the evaporation cell. 78 The LDS and the cell drain system are checked daily for liquid level and observations are required to be recorded on a weekly basis (or more frequently if a sudden change occurs). The LDS and cell drain system monitoring and chemical testing requirements are detailed in Condition 11.3 of the basic license issued by the Commission.

e. Geology and Groundwater Hydrology of the Mill Site

There are three separate and identifiable sections of interest in the geologic soil column underlying the Mill site: (1) an upper section of limited permeability containing perched water, (2) a middle-section aquitard (extremely low permeability) that would block the downward passage of fluids, and (3) a lower section of high permeability that contains a major aquifer of quality water.

The uppermost of the three sections is 125 to 150 feet thick and consists of sandstone with discontinuous shale layers. The section is made up of the Dakota and Burro Canyon Sandstone Formations, with the underlying Burro Canyon Formation being approximately 75 feet thick. The tailings cells are located in the Dakota Sandstone Formation.⁷⁹

The Dakota and Burro Canyon Formations are similar in composition and consist of very fine to coarse-grained sandstones with discontinuous random shales. At its interface with the aquitard below (a section with extremely low permeability), the Burro Canyon material becomes argillaceous (claylike) owing to the bentonitic mudstones and claystones of the next lower formation. The Burro Canyon Formation — not generally considered an aquifer because of its very low productivity, low permeability, and discontinuous nature — does contain a perched water zone that occurs at depths of 22 to 33 meters (73 to 109 feet) below the surface. The top of the perched water zone is approximately 70 feet below the bottom of tailings cell #3.80 The thickness of the water lens varies from 17 meters (55 feet) in the northern section to less than 1.5 meters (5 feet) in the southern area. The predominant direction of groundwater flow is to the south-southwest.81

⁷⁸ Taylor Aff. at 4, 8.

⁷⁹EA for Renewal at 7-8.

⁸⁰ IUSA Response at 26.

⁸¹ EA for Renewal at 9.

The quality of the Burro Canyon perched water beneath and downgradient from the Mill site is poor and highly variable with total dissolved solids (TDS) ranging between 1000 and 5000 mg/L. Sulfate concentrations in three upgradient wells varied between 670 and 1740 mg/L. Virtually all of the users of the Burro Canyon Formation water are upgradient of the Mill site and the uses are limited owing to the relatively poor quality of the water and the low productivity, with most wells producing less than 8 gallons per minute. Aside from the monitoring wells used by the Mill, there are no wells within the perched groundwater of the Burro Canyon Formation within 5 miles downgradient of the Site. 82 Groundwater in the perched zone appears in outcroppings in the Canyons to the south southwest. 83

Beneath the Burro Canyon Formation are the Morrison and Summerville Formations, 1100 to 1200 feet of unsaturated, low-permeability layers with numerous clay zones including one 300-foot section consisting of 80% clay. The permeability characteristics of this section are responsible for the perched water layer in the Burro Canyon Formation. The bottom of that water layer is at the interface of the Burro Canyon Formation and the uppermost member of the Morrison Formation, the Brushy Basin Member. That member (200 to 450 feet thick) is the first section of the aquitard and consists of variegated bentonitic mudstone and claystone that prevent the downward percolation of groundwater. The entire 1100- to 1200-foot-thick section, particularly the Brushy Basin portion, constitute an effective barrier (aquiclude or aquitard) to the passage of fluid between the Dakota/ Burro Canyon Sandstones and any layers beneath the Morrison and Summerville Formations.⁸⁴

Immediately beneath the Summerville Formation are the Entrada and Navajo Sandstones that form one of the most permeable aquifers in the region and are separated from the Burro Canyon Formation by at least 1100 feet of very low permeability formations. The Entrada/Navajo Aquifer is artesian and rises in the well pipes some 800 to 900 feet. The aquifer is capable of producing domestic quality water at rates of 150 to 225 gpm and serves as the source of water for the Mill. Two domestic water supply wells drawing from the Entrada/Navajo Aquifer are located 4.5 miles southeast of the Mill site on the Ute Indian Reservation. Recharge of the Entrada/Navajo Aquifer occurs many miles from the Mill site and does not occur from infiltration of rainfall on the surface of the Mill site.

⁸²EA at 3.

⁸³ Ibid.; EA for Renewal at 9.

⁸⁴ IUSA Response at 26-27.

⁸⁵EA for Renewal at 9.

⁸⁶ IUSA Response at 27.

Behavior of Molycorp Tailings Liquid if Cell Liner Leaks

Under the acidic pH conditions (pH < 1.5-2.0) that exist in the tailings cells solutions, the constituents are geochemically mobile. Given, however, the geochemical conditions that exist at the Mill, Pyrih concludes that the constituents dissolved in the tailings solution are physically isolated and geochemically contained.87

According to Pyrih, the soil and bedrock underlaying the cell is calcareous in composition containing calcium carbonate minerals similar to limestone. Any seepage or leakage from the cell or cell liner would react with the carbonate minerals neutralizing the acidic pH of the tailings solution. Calcium would be released and would immediately react with the abundant sulfate in the tailings solution and form insoluble calcium sulfate (gypsum). The gypsum would tend to plug seepage pathways, thus making the soils and bedrock more impermeable to seepage and in effect self-healing the cell area. Additionally, the iron present (estimated at 10,000 mg/L) in the tailings solution would also tend to plug solution pathways in the soil and bedrock. As the tailings solution reacts with the alkaline soil and the pH is raised above 3, the iron forms a very insoluble iron hydrous-oxide gel that would seal off seepage pathways.88

The presence of calcareous soils and bedrock beneath the cell is an additional safeguard in that geochemical reactions promote natural attenuation of the seepage constituents. Natural attenuation is the ability of earthen materials to interact with potential groundwater contaminants and to remove such constituents before the solutions enter groundwater.⁸⁹ According to Pyrih, natural attenuation of heavy metals (including lead) and radionuclides is well known to this Commission and is well documented by laboratory and field investigations at various uranium tailings sites.⁹⁰ In Pyrih's experience, the neutralization of the acidic tailings solutions, the formation of self-healing precipitates and the processes of natural attenuation occur within a space of a few inches in naturally calcareous formations.⁹¹

In a report dated November 23, 1998, the Knight Piesold consulting firm summarized its modeling studies of infiltration and groundwater flow between tailings cell #3 and the perched water zone. Based on its modeling of potentially occurring flow through the cell #3 PVC liner and other assumptions, its time estimate for commencement of downward flow toward the perched zone was 400 years, with another 900 years needed to travel 110 feet through the vadose zone to the perched water-bearing zone, meaning that a total of 1300 years

⁸⁷ Pyrih Aff. at 3.

⁸⁸ *Id.* at 2-3. 89 *Id.* at 3-4.

⁹⁰ *Id.* at 4.

would be necessary for infiltration to reach the perched zone.⁹² Obviously using different assumptions than Knight Piesold had employed, Energy Fuels Nuclear estimated it would take 50 to 150 years for moisture to travel from the bottom of a tailings cell to the perched water zone.⁹³ After entering the perched zone in the Burro Canyon Formation, the travel time for seepage from a tailings cell to the downgradient edge of the mesa has been estimated by Energy Fuels Nuclear to be at 8,900 to 13,000 years.⁹⁴

In sum, the Entrada/Navajo regional aquifer is separated from the perched water by at least 1100 feet of impermeable material that effectively blocks the passage of any fluids. Unless passage to the Entrada/Navajo Formation is assisted by man-made error such as an ill-engineered or open-drilled well shaft that might provide an open conduit through the aquiclude barrier, there is virtually no chance of contaminating this major aquifer with tailings cell constituents.

g. Monitoring and the Use of Indicators

Groundwater has been monitored at the White Mesa Site for almost 25 years. Preoperational groundwater sampling began in 1977 and continued until Mill startup in 1980. Since startup, the Mill has collected and reported quarterly water quality data to the Commission. The Mill's current detection monitoring system, which is called the Point of Compliance (POC) program, was initiated in 1997 and has been accepted by NRC as the basis for the Mill's ongoing detection monitoring program.⁹⁵

The POC program involves quarterly sampling of six selected wells located in the Burro Canyon perched water zone (screened in the perched groundwater zone) and hydraulically downgradient and adjacent to the tailings cells. The wells are sampled for four key indicator chemicals: chloride, nickel, potassium, and natural uranium. These chemicals were specifically selected because of their relative abundance in the tailings cells and their relatively low concentration in the perched groundwater. By showing a high mobility in groundwater, properly selected chemical parameters can serve as early warning indicators for the potential arrival of other slower moving potential groundwater contaminants such as lead. By

⁹²GWI Report, Attach. 5, Knight Piesold Report and Correspondence (Nov. 23, 1998) at 10. In actuality the distance that should have been considered, the distance from the bottom of the tailings cell, is 70 feet. Based on this updated distance, however, it would still take roughly 970 years to reach the perched water zone. See IUSA Response at 26.

Response at 26.

93 EA for Renewal at 16.

⁹⁴ Ibid.

⁹⁵ IUSA Response at 29-30.

⁹⁶ See IUSA Response at 30 for a detailed listing of the criteria for selection of POC indicator parameters, which includes the characteristics of travel at or near the speed of groundwater and of not being significantly retarded by natural attenuation.

⁹⁷ Ibid.

Nickel, one of the selected indicator parameters, is not affected by the geochemical processes that attenuate the movement of most heavy metals in groundwater and is much more mobile than lead. As such, because of its relative abundance in the tailings liquid compared to its concentration in either the perched water of the Burro Canyon Formation or the groundwater in the Entrada/Navajo Formation (a ratio of approximately 800 to 1), nickel serves as an early indicator of the approach of seepage that might contain other heavy metals including lead. 98 Uranium, another of the key indicator parameters, is much less affected by the geochemical processes that attenuate the movement of natural radionuclides and is much more mobile than thorium. Uranium therefore serves as an early warning of the approach of seepage that may contain thorium.⁹⁹

The concentrations of the indicator parameters vary considerably not only from one test well to another, but also within the same well. The poor quality of the perched water is generally attributable to its dissolving minerals from the Brushy Basin that serves as the confining formation for the perched water. The average TDS for the well sites in the perched zone varied from 1200 to 5000 mg/L and average sulfate concentrations range from 600 to 3000 mg/L.¹⁰⁰ The variability within individual wells and between the various wells in the perched groundwater is attributable to several factors including:

- the slow groundwater velocities that allow water to equilibrate with local mineralogy;
- the mineralogical variability of the host rock unit;
- changes in the saturated thickness of the aquifer; and
- the partial penetration of some wells into the Brushy Basin Member. 101

Sampling techniques and sample handling particularly for trace elements might also be considered to contribute to the variability of analyses results of groundwater sampling.102

Because of this variability of the groundwater chemistry, comparison of individual well groundwater chemistry data to a single background groundwater well was not deemed an appropriate method of monitoring potential cell leakage or groundwater impacts. Baselines for comparison with future samples were

⁹⁸ Pyrih Aff. at 4. See Summary of Groundwater Background Water Quality and Other Water Quality Studies for the White Mesa Mill (Sept. 15, 2000), Attach. 11, Points of Compliance White Mesa Uranium Mill (Sept. 1994).

⁹⁹ Pyrih Aff. at 4-5.

 $^{^{100}}$ Ibid.

¹⁰¹ Response of International Uranium (USA) Corporation to Ute Mountain Ute Tribe's Written Presentation (Docket No. 40-8681-MLA-11) (Apr. 9, 2002) [hereinafter IUSA Response to Ute Tribe], Exh. 3, Evaluation of Eight Other Parameters (Nov. 29, 1999), at 8.
¹⁰² IUSA Response to Ute Tribe, Exh. 1, Aff. of Samuel J. Billin, P.E., at 3. Mr. Billin is a registered professional

engineer with academic degrees in civil engineering

established on a well-by-well basis with a separate control chart for each well and for each of the indicator parameters. If the established limits on the control charts are exceeded for a parameter at a POC well, a program of confirmatory sampling is required. This would involve monthly sampling for 6 months and a separate analysis of the variance to determine whether there is a significant difference between these samples and those collected prior to the confirmatory sampling program. If the data are significantly different, a corrective action plan will be developed. This intra-well approach for assessing water quality trends was approved by the NRC for the POC program and has been utilized by the Licensee since 1997.¹⁰³

Table A that follows shows (1) the relative concentrations of chlorides, potassium, and nickel in the slimes drainwater of Cell No. 2, which are abstracted from Table 1 "Average Concentrations of Indicator Parameters" of the Titan Report; and (2) the average concentrations of indicator chemicals in five of the six selected POC wells. The well data summarize the results of chemical analyses dating from October 1979 to November 1992, and so can be considered as baseline concentrations of indicator parameters for comparison with future measurements. The chemical concentration data in Table A, even though the values shown are averages of many samples, demonstrate the variability of the indicator parameters from well to well. 104 The ratio of the concentration of indicator parameters in the slimes water to the concentration in the various test wells tends to verify their selection as good indicator parameters.

 $\label{eq:Table A} \mbox{ Average Concentrations of Indicator Parameters Used in POC Program (mg/L)}$

Location	Chloride	Potassium	Nickel
Cell #2 slimes drainwater -May 1991	3191	251	7.2
Cell #2 slimes drainwater -Sept 1991	2573	286	12.0
Well #5	55	9	0.007
Well #11	35	8	0.008
Well #12	66	14	0.016
Well #14	20	13	0.016
Well #15	40	11	0.016
Ratio of average slimes concentration to average well concentration	66.7 to 1	24.4 to 1	800 to 1

¹⁰³ Staff Response at 25-26; Von Till Aff, at 8-9; Response of International Uranium (USA) Corporation to Presiding Officer's Request for Additional Information (Docket No. 40-8681-MLA-11) (July 15, 2002) at 2 [hereinafter IUSA Response to RAI].

¹⁰⁴ See supra, p. 136 for a discussion of variability.

Table B summarizes the data collected under the POC program during the period March 1997 through November 2001.

Table B

Average Concentrations and Range of Indicator Parameters Found in POC Wells (mg/L)

(Fifteen (15) quarterly samples March 1997 to November 2001)*

(With average values for chloride and potassium from Table A in parentheses)

Location	Chloride	Potassium	Nickel
Well #5	52.5 (55) range = 45 to 70 mg/L	7.76 (9) range = 6.7 to 11.9 mg/L	range = 0.049 to < 0.05mg/L
Well #11	33.7 (35) range = $28 \text{ to } 44 \text{ mg/L}$	6.73 (8) range = 5.6 to 11.9 mg/L	< 0.05
Well #12	53.3 (66) range = 28 to 73 mg/L	11.54 (14) range = 5.8 to 13.1 mg/L	< 0.05
Well #14	21.6 (20) range = 9 to 27 mg/L	11.38 (13) range = 10.2 to 13 mg/L	< 0.05
Well #15	42 (40) range = 27 to 54 mg/L	11.03 (11) range = 9.3 to 23.0 mg/L	<0.05
Well #17	32.81 range = 27 to 45	121.57 range = 9.6 to 23 mg/L	<0.05

^{*}Except for potassium in well #14, where sampling began on September 30, 1999.

As comparison of the average concentration values and range of values for chloride and potassium in each of the listed wells in Table B with the average concentration values for chloride and potassium in Table A (shown in parentheses in Table B) clearly indicates, the perched water has not been significantly impacted by liquids from the storage cells.

For three of the five test wells (wells #5, #11, and #12), the pre-1993 average values of chloride and potassium from Table A exceeded the average values for those parameters measured during the period March 1997 to November 2001. For well #14, the average of the earlier data for potassium exceeded the average concentration for the 1997-2001 POC data. The values for chloride in wells #14 and #15 were slightly higher in the POC program data, but the average value of the earlier data was well within the range of the POC values. In test well #15, the average value for potassium was essentially identical (11.03 mg/L versus 11 mg/L).

Ultimately, in seven of ten comparisons made between the most recent data (1997-2001 POC data) and average chloride and potassium data collected earlier (1992 and earlier), the most recent data showed a lower value. Moreover, in those cases where the values contained in more recent data exceeded those in the earlier data, the differences were not significant. These results and comparisons

thus clearly indicate that the quality of the perched water has not been impacted by any discharges from the tailings cells. 105

Appendix B of the Titan Report, which is entitled "Water Quality Data," contains, among other things, chronological lists of test results for thirtyfive chemical parameters dating from October 1979 to November 1992. 106 An examination of these chronological chemical data does not show any significant trend or increase in any of the parameters that might migrate from the tailings cells. In fact, the data generally show a trend of relatively uniform concentration or a modest reduction over time, thus confirming that the perched water some 70 feet below the tailings cells is not receiving any chemical-laden liquids from the Mill's tailings cells.

Chloroform Plume

The NRC Staff notes that the only documented evidence of groundwater pollution above background levels provided by Petitioners concerns the chloroform that has been detected in monitoring wells at the site. 107 The State of Utah is conducting an ongoing investigation to ascertain the source of the contamination. While not as yet confirmed, the most likely source of the detected chloroform appears to be an abandoned scale house leach field that received laboratory waste containing chloroform more than 20 years ago, prior to Mill operations. 108 That the leach field indeed is the origin of this chloroform is supported by several factors, including (1) the general distribution of the chloroform plume in the perched water; (2) the location of the scale house leach field upgradient of the detected chloroform; (3) the correlation between elevated nitrate concentrations (likely waste discharged to the leach field) and elevated chloroform concentrations in the monitoring wells with elevated chloroform levels; and (4) the absence of any known continuing chloroform source, indicating that when the abandoned scale house ceased operations the source of chloroform was eliminated. 109 In any event, the Petitioners pointed to nothing that indicated a likely association between the chloroform plume and Mill activity.

 $^{^{105}\}mathrm{A}$ like comparison could not be made for nickel because the POC values were presented as being less than a value of 0.05 mg/L. Nonetheless, because this value is less than the established limit on the nickel parameter control chart, there is no evidence that the perched water is being impacted by the chemical constituent nickel, indeed, or any other constituent of the tailings cells.

¹⁰⁶ IUSA Response to RAI, Attach. 3, Titan Report App. B.

¹⁰⁷ Staff Response at 30.

¹⁰⁸ IUSA Response, Exh. 3, Aff. of Stewart J. Smith at 3. Mr. Smith is a hydrologist with an academic degree also in geoscience.
109 *Ibid*.

i. Cooperative Studies with the State of Utah

The Licensee has voluntarily agreed with the request of the State of Utah's Department of Environmental Quality (UDEQ) that the Mill obtain a Utah Groundwater Discharge Permit (GWDP) and implement supplementary groundwater monitoring measures, which include monitoring for additional parameters. The Licensee and UDEQ are currently working on the form and details of the GWDP. In a report to UDEQ submitted on October 3, 2001, the Licensee provided an evaluation of additional constituents that may be used as further parameters for monitoring purposes and serve as bases for assigning compliance limits to those monitoring parameters for the GWDP. In fact, since May 1999, the Licensee has voluntarily sampled for additional parameters in cooperation with UDEQ. The cooperative program with UDEQ involves split sampling of up to seventeen monitoring wells, including the POC wells and any other wells that are not dry at the time of sampling, for additional UDEQ-selected parameters, including major ions; physical properties; total metals (phosphorus and total uranium); dissolved metals (including lead); nitrogen (ammonia as nitrogen and nitrate+nitrite as nitrogen); gross alpha; and semivolatile and volatile organic compounds.110

III. CONCLUSION

In the final analysis, the venerable adage to the effect that the proof of the pudding is in the eating applies in full measure here. Notwithstanding its relative magnitude, there is nothing in the record at hand that permits, let alone compels, a finding that the Mill activities over the course of the past two decades might have occasioned significant harm to the environment. Thus, the sole question becomes whether there is the required record support for the proposition that was at the root of the grant of the Petitioners' hearing requests: namely, that, because of the high lead content of the Molycorp material, the activity hereinvolved nonetheless does pose such a threat.

On this score as well, no evidentiary foundation has been provided that would enable an affirmative answer. To the contrary, the information supplied by the Licensee and the NRC Staff, as outlined above, has persuaded me (and Judge Cole as well), that the processing of this material does not appear to present an environmental threat above and beyond that associated with the Mill activities conducted over the years under the aegis of the basic license and the numerous amendments thereto. In the end, Petitioners' claims to the contrary rest on little

¹¹⁰IUSA Response at 23-34.

more than mere conjecture given that what has been placed before us in their written presentations and other submissions fails totally to support their assertions.

Accordingly, based upon a full consideration of the entire record in this proceeding, the NRC Staff's December 11, 2001 issuance of the challenged license amendment hereby is, as it must be, *upheld*.

If so inclined, the Petitioners and the Ute Mountain Ute Tribe may seek Commission review of this Decision within fifteen (15) days in the manner prescribed in 10 C.F.R. §§ 2.1253 and 2.786. In addition, because it has now achieved finality, the Tribe is free at this time to seek review, as well, of the rejection several months ago in LBP-02-11, *supra*, of its assertion that the issuance of the Molycorp license amendment violated certain cited Executive Orders.

It is so ORDERED.

BY THE PRESIDING OFFICER¹¹¹

Alan S. Rosenthal ADMINISTRATIVE JUDGE

Rockville, Maryland August 28, 2002

¹¹¹ Copies of this Initial Decision were sent this date by e-mail transmission to the counsel or other representative of all of the participants in this proceeding.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 70-3098-ML

DUKE COGEMA STONE &
WEBSTER
(Savannah River Mixed Oxide Fuel
Fabrication Facility)

September 4, 2002

In this proceeding to authorize construction of a mixed oxide ("MOX") fuel fabrication facility, the Commission accepts the Board's recommendations to apply 10 C.F.R. Part 2, Subpart I, and 10 C.F.R. § 2.744(e) to the adjudicatory proceeding.

RULES OF PRACTICE: LICENSING BOARDS

LICENSING BOARDS: AUTHORITY

Pursuant to 10 C.F.R. § 2.1209(k), a presiding officer has the power to recommend to the Commission that procedures other than those authorized under 10 C.F.R. Part 2, Subpart L, be used in a particular proceeding.

RULES OF PRACTICE: PROTECTION OF SENSITIVE INFORMATION

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART I)

Part 2, Subpart I, of 10 C.F.R., dealing with special procedures applicable to adjudicatory proceedings involving restricted data and/or national security information, by its own terms is applicable only to 10 C.F.R. Part 2, Subpart G, proceedings.

RULES OF PRACTICE: HEARING PROCEDURES FOR MOX FUEL FABRICATION FACILITY

The Commission must approve the use of any non-Subpart L hearing procedures in this modified Subpart L proceeding. *See Safety Light Corp.* (Bloomsburg Site Decontamination and License Renewal Denials), CLI-92-13, 36 NRC 79, 87 (1992); 10 C.F.R. § 2.1209(k).

RULES OF PRACTICE: HEARING PROCEDURES FOR MOX FUEL FABRICATION FACILITY; PROTECTION OF SENSITIVE INFORMATION

The Commission accepts the Board's recommendations to apply 10 C.F.R. Part 2, Subpart I, and 10 C.F.R. § 2.744(e) procedures for handling classified and safeguards information in a Subpart G adjudication, to this modified Subpart L proceeding.

MEMORANDUM AND ORDER

This case involves the application of Duke Cogema Stone & Webster ("DCS") for authorization to construct a mixed oxide ("MOX") fuel fabrication facility. On July 18, 2002, the Board certified to the Commission the question whether the appropriate provisions of 10 C.F.R. Part 2, Subparts I and G, concerning the procedures for dealing with classified and safeguards information should be applied in this modified Subpart L proceeding. We accept the Board's certification.

¹ See unpublished Memorandum and Order (Certifying Question to the Commission) (July 18, 2002). Pursuant to 10 C.F.R. § 2.1209(k), a presiding officer has the power to recommend to the Commission that procedures other than those authorized under 10 C.F.R. Part 2, Subpart L, be used in a particular proceeding.

I. BACKGROUND AND DISCUSSION

As this case has been before the Commission several times, we have already described its background extensively and see no need to repeat that discussion here.² Recently, Intervenor, Georgians Against Nuclear Energy ("GANE"), attempted to apply for security clearances for three individuals who will prepare GANE's evidentiary case.³ GANE anticipates that it will need the clearances in this proceeding to review as yet unidentified classified information.⁴ Because a security clearance takes months to obtain, GANE states that it cannot afford to wait until the documents are identified to proceed with its application. GANE also recognizes that some of the information may be classified by the Department of Energy ("DOE") rather than by the NRC, and the two agencies may have conflicting requirements for security clearances.⁵

To ensure that all applicable regulatory provisions are identified and followed, the Board requested DCS and the NRC Staff to file responses to GANE's application.⁶ Both the Staff and DCS noted that 10 C.F.R. Part 2, Subpart I, dealing with special procedures applicable to adjudicatory proceedings involving restricted data and/or national security information, by its own terms is applicable only to 10 C.F.R. Part 2, Subpart G, proceedings. This proceeding, however, is a "modified" Subpart L proceeding.⁷ Since the Commission must approve the use of any non-Subpart L hearing procedures, the Board certified this threshold procedural issue to us. In its certification order, the Board recommended adoption of the procedures in 10 C.F.R. Part 2, Subpart I, along with the Subpart G procedures for dealing with safeguards information contained in 10 C.F.R. § 2.744(e), because Subpart L contains no procedures for dealing with classified and safeguards information.

 $^{{}^{2}\}mathit{See}, \mathit{e.g.}, \mathsf{CLI-02-7}, \mathsf{55}\,\mathsf{NRC}\,\mathsf{205}, \mathsf{212-13}\,(2002); \mathsf{CLI-02-9}, \mathsf{55}\,\mathsf{NRC}\,\mathsf{245}, \mathsf{247-48}\,(2002).$

³ See "Georgians Against Nuclear Energy's Application for Security Clearances" (June 7, 2002).

⁴The Board pointed out several months ago that section 13.1.4.3 of the Staff's Standard Review Plan for the MOX fuel fabrication facility stated that the details of the physical protection system for the MOX facility should be classified as Confidential National Security Information. See LBP-01-35, 54 NRC 403, 429 (2001).

⁵ A Memorandum of Understanding (''MOU'') between the NRC and the DOE is under development to resolve dual regulation concerns, including whether the NRC or the DOE should be responsible for granting security clearances for access to classified information regarding the MOX facility. The NRC Staff anticipates that an approved MOU will not be signed until at least the spring of 2003. See "NRC Staff's Response to Georgians Against Nuclear Energy's Application for Security Clearances' at 14 (July 5, 2002). The Staff recently informed the Commission that the DOE has proposed that it take on this responsibility pending completion of the MOU. See Memorandum from Robert Pierson, NRC, Board Notification: 2002-02 (July 31, 2002), with attached letter from K.E. Baker, Acting Deputy Administrator, National Nuclear Security Administration, DOE, to W.D. Travers, Executive Director of Operations, NRC (July 17, 2002).

⁶ See unpublished Memorandum and Order (June 12, 2002).

⁷The Commission, in its order referring this case to the Chief Administrative Judge of the Atomic Safety and Licensing Board, determined that Subpart L, with the addition of certain enumerated enhancements from Subpart G, would govern this proceeding. *See* CLI-01-13, 53 NRC 478, 480-82 (2001).

⁸ See Safety Light Corp. (Bloomsburg Site Decontamination and License Renewal Denials), CLI-92-13, 36 NRC 79, 87 (1992); 10 C.F.R. § 2.1209(k).

We agree with the Board's recommendation. The MOX proceeding already contains some elements of Subpart G, and the procedures for handling classified and safeguards information in a Subpart G adjudication are appropriate here as well. The Commission expresses no opinion as to GANE's ultimate need for security clearances. We leave this and other issues raised by DCS and the Staff to the Board for its determination in the first instance.

II. CONCLUSION

The Commission *accepts* the Board's recommendations to apply 10 C.F.R. Part 2, Subpart I, and 10 C.F.R. § 2.744(e) to the instant adjudicatory proceeding. The Commission also *directs* the NRC Staff to keep the Board apprised of changes in the status of the Memorandum of Understanding between the NRC and the Department of Energy regarding the two agencies' responsibilities for granting security clearances.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 4th day of September 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 72-22-ISFSI

PRIVATE FUEL STORAGE, L.L.C. (Independent Spent Fuel Storage Installation)

October 1, 2002

NATIONAL ENVIRONMENTAL POLICY ACT: ENVIRONMENTAL JUSTICE

Executive Order 12898, by its own terms, established no new rights or remedies, but was intended "merely to "underscore" certain provision[s] of existing law that can help ensure that all communities and persons across this Nation live in a safe and healthful environment." See Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 102 (1998).

NATIONAL ENVIRONMENTAL POLICY ACT: ENVIRONMENTAL JUSTICE

A disproportionate distribution of financial benefits of a project cannot form the basis of an environmental justice complaint, which requires a finding of disproportionate adverse human health or environmental effects.

NATIONAL ENVIRONMENTAL POLICY ACT: ENVIRONMENTAL JUSTICE

The desirability of a "broad and informal balancing" of costs and benefits does not call for an investigation into perceived financial misdeeds going well beyond the natural or anticipated environmental effects of a proposed project.

NATIONAL ENVIRONMENTAL POLICY ACT: ENVIRONMENTAL JUSTICE

The executive order on environmental justice does not transform NEPA into a general "civil rights law." *Claiborne*, CLI-98-3, 47 NRC at 106. The Commission will not use NEPA as authority to conduct an investigation into alleged corruption in tribal leadership, a major undertaking "far afield from the NRC's experience and expertise."

NATIONAL ENVIRONMENTAL POLICY ACT: ENVIRONMENTAL JUSTICE

An environmental justice inquiry cannot depend upon splitting the pertinent environmental justice population into competing "subgroups." Otherwise, "environmental justice" becomes simply a device for ventilating intramural disputes within communities — which is not a function Congress has assigned to the NRC and is not a function in which we have skill or expertise.

RULES OF PRACTICE: CONTENTIONS (SCOPE)

The NRC's longstanding practice requires adjudicatory boards to adhere to the terms of admitted contentions in order to give opposing parties "advance notice of claims and a reasonable opportunity to rebut them." *See Claiborne*, 47 NRC at 105.

NATIONAL ENVIRONMENTAL POLICY ACT: COST/BENEFIT ANALYSIS

INDIANS: TRIBAL SOVEREIGNTY

The NEPA cost/benefit analysis cannot justify an inquiry into a tribe's internal financial affairs, which federal law protects from outside review.

NATIONAL ENVIRONMENTAL POLICY ACT: COST/BENEFIT ANALYSIS

INDIANS: TRIBAL SOVEREIGNTY

An Indian tribe does not waive its sovereign immunity by intervening in an NRC licensing proceeding to protect its tribal interests. Waivers of sovereign immunity, in Indian cases as elsewhere, are not lightly implied or presumed. *See Santa Clara Pueblo v. Martinez*, 436 U.S. 49, 59 (1978).

MEMORANDUM AND ORDER

On February 22, 2002, the Atomic Safety and Licensing Board in this proceeding issued a decision that set for hearing some aspects of an "environmental justice" contention filed by Intervenor Ohngo Gaudadeh Devia (OGD).¹ At the urging of another Intervenor, the Skull Valley Band of Goshute Indians, we granted interlocutory Commission review of the Board ruling and a stay of all proceedings related to environmental justice.² Our order also invited the United States Bureau of Indian Affairs to submit an *amicus curiae* brief.

The Board ordered an environmental justice hearing to resolve the question whether the individual members of OGD, including Band members who oppose the PFS project, might suffer the environmental impacts of the project without enjoying its financial benefits. The Board found that the accuracy of the NRC's Environmental Impact Statement ("EIS") had been called into question by allegations that funds paid on the PFS lease had been misappropriated, thereby raising a question whether the project's adverse environmental consequences would in fact be offset by economic benefits. The Board directed the litigants to prepare for a hearing on payments made by PFS to date and on the manner in which the Band has handled, spent, and distributed the payments.

Before us, on interlocutory appeal, the Band, PFS, and the NRC Staff argue that NRC hearing boards lack legal authority, under the National Environmental Policy Act ("NEPA") or otherwise, to adjudicate claims requiring an inquiry into internal financial and governance matters of a federally recognized sovereign Indian tribe such as the Skull Valley Band. The Bureau of Indian Affairs, in response to our request for an *amicus* brief, also opposes the Board decision. OGD, on the other hand, fully supports it.

Without for a moment discounting the seriousness of OGD's claims of financial impropriety, we do not agree with the Board that such claims fall within NEPA or

¹LBP-02-8, 55 NRC 171 (2002) (summary disposition ruling on OGD Contention O).

²CLI-02-8, 55 NRC 222 (2002).

justify an NRC hearing on the issue. OGD's allegations show, at most, a disparity in the financial benefits that the PFS project may bring to different members of the Skull Valley Band. But OGD's financial allegations do not display a disparity in the project's *environmental* impacts — the focus of a NEPA-environmental justice inquiry at the NRC.³ Moreover, OGD's original environmental justice contention, as admitted, contained no hint of its financial claims. It is neither fair nor consistent with our usual practice to allow a last-second infusion of new elements into a previously admitted contention.⁴ Finally, even were we inclined to overlook these flaws in OGD's claims, we are not nearly as convinced as the Board that an NRC hearing into a tribal Chairman's alleged mishandling of tribal funds could go forward without infringing tribal sovereignty, a concern pressed forcefully in the *amicus curiae* brief of our sister federal agency, the Bureau of Indian Affairs.

The Board was well aware that OGD's environmental justice claims might require excessive NRC probing into internal tribal affairs. It attempted conscientiously to avoid the problem by postponing definitive decisions until further facts emerged at a hearing.⁵ But, as we see the environmental justice issue, no hearing should take place. Claims of financial and political corruption inside the Skull Valley tribe do not belong in our hearing process under the rubric of environmental justice or NEPA. Our mission is to protect the public health and safety and the environment. We lack the expertise, the resources, and the statutory mandate to get to the bottom of tribal corruption charges. Other government bodies, including the Federal Bureau of Investigation and the Bureau of Indian Affairs, are far better positioned to consider OGD's complaint.

I. BACKGROUND

OGD is a group of individuals, some of whom are Skull Valley Band members and some of whom are not, some of whom live on the Skull Valley reservation and some of whom do not, all of whom are opposed to the PFS project.

In the Board's original ruling on Intervenors' proposed contentions it rejected all of OGD's proposed contentions except OGD O, which relates to environmental justice. That contention claimed that the license application "poses undue risk to public health and safety because it fails to address environmental justice issues." "It is not just and fair," the contention stated, "that this community

³ See Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 100-110 (1998).

⁴ See id. at 104-06. See also Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 22 (1998).

⁵ See LBP-02-8, 55 NRC at 184-85.

⁶ See LBP-98-7, 47 NRC 142, 233 (1998).

be made to suffer more environmental degradation at the hands of the NRC." OGD's contention pointed to "a ring of environmentally harmful companies and facilities" that surround the site of the proposed PFS facility, including the Dugway Proving Ground, the Deseret Chemical Depot, the Envirocare mixed waste storage facility, the APTUS Hazardous Waste Incinerator, and the Grassy Mountain Hazardous Waste Landfill.8 The Board admitted OGD's environmental justice contention, "with the caveat that the contention is limited to . . . disparate impact matters," including cumulative impacts from the nearby facilities and effects on property values. 9

PFS moved for summary disposition on OGD's environmental justice contention. In opposing PFS's motion, OGD filed a lengthy affidavit by a member, Sammy Blackbear, that made a number of allegations against tribal Chairman Leon Bear. Among other things, Blackbear claimed that Chairman Bear had misappropriated funds paid by PFS under the lease it entered into with the Band in 1997. Blackbear alleged that Chairman Bear had used these funds both for personal gain and to bribe other tribe members to support his administration. Blackbear also stated that tribe members who opposed the PFS project or Chairman Bear's chairmanship of the tribe were wrongfully denied any share in the proceeds of the lease. 11

The Board granted the motion for summary disposition in part and denied it in part.¹² It found that there was no remaining issue of fact as to cumulative impacts from the surrounding facilities or effects on property values.¹³ The Board found, however, that the claim that the PFS proceeds had not been used to benefit all members of the tribe raised a litigable question whether there was a minority "subgroup" of the tribe that would suffer a disproportionate environmental impact from the project.¹⁴

The Board reasoned that because of "unchallenged" environmental effects — operational noise, visual impact, and interference with the Goshutes' traditional lifestyle (a "cultural insult") — OGD's claim that some Goshutes are not

⁷ *Id*.

⁸ *Id*.

⁹ *Id*.

¹⁰The lease provided for the immediate payment of certain fees to keep the lease option open until construction can begin. Because the land is held in trust by the United States for the Band, the Secretary of the Interior, through the Bureau of Indian Affairs, must approve the lease. See 25 U.S.C. §415(a). The BIA gave conditional approval in May 1997. It conditioned final approval on a finding that the lease is in the Band's best interest. See Brief of Amicus Curiae Bureau of Indian Affairs in the Commission's Interlocutory Review of the Licensing Board's Decision in LBP-02-08 Concerning Contention OGD 0 (Environmental Justice), at 3 (Apr. 15, 2002).

¹¹The Skull Valley Band has not refuted the allegation that some members have received distributions of the PFS lease payments while others have not, arguing instead that this allegation is irrelevant. For the purposes of this Order, we will assume the truth of the facts alleged by the party opposing summary disposition — i.e., OGD. See Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102 (1993).

¹² See LBP-02-8, 55 NRC at 203.

¹³ See id. at 193-97.

¹⁴ See id. at 189-91.

enjoying the financial benefits of the lease constitutes a claim of disproportionate environmental burden "from a NEPA balancing standpoint." According to the Board, OGD's claim of cumulative environmental impacts and impacts on property values were not substantiated and could not proceed to hearing, "[b]ut the same cannot be said" for the claimed disproportionate impact on OGD's members from the uneven sharing of the project's lease income. ¹⁶ This issue, the Board ruled, "can be resolved only at a hearing."

To resolve the lease income issue, the Board ordered PFS and the Skull Valley Band to produce records showing how much money had been paid under the lease and how it had been distributed. The Board also suggested that the NRC Staff or the Skull Valley Band might provide evidence from a representative of the Bureau of Indian Affairs "detailing his response to the relevant allegations in the Blackbear affidavit and setting out his understanding of the BIA's authority and responsibility to bring about change in the situation." Finally, the Board strongly urged the possibility of settlement.

In directing a hearing on OGD's environmental justice claim, the Board rejected two threshold arguments: (1) that OGD's financial misconduct claim, if litigated, would interfere in internal tribal governance; and (2) that OGD's financial claim fell outside the scope of its original environmental justice contention. On tribal governance, the Board found the doctrine against outside scrutiny 'not absolute,' but dependent upon a 'fact-driven' inquiry into whether this particular case represents a 'special situation' allowing an NRC environmental justice review, notwithstanding the usual policy against 'interfering in intratribal disputes.'' As for the argument that OGD's environmental justice contention, as originally framed, did not cover financial misconduct, the Board said that the 'argument has something to commend it, but not enough.'' The Board noted that the original contention had complained of 'negative . . . sociological impacts,' that 'later developments' concerning uneven distribution of the lease income shed 'new light' on the contention, and that claims made in discovery gave other parties in the case sufficient advance notice of OGD's concerns.

¹⁵ *Id.* at 197.

¹⁶ Id. at 193.

¹⁷ *Id.* at 198.

¹⁸ See id. at 199-200.

¹⁹ Id.

²⁰ See id. at 201-03.

²¹ See id. at 184-89.

²² See id. at 184-85.

²³ *Id.* at 186.

²⁴ See id. at 186-89.

Subsequently, the Commission granted interlocutory appellate review of the Board decision on the environmental justice contention, and stayed all hearing activity on the contention pending the Commission's decision.²⁵

II. DISCUSSION

In 1994, President Clinton issued Executive Order 12898, which instructed federal agencies to consider "environmental justice" in their decisions — that is, whether a proposed government action will have a disproportionately high and adverse environmental impact on minorities and low-income populations. In 1998, we analyzed the executive order, and its meaning for the NRC, in Claiborne. We pointed out that "[t]he executive order, by its own terms, established no new rights or remedies," but was intended "merely to "underscore certain provision[s] of existing law that can help ensure that all communities and persons across this Nation live in a safe and healthful environment." At the NRC, we said, the "only 'existing law' conceivably pertinent . . . is NEPA, a statute that centers on environmental impacts." At the outset of the current proceeding we reminded all parties of our Claiborne guidance.

With this background in mind, we turn now to how NEPA and the executive order on environmental justice affect this case. Several considerations, separately and together, persuade us to set aside the Board order requiring a hearing on OGD's "environmental justice" claim of financial mismanagement or chicanery.

A. There Is No Disproportionate Environmental Impact

Environmental harm is NEPA's "core interest." The essence of an environmental justice claim, in NRC practice, is disparate environmental harm. 22 The executive order on environmental justice, on which the Board bases its decision, calls on agencies to determine whether a proposed action would have "disproportionately high and adverse human health or environmental effects." 33

Here, though, OGD and the Board have focused on disparate economic benefits, not on disparate environmental effects. The Board's reasoning starts

²⁵ See CLI-02-8, 55 NRC at 226.

²⁶ 59 Fed. Reg. 7629 (Feb. 11, 1994).

²⁷ CLI-98-3, 47 NRC at 100-02.

²⁸ Id. at 102 (emphasis in original).

²⁹ *Id.*, *quoting* Memorandum for the Heads of All Departments and Agencies, 30 Weekly Comp. Pres. Doc. 279 (Feb. 14, 1994).

³⁰ See CLI-98-13, 48 NRC 26, 35-36 (1998).

³¹ Claiborne, CLI-98-3, 47 NRC at 102.

³² See id. at 106-10.

³³ See LBP-02-8, 55 NRC at 181 n.21, quoting E.O. 12898, §1-101 (emphasis added).

to go awry when it conflates economic benefits and environmental effects. In actuality OGD makes no claim that its members will suffer a disproportionate environmental injury when compared to other members of the tribe, and there is no evidence that they will. The Board acknowledged that the environmental impacts are the same for all living on the reservation:

The disparity comes about, then, not in the direct environmental burden, but from the net impact as measured by the NEPA-sanctioned balance of environmental burdens and economic benefits — some obtain an economic benefit from the project to offset its environmental burdens, while others do not, experiencing only the burdens. We hold that this type of net disparity can be as much a matter for environmental justice review under NEPA — a statute that sets up a process in which the classic burden/benefit balance has always been central — as is the more usual disparate environmental burden viewed alone. ³⁴

In our view, the executive order, and NEPA generally, do not call for an investigation into disparate economic benefits as a matter of environmental justice. Even though money (or social services) from the PFS lease payments might make it easier for some to tolerate noise, cultural insult, and unsightliness near the facility, the payments don't 'mitigate' environmental harms in the sense of eliminating or minimizing them.³⁵ We see nothing in the executive order or in NEPA to suggest that a failure to receive an economic benefit should be considered tantamount to a disproportionate environmental impact.

Notably, the executive order asks agencies to consider environmental justice implications only when disparate environmental effects are "high and adverse." Here, the EIS found the overall environmental impacts on reservation residents small or "small to moderate," a finding not now in dispute before the Board. There is no reason, therefore, to conclude that persons who fail to receive their desired share of the PFS lease money are suffering a "high and adverse" environmental impact. Such persons may well have a grievance against their tribal leadership, but that grievance cannot fairly be considered "environmental." None of this is to say that under NEPA our staff and hearing boards do not consider socioeconomic costs and benefits at all. They do, "to a limited extent." But NEPA has limits. The desirability of a "broad and informal balancing" of costs

³⁴Id. at 192 (emphasis in original).

³⁵ It is also noteworthy that we are not even focused on the Applicant's direct payments related to this project, but rather on a secondary distribution of those payments. It would raise some troubling questions indeed if NEPA or environmental justice were to be seen as requiring a potentially endless trek following the flow of contract payments from major construction projects.

³⁶E.O. 12898, § 1-101.

³⁷ The EIS considered all the adverse impacts that the Board found significant — noise, visual impact, and cultural insult — and concluded that none of these would have a disproportionately high impact on the Skull Valley Band, or other low income or minority populations residing near the reservation. *See* EIS at 6-21–6-33.

³⁸ Claiborne, CLI-98-3, 47 NRC at 89.

and benefits³⁹ does not call for an investigation into perceived financial misdeeds going well beyond the natural or anticipated environmental effects of a proposed project.⁴⁰

In *Claiborne*, we held that the executive order on environmental justice does not transform NEPA into a general "civil rights law," and thus we declined to authorize a NEPA hearing on claims of intentional race discrimination. Similarly, we decline today to use NEPA as authority for (in effect) a corruption investigation, a major undertaking "far afield from the NRC's experience and expertise." What we said in *Claiborne* pertains here as well: "Were NEPA construed broadly to require a full examination of every conceivable aspect of federally licensed projects, 'available resources may be spread so thin that agencies [would be] unable adequately to pursue protection of the physical environment and natural resources."

B. The Board's Order Improperly Looks at a "Subgroup" of a Minority Population

Even if an uneven distribution of financial benefits could be viewed as some form of environmental harm, we would not uphold the Board decision to begin a NEPA inquiry into the matter because it depends upon splitting the pertinent environmental justice population, the Skull Valley Band, into competing "subgroups."⁴⁴ The dispute between OGD and others in the Band is not ours to ameliorate or mediate, certainly not under NEPA.

The Board sought to apply environmental justice on the theory that losing out on the PFS lease payments makes OGD a "low-income" subgroup of the larger tribal community. But this approach potentially would create an artificial "environmental justice" concern at virtually all proposed federal projects, for almost any project yields more benefits for some than others. For example, when a project brings jobs to the community, those persons who are hired benefit disproportionately over those who are not. But this does not mean that those not obtaining jobs have a legitimate "environmental justice" complaint. If they did, agencies' NEPA reviews would be endless, because the potential universe of

³⁹ See id.

⁴⁰We add, however, a point of clarification on the Licensing Board's role in this case. The Board commented that because PFS has "no right to use [Tribal] lands for its own purpose . . . the *only* justification for imposing . . . adverse impacts on an impoverished population is the offsetting benefits that will accrue to the Band's members from payments for use of Tribal lands." *See* LBP-02-8, 55 NRC at 191-92 (emphasis added). In balancing costs and benefits under NEPA the Board should also consider the other benefits of the project, such as (for example) the benefit of allowing shutdown reactors to be decommissioned sooner and any tax revenues accruing to the state and local governments. *See* EIS, § 8.2, at 8-11–8-12.

⁴¹ See Claiborne, CLI-98-3, 47 NRC at 106.

⁴² *Id.* at 103.

⁴³ Id. at 102-03, quoting Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 776 (1983).

⁴⁴ See LBP-02-8, 55 NRC at 189-91.

aggrieved individuals and groups is, as the NRC Staff's brief stated, "virtually infinite, limited only by one's imagination."

Environmental justice, as applied at the NRC, does not take us down that road. Instead, it means that the agency will make an effort under NEPA to become aware of the demographic and economic circumstances of local communities where nuclear facilities are to be sited, and take care to mitigate or avoid special impacts attributable to the special character of the community. Thus, an NRC EIS looks at the pertinent minority community in general, not at vaguely defined, shifting "subgroups" within that community. Otherwise, "environmental justice" becomes simply a device for ventilating intramural disputes within communities — which is not a function Congress has assigned to the NRC and is not a function in which we have skill or expertise.

The Board in this case recognized that the Skull Valley Band as a whole "has welcomed the project," is benefitting from it, and is not complaining of environmental injustice.⁴⁷ The Board proposed to "reframe" the environmental justice inquiry, so that instead of looking at the tribe as a whole to determine if its members would suffer a disproportionate impact vis à vis the larger population of Utah or the nation, the Board would consider the OGD members⁴⁸ vis à vis the rest of their own tribe:

As reframed, our inquiry now focuses, at OGD's urging, on a subgroup of the larger community, a smaller but distinct and well-defined population: those who are suffering a disparate burden, bearing the adverse environmental consequences of the PFS project while remaining impoverished as others have their situation improve.⁴⁹

But we see no basis for launching an "environmental justice" inquiry into whether some members of a minority community are impoverished when compared to others in the same community or (as is alleged in this case) whether one tribal subgroup is siphoning money or benefits from another. President Clinton's executive order asked agencies to consider whether a disadvantaged community is suffering from disproportionate harmful environmental effects, such as when a number of pollution-emitting neighboring facilities have a cumulative adverse effect on a predominantly poor or minority neighborhood. Nothing in the executive order or in NEPA suggests that agencies also must investigate which

⁴⁵NRC Staff's Brief on Appeal (Apr. 5, 2002), at 20-21.

⁴⁶ See Claiborne, CLI-98-3, 47 NRC at 106.

⁴⁷LBP-02-8, 55 NRC at 189.

⁴⁸ OGD's members include persons who do not reside on the reservation. Obviously, only those members who do reside there are the subject of the environmental justice analysis because only they are subjected to the anticipated environmental harms. For purposes of this discussion, we will use "OGD" as shorthand for those members on the reservation.

⁴⁹LBP-02-8, 55 NRC at 189-90 (emphasis in original).

subgroups within a minority community may obtain special benefits as compared to others.

Our agency's environmental decisionmaking under NEPA does not require us to intervene in what is, at bottom, a political dispute inside the Skull Valley Band. It is apparent from OGD's allegations that OGD represents a political faction opposed to the current tribal leadership. OGD's charges of corruption may prove salient — but for criminal investigators, for civil lawsuits, or for voters in future tribal elections, not for NEPA reviewers. Our NEPA record already contains ample information on the likely effects and the local and national benefits of the PFS facility, including the infusion of financial resources into the local community. To complete our NEPA review, we do not need to know precisely how those resources are shared.⁵⁰

C. Disparate Financial Benefit Is Outside the Scope of Admitted Contentions

A further reason for denying a hearing on the environmental justice issue is that the factual dispute over where the lease income is going lies outside the scope of the admitted contentions.

The NRC's "longstanding practice requires adjudicatory boards to adhere to the terms of admitted contentions" in order to give opposing parties "advance notice of claims and a reasonable opportunity to rebut them." OGD's environmental justice contention ("OGD O"), as admitted, alleged that the environmental impacts of the proposed ISFSI would have a cumulative adverse effect on tribe members and would adversely affect property values, and that the license application failed to mitigate these impacts. OGD first raised the issue of uneven or corrupt distribution of lease payments when it submitted Sammy Blackbear's declaration in response to PFS's motion for summary disposition — 3 years after OGD had filed its original environmental justice contention.

As the litigation went forward, OGD made no effort to amend its contention to add its financial grievance or to introduce the claim that a "subgroup" of the tribe would suffer disparate environmental harm. PFS and the other parties

⁵⁰The benefits discussion in the EIS does not state that everyone in the community will benefit equally, or even that everyone will benefit to any degree. The EIS speaks in terms of increased revenues and enhanced job opportunities for the "Skull Valley Band." *See, e.g.,* EIS at pp. 4-39, 6-32, 8-11.

The Board interpreted our *Claiborne* decision as a precedent for dividing environmental justice populations into subgroups. *See* LBP-02-8, 55 NRC at 190. But in *Claiborne*, we approved a Board decision requiring the NRC Staff to consider whether a proposed road relocation would affect pedestrians in an impoverished and minority community where "many residents of the two impoverished communities have no choice but to travel by foot." CLI-98-3, 47 NRC at 107. We did not call for breaking up the community into "subgroups" of car-drivers and pedestrians. There was no controversy between motorists and pedestrians in *Claiborne* remotely comparable to the financial dispute between rival tribal factions here.

⁵¹ Claiborne, CLI-98-3, 47 NRC at 105.

⁵² See OGD Contentions at 27-36; see also LBP-98-7, 47 NRC at 233.

apparently had no reason to know about OGD's new, finance-driven, version of its environmental justice contention. Indeed, PFS's motion for summary disposition did not even address the subject. As the Board acknowledged, this meant "that in most respects we have before us only one side of the story about the matters presented so forcefully in [the Blackbear] declaration."⁵³

Our rules of procedure require that contentions include a "specific statement of the issue of law or fact to be raised or controverted." Here, however, the admitted contention included neither the law nor the facts that the Board later set for hearing. As admitted, OGD O did not give fair notice that the parties must litigate the alleged misappropriation of PFS lease money; or that they must address the theory that disparate payments created a "subgroup" of the Skull Valley Band; or that they must produce accountings as evidence at the hearing. The issue set for hearing in the Board's February order nonetheless dealt entirely with those matters; i.e., the new environmental justice theory introduced by the Blackbear declaration. The Board even instructed the parties to develop and produce new evidence for the hearing — accountings of money PFS paid and how the tribe handled that money. 55

In *Claiborne* we rejected an untimely attempt to insert a claim of intentional race discrimination into a previously admitted environmental justice contention. So too, here, it would be unfair, and violative of our rules of procedure, to require the parties to go to hearing on a legal theory that departs dramatically from the admitted environmental justice contention.

D. NEPA Responsibilities Do Not Justify an NRC Inquiry into Tribal Affairs

All parties appear to share the common ground that, as a general rule, federal agencies and adjudicators lack power to oversee sovereign Indian tribal matters. OGD, though, says that the normal government reluctance to interfere with tribes does not apply here because, by intervening in our proceeding in support of the PFS project, the Skull Valley Band, in effect, has consented to an NRC inquiry into tribal financial affairs. OGD also maintains that a NEPA cost-benefit analysis requires the NRC to consider how the Band is handling the PFS lease income. PFS and the NRC Staff, on the other hand, insist that in this case, as in most situations, federal Indian law prevents outside review of tribal financial affairs. The Band itself and the Bureau of Indian Affairs (in its *amicus curiae* brief) take the same position. So do we.

⁵³ LBP-02-8, 55 NRC at 181.

⁵⁴ 10 C.F.R. § 2.714(b)(2).

⁵⁵LBP-02-8, 55 NRC at 199-200.

As we already have explained at length earlier in this opinion, OGD's grievance—that the Skull Valley Band's leadership is allegedly misappropriating income from the PFS lease—is not properly a NEPA claim at all. In *Metropolitan Edison Co. v. People Against Nuclear Energy*, the Supreme Court ruled that NEPA comes into play only when there is a "close[] relationship between the change in the physical environment and the 'effect' at issue." Alleged mishandling of lease proceeds does not fall in this category. NEPA simply is not the vehicle, and NRC not the forum, to resolve the question whether the leadership of an Indian tribe is dealing unfairly with its members.

The question whether the leadership of an Indian tribe is dealing unfairly with its members relates fundamentally to tribal governance. The specter of quasi-judicial oversight by a federal agency, including the presentation of evidence and cross-examination on tribal financial decisions, undermines well-established principles governing the interaction of the federal government with Indian tribes. The first of these principles is that unless Congress has specifically acted to abrogate a tribe's sovereign immunity, a wholly intratribal dispute must be resolved within the tribe.⁵⁷ The Board thus lacks jurisdiction to provide declaratory or injunctive-type relief to OGD on its complaint that the tribal leadership is mishandling PFS lease payments.

OGD's argument that the Band has waived its sovereign immunity by intervening in the NRC licensing proceeding is unpersuasive. The Band is not applying for an NRC license, but has simply intervened in an existing proceeding to protect tribal interests. At the time of the Band's intervention, there was not the slightest suggestion that OGD or the Board planned to examine tribal financial records and governance. Waivers of sovereign immunity, in Indian cases and elsewhere, are not lightly implied or presumed.⁵⁸

It is the policy of the federal government to promote self-determination by Indian tribes.⁵⁹ This means that the Skull Valley Band is entitled to decide what is best for it as a whole, without second-guessing by the Board. The Band evidently determined that the lease was in its best interest when it entered into it. The Board cannot attempt to protect the interests of a disaffected "subgroup" of the Band, namely, OGD's members, for that would place the Board, uncomfortably and

⁵⁶460 U.S. at 774.

⁵⁷ See Santa Clara Pueblo v. Martinez, 436 U.S. 49, 59 (1978) (subjecting wholly intratribal dispute to a nontribal forum would infringe on the Indians' right to govern themselves).

⁵⁸ See id. at 58.

⁵⁹ See Indian Self-Determination and Education Assistance Act, 25 U.S.C. § 450 et seq. See also Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (Nov. 6, 2000), 65 Fed. Reg. 67,249, sec. 2(c) ("The United States recognizes the right of Indian tribes to self-government and supports tribal sovereignty and self-determination").

unlawfully, right in the middle of an internal tribal dispute.⁶⁰ Subject to criminal and tribal law, the Band ultimately gets to decide how to handle its own revenues, even if its distribution scheme appears unfair to outside observers.

The allegations contained in the Blackbear affidavit understandably caught the Board's attention. But they are not matters for NRC licensing hearings. Tribal dissidents, including Blackbear, have filed administrative appeals with the Bureau of Indian Affairs and also have sued in federal district court to challenge the BIA's approval of the lease. In addition, claims that funds have been misappropriated have apparently been referred to the Federal Bureau of Investigation.

In short, other, more appropriate, avenues of redress remain open to OGD in its dispute with the Band's leadership. Our hands-off position is buttressed by the federal agency with the most expertise in this area, the Bureau of Indian Affairs, which has filed an *amicus* brief insisting that the NRC stay out of the Goshutes' intratribal dispute.

III. CONCLUSION

For the foregoing reasons, the Board's partial denial of summary disposition on OGD's environmental justice contention, OGD O, is *reversed*, and the Board is *directed* to grant summary disposition for PFS on OGD O.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 1st day of October 2002.

⁶⁰ See Santa Clara Pueblo v. Martinez, 436 U.S. 49 and cases cited therein; cf. Wheeler v. United States Department of the Interior, 811 F.2d 549 (10th Cir. 1987) (Department of Interior had no jurisdiction to hear appeal of election challenge by unsuccessful candidate for tribal office, which must be determined internally).

 ⁶¹ See, e.g., United States ex rel. Blackbear v. Babbit, 2:99CV156K (D. Utah); Blackbear v. Norton, No.
 2:01CV00318C (D. Utah).
 62 See Fahys, Feds Demand Goshutes Open Financial Books on N-Waste Deal, Salt Lake City Tribune (Mar. 14,

⁶² See Fahys, Feds Demand Goshutes Open Financial Books on N-Waste Deal, Salt Lake City Tribune (Mar. 14, 2002).

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 40-8681-MLA-10

INTERNATIONAL URANIUM (USA)
CORPORATION
(White Mesa Uranium Mill)

October 1, 2002

The Commission reviews an Atomic Safety and Licensing Board decision that found that the Petitioner failed to establish standing to intervene. The Commission affirms the Board's decision.

LICENSING BOARDS: DISCRETION IN MANAGING PROCEEDINGS

Absent an abuse of discretion, the Commission is loathe to upset a Presiding Officer's management of a proceeding. In procedural and scheduling matters, where first-hand contact with and appreciation for all the circumstances surrounding a case are necessary, maximum reliance on the proper discretion of a Presiding Officer is essential.

RULES OF PRACTICE: STANDING TO INTERVENE

There may be circumstances when a previously encountered injury, associated with an earlier licensing action, may no longer exist. In such a case, the reemergence of a similar — yet altogether new — alleged harm, associated with

a new licensing action, could prove sufficient for standing, if set forth in detailed fashion and with adequate basis.

MEMORANDUM AND ORDER

I. INTRODUCTION

For the second time in recent months, the Glen Canyon Group of the Sierra Club (Sierra Club) has appealed its dismissal from this license amendment proceeding. After a Commission remand, the Presiding Officer has again found that the Sierra Club lacks standing to challenge the proposed license amendment. The International Uranium (USA) Corporation (IUSA) opposes the Sierra Club appeal. We affirm the Presiding Officer's decision.

II. BACKGROUND

Earlier this year, the Presiding Officer issued an initial decision rejecting the Sierra Club's petition to intervene for lack of standing.² The Sierra Club appealed that decision based upon two alleged procedural errors of the Presiding Officer: (1) that he failed to issue a ruling on whether the Sierra Club could submit additional affidavits; and (2) that he unreasonably rejected a Sierra Club response to an IUSA supplemental filing. In CLI-02-13, 55 NRC 269 (2002), the Commission affirmed the Presiding Officer's rejection of the late-filed affidavits, but vacated and remanded on the issue of the rejected Sierra Club response. The Presiding Officer had struck the Sierra Club response in its entirety on the ground that it exceeded the scope of the specific issues that were to be addressed. In remanding, the Commission noted that not only the Sierra Club, but also IUSA, "seemingly addressed issues beyond what the Presiding Officer had intended" (id. at 275), and that therefore we could not readily discern why the Presiding Officer had relied upon the IUSA filing but rejected the Sierra Club's response outright. We therefore remanded the case for the Presiding Officer to reconsider — or at least clarify — his reasons for rejecting the entire Sierra Club filing, and, if appropriate, to consider further the underlying question of the Sierra Club's standing.

The Presiding Officer now has reaffirmed his decision to strike the Sierra Club response in its entirety.³ The Presiding Officer further held that even if had he

¹ See LBP-02-12, 55 NRC 307 (2002).

² See LBP-02-3, 55 NRC 35 (2002).

³ See LBP-02-12, 55 NRC at 312-13.

accepted the response, it would have made no difference in his conclusion that the Sierra Club had failed to establish standing to intervene.⁴

III. ANALYSIS

Under NRC rules, a "presiding officer has the duty to conduct a fair and impartial hearing according to law, to take appropriate action to avoid delay, and to maintain order." To achieve those ends, presiding officers have "all powers necessary," including the discretion to regulate the course of the hearing and the conduct of the participants and dispose of procedural matters. On their own initiative they may "strike any portion" of pleadings found "cumulative, irrelevant, immaterial, or unreliable."

Absent an abuse of discretion, the Commission is loath to upset a Presiding Officer's management of a proceeding. As we stressed earlier in this very case, in "procedural and scheduling matters, where first-hand contact with and appreciation for all the circumstances surrounding a case are necessary, maximum reliance on the proper discretion of a [presiding officer] is essential." Here, after our initial remand, the Presiding Officer has given ample grounds for why he chose to strike the Sierra Club's response. He recounted numerous difficulties he had had with the Sierra Club's actions both in the course of this proceeding and in an earlier license amendment proceeding involving the receipt and processing of material from the Molycorp site in California. In both proceedings, initial petitions for intervention were filed by lay persons, yet at the prehearing conference stage a Sierra Club counsel appeared, attempting to remedy deficiencies in the lay-filed petitions.

In the current proceeding, for example, counsel for the Sierra Club conceded at the prehearing conference that the Sierra Club still did not "have enough facts before the court" to show the injury alleged from this license amendment. She acknowledged that the "concerns that have been set forth by the Sierra Club have not been supported by affidavit or testimony," that the lay-filed petitions and affidavits contained "conclusory statements," and that the Sierra Club "need[ed] further investigation" to set forth with basis the specific injury alleged. She then asked the Presiding Officer if the Sierra Club could file "more

⁴ *Id.* at 313-14.

⁵ 10 C.F.R. § 2.1209.

⁶See id.

⁷ See 10 C.F.R. § 2.1233(e).

⁸CLI-02-13, 55 NRC at 273.

⁹ Telephone Conference Hearing Transcript (Nov. 28, 2001) ("Transcript") at 12-13.

¹⁰ *Id.* at 10-11.

¹¹ Id. at 10, 15.

¹² *Id.* at 14.

affidavits that give more specifics." ¹³ The Presiding Officer took the matter under advisement but asked the Sierra Club to submit an offer of proof, indicating who would submit an affidavit and what it would purport to show. When no offer of proof was submitted, he denied the request.

Later, the Presiding Officer allowed both IUSA and the Sierra Club to submit a supplemental filing intended only to address two very specific transportation issues: (1) truck traffic volume along the transportation corridor involved in the truck shipments at issue in this license amendment; and (2) the circumstances of a particular 1999 truck accident. When the Sierra Club's filing included not only these issues but others as well, the Presiding Officer struck the filing.

In directing the Presiding Officer to reconsider his decision, the Commission noted that IUSA also had discussed issues exceeding the scope of the two topics, and that much of the Sierra Club filing seemingly responded to matters first raised by IUSA. 14 Now, after remand, the Presiding Officer explains that even if IUSA "exceeded the charter that had been given it," all of its submission was still essentially related to the "possible incremental impact of the truck transportation of the Maywood material enroute to the Mill from the railhead at Cisco," but that "the same cannot be said for the Sierra December 24 filing," which (according to the Presiding Officer) "sought to introduce entirely new issues into the proceeding that had absolutely nothing to do with the truck transportation of the Maywood materials." These included groundwater impacts at the White Mesa Mill site—a topic entirely unrelated to truck traffic. By its own admission, the Sierra Club filing also sought to address "unanswered" questions posed to the Licensee during the telephone conference. 17

In short, the Presiding Officer found that the Sierra Club filing contained an abundance of unrelated new issues, representing "a backdoor approach to opening the proceeding at a very late date to claims far removed" from those that had been "put on the table." The Presiding Officer thus viewed the Sierra Club filing as "an endeavor by counsel to subvert the orderly conduct of the adjudicatory process." Moreover, given "the past history" of the Sierra Club's repeated and late attempts to correct earlier deficiencies, he found the December 24 filing "manifestly beyond toleration." He thus struck the filing in its entirety

¹³ Id. at 19.

¹⁴ See CLI-02-13, 55 NRC at 276.

¹⁵LBP-02-12, 55 NRC at 312.

¹⁶ See id. at 311.

¹⁷ See id.

¹⁸ Id. at 312-13.

¹⁹ Id. at 313.

²⁰ *Id.* at 312.

"to make it clear to Sierra that there were definite limits to the extent that [he] was willing to continue to allow it to cure deficiencies in lay-prepared submissions." ²¹

Given the background as recited by the Presiding Officer, and the "substantial deference" we owe his procedural rulings,²² we cannot say that he abused his discretion in striking the Sierra Club's December 24 submission. On appeal, the Sierra Club does not really come to grips with the Presiding Officer's procedural ruling, but instead seeks to recast its concerns to include many more issues than the alleged injury from an increase in truck traffic. To that effect, the Sierra Club returns to its original September 24, 2001, intervention petition, and to a later petition from October 18, 2001, both of which cited a litany of claims, not simply the traffic-related concerns that later became the focus of this proceeding. The Sierra Club thus argues that "the ultimate issues" raised in its hearing request "were in no manner confined to the incremental impacts related to truck transportation," and that therefore "any conclusion [by the Presiding Officer] that the December 24 filing should be dismissed because it brought forth new issues in the proceeding that were not associated with transportation issues is without basis." ²³

The Sierra Club's view of "the ultimate issues" is incorrect. Regardless of what issues the Sierra Club may have raised earlier, the *supplemental filing* at issue here was to focus only on the two transportation matters outlined by the Presiding Officer in the prehearing conference. At that conference, Sierra Club's counsel referred only to the issue of alleged harm from the "increase in truck loads" and the potential for a truck accident. As she herself characterized the Sierra Club's position, the increases in trucks and concomitant potential for more truck accidents were "the basic nutshell of Sierra's concern." ²⁴ Indeed, she discounted the adequacy of the Sierra Club original hearing petitions — declaring them conclusory and unsupported.²⁵ And, significantly, in its prior appeal to the Commission, the Sierra Club made absolutely no mention of the original hearing petitions or any of their allegations. Instead, that appeal raised only two issues: the Presiding Officer's decision to reject the Sierra Club's December 24, 2001 filing, and his decision to disallow the filing of additional affidavits. The Commission decided those two issues.26 The Sierra Club cannot now introduce entirely new arguments that could have been raised before the Commission in the prior appeal. Effectively, the Sierra Club has waived any arguments relating to the Presiding Officer's analysis of the original hearing petitions.

²¹ *Id.* at 313.

²² See CLI-02-13, 55 NRC at 273.

²³ Petitioner Sierra Club's Appeal of April 26, 2002, Memorandum and Order (Responding to Commission Remand in CLI-02-13) (May 10, 2002) ("Sierra Club Appeal") at 13.

²⁴ Transcript at 11 (emphasis added).

²⁵ See, e.g., id. at 10, 12-13, 15.

²⁶ See CLI-02-13, 55 NRC at 274-77.

In short, the Presiding Officer did not abuse his discretion in rejecting the Sierra Club's December 24 filing, and we therefore affirm his dismissal of the proceeding. We do not, however, reach the Presiding Officer's alternate holding that the December 24 filing, even were it admitted, would not support a finding of standing.²⁷ That aspect of the Presiding Officer's decision raises complex factual and legal questions that we need not decide definitively in today's decision. But we offer a word of caution to guide future cases.

As we see it, the series of Presiding Officer and Commission decisions in the *International Uranium* cases have left the law of standing in materials license amendment cases in something of a confused state.²⁸ In the Presiding Officer decision under review here, for example, the Presiding Officer correctly stressed that in license amendment cases petitioners must allege a "distinct new harm or threat apart from the activities already licensed."²⁹ But the Presiding Officer also has implied in his standing discussions that a petitioner may lack standing simply because an alleged injury resembles one that occurred at some discrete point in the past, even if the old injury no longer poses any threat. For example, in his original standing decision the Presiding Officer inquired whether "hearing requestors pointed to any threat posed by the Maywood [truck] shipments that was not equally present with respect to the earlier [shipments]."³⁰ And in his latest decision, he seemed to call for harm of a type or degree "not previously encountered in the assessment of the prior amendment applications."³¹

There may be circumstances when a "previously encountered" injury, associated with an earlier licensing action, may no longer exist (as with truck traffic impacts that ended when shipments under an earlier license amendment were concluded). In such a case, the reemergence of a similar — yet altogether *new* — alleged harm, associated with a new licensing action, could prove sufficient for standing, if set forth in detailed fashion and with adequate basis.³² Already suffered harm, in short, does not necessarily preclude standing based on fresh harm of the same type.

 $^{^{\}rm 27}\,See$ LBP-02-12, 55 NRC at 314-15.

²⁸ See LBP-01-8, 53 NRC 204, aff'd, CLI-01-18, 54 NRC 27 (2001); LBP-01-15, 53 NRC 344, aff'd, CLI-01-21, 54 NRC 247 (2001); LBP-02-3, 55 NRC 35, vacated, CLI-02-13, 55 NRC 269 (2002); LBP-02-6, 55 NRC 147, aff'd, CLI-02-10, 55 NRC 251 (2002). In three decisions, the Commission provided relatively narrow, summary affirmances. Our failure to take these earlier occasions to provide more detailed, vigorous guidance on standing may have led the Presiding Officer to assume that the Commission fully endorsed all of the reasoning found in these earlier decisions.

²⁹LBP-02-3, 55 NRC at 45; *See, e.g., Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 190-92 (1999); *See also International Uranium (USA) Corp.* (Receipt of Additional Material from Tonawanda, New York), LBP-99-8, 49 NRC 131, 134 (1999) (where injuries claimed "amount[ed] to a generalized grievance" over operations at the White Mesa mill, and not a "distinct and palpable harm from the proposed licensing action").

³⁰LBP-02-3, 55 NRC at 45.

³¹ See LBP-02-12, 55 NRC at 315.

³² See, e.g., Save Our Heritage, Inc. v. FAA, 269 F.3d 49, 56 (1st Cir. 2001); Hall v. Norton, 266 F.3d 969 (9th Cir. 2001); Committee to Save the Rio Hondo v. Lucero, 102 F.3d 445 (10th Cir. 1996).

In today's decision we need not analyze this standing question in full. We leave it, potentially, for another more appropriate occasion, and affirm the Presiding Officer's decision on procedural grounds.

IV. CONCLUSION

For the reasons given in this decision, the Commission hereby *affirms* LBP-02-12.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 1st day of October 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman Dr. Jerry R. Kline Dr. Peter S. Lam

In the Matter of

Docket No. 72-22-ISFSI (ASLBP No. 97-732-02-ISFSI)

PRIVATE FUEL STORAGE, L.L.C. (Independent Spent Fuel Storage Installation)

October 15, 2002

In this proceeding concerning the application of Private Fuel Storage, L.L.C. (PFS), under 10 C.F.R. Part 72 to construct and operate an independent spent fuel storage installation (ISFSI), the Licensing Board grants the motion of Applicant PFS for summary disposition of Intervenor State of Utah's (State) contention Security-J, Law Enforcement.

ATOMIC ENERGY ACT: FEDERAL PREEMPTION

Federal preemption of state laws is a product of the federal Constitution's Supremacy Clause, which provides that the "Constitution, and the Laws of the United States which shall be made in Pursuance thereof . . . shall be the supreme Law of the Land" U.S. Const. art. VI, cl. 2. Federal preemption of state laws occurs in three ways. First, if Congress acts pursuant to its enumerated powers, it can expressly preempt state laws with federal laws. Second, "field preemption" can occur in instances when a scheme of federal regulation is so pervasive as to make reasonable the inference that Congress has left no room to supplement it. Third, even if Congress has not entirely displaced state regulation in a specific

area, state law is preempted to the extent that it actually conflicts with federal law. See Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission, 461 U.S. 190, 204 (1983).

FEDERAL CONSTITUTION COMMERCE CLAUSE: FEDERAL PREEMPTION

Besides granting Congress the express authority to override conflicting state-adopted commercial regulations, the Commerce Clause has been recognized to abridge state authority through negative implication. This "dormant" Commerce Clause concept is based on the idea that, although the Commerce Clause is an affirmative grant of power to Congress to regulate interstate commerce, it also operates to preclude the states from burdening unduly or discriminating against interstate commerce. See Oregon Waste Systems, Inc. v. Department of Environmental Quality of Oregon, 511 U.S. 93, 98 (1994); Fort Gratiot Sanitary Landfill, Inc. v. Michigan Department of Natural Resources, 504 U.S. 353, 359 (1992). In this regard, if a state law discriminates against interstate commerce on its face, it is per se invalid under the dormant Commerce Clause. See Oregon Waste Sys., 511 U.S. at 99. If, however, a state law is even-handed or nondiscriminatory, but still burdens interstate commerce, the law is invalid only if "the burden imposed on such commerce is clearly excessive in relation to the putative local benefits." Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

EMERGENCY PLANNING: STATE AND LOCAL GOVERNMENT (PARTICIPATION; REALISM DOCTRINE)

As set forth in 10 C.F.R. § 50.47(c)(1)(iii), the realism doctrine "recognize[s] the reality that in an actual emergency, state and local government officials will exercise their best efforts to protect the health and safety of the public." Therefore, if as a result of a lack of state and/or local government participation a nuclear reactor applicant cannot demonstrate that an adequate emergency plan exists, the applicant can develop its own emergency plan and the NRC will evaluate that plan based upon the presumption that state and local officials generally will follow the applicant's plan in the event of an emergency.

RULES OF PRACTICE: SUMMARY DISPOSITION (BURDEN OF PERSUASION; BURDEN OF PROOF)

Under 10 C.F.R. § 2.749(a), (d), summary disposition may be entered with respect to any matter (or all of the matters) in a proceeding if the motion, along with any appropriate supporting material, shows that there is "no genuine issue as

to any material fact and that the moving party is entitled to a decision as a matter of law." The movant bears the initial burden of making the requisite showing that there is no genuine issue as to any material fact, which it attempts to do by means of a required statement of material facts not at issue and any supporting materials (including affidavits, discovery responses, and documents) that accompany its dispositive motion. An opposing party must counter each adequately supported material fact with its own statement of material facts in dispute and supporting materials, or the movant's facts will be deemed admitted. See Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102-03 (1993).

RULES OF PRACTICE: RES JUDICATA

A classic formulation of the doctrine of res judicata, also known as claim preclusion, was set forth by the United States Supreme Court in the case of *Cromwell v. County of Sac*, 94 U.S. 351, 352 (1876):

[T]he judgment, if rendered upon the merits, constitutes an absolute bar to a subsequent action. It is a finality as to the claim or demand in controversy, concluding parties and those in privity with them, not only as to every matter which was offered and received to sustain or defeat the claim or demand, but as to any other admissible matter which might have been offered for that purpose.

In applying the doctrine of claim preclusion, modern courts look to three factors to determine whether or not a claim should be barred in connection with subsequent litigation: (1) whether there was a final judgment on the merits of the claim by a court of competent jurisdiction; (2) did the prior action involve the same parties or their privies; and (3) did the prior action involve the same claim. *See* 18 James Wm. Moore et al., *Moore's Federal Practice* § 131.01, at 131-12 (3d ed. 1999) [hereinafter Moore].

RULES OF PRACTICE: RES JUDICATA

Central to the principle of claim preclusion are the concepts of merger and bar. The doctrine of merger states that when a plaintiff succeeds in litigation and recovers a valid and final judgment, the plaintiff's claim is merged into the judgment, as well as all the defenses to it, including any that have not, but could have been, brought. By the same token, if a plaintiff loses in litigation, the result is a bar on any further claims made by the plaintiff arising from that particular cause of action. *See* 18 Moore § 131.01, at 131-11.

RULES OF PRACTICE: COLLATERAL ESTOPPEL

Similar to the doctrine of res judicata, the precept of collateral estoppel, also known as issue preclusion, prevents the relitigation of issues that already have been adjudicated. Issue preclusion applies only if the issue in the prior adjudication is identical to that in the subsequent case. Moreover, to apply the doctrine of collateral estoppel: (1) the judgment in the case must be final and entered by a court of competent jurisdiction; (2) the issue must have been the same as that actually litigated and necessary to the outcome of the first action; and (3) the party to which the estoppel is to be applied must have been a party, or in privity with a party, that litigated the issue in the prior proceeding. *See* 18 Moore § 132.01[1]-[2], at 132-10 to 132-11. If so, the issue cannot be relitigated in a subsequent action with a different claim.

RULES OF PRACTICE: RES JUDICATA (APPLICATION IN NRC ADJUDICATORY PROCEEDINGS)

While, as a general rule, the doctrine of res judicata may be applied in NRC adjudicatory proceedings, an exception to this customary practice occurs when broad public policy considerations or special public interest factors are involved such that an agency's need for flexibility outweighs the reasons underlying this repose doctrine so as to favor relitigation of a particular issue. *See United States Department of Energy* (Clinch River Breeder Reactor Plant), CLI-82-23, 16 NRC 412, 420 (1982). For instance, a judicial decision need not be considered binding on an administrative agency if the legislature granted primary authority to decide the substantive issue in question to the administrative agency. *See* 2 Kenneth C. Davis, *Administrative Law Treatise* § 18.12, at 627-28 (1958) [hereinafter Davis]. Nor is a change in external circumstances required for an agency to exercise its basic right to change a policy decision and apply a new policy to parties to which an old policy applied. *See Clinch River*, CLI-82-23, 16 NRC at 420.

RULES OF PRACTICE: RES JUDICATA (APPLICATION IN NRC ADJUDICATORY PROCEEDINGS)

Res judicata also does not apply when the foundation for a proposed action arises after the prior ruling advanced as the basis for res judicata or when the party seeking to employ the doctrine had the benefit, when it obtained the prior ruling, of a more favorable standard as to burden of proof than is now available to it. *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-349, 4 NRC 235, 245-46 (1976).

RULES OF PRACTICE: COLLATERAL ESTOPPEL (APPLICATION IN NRC ADJUDICATORY PROCEEDINGS)

The principle of collateral estoppel, like that of res judicata, may also be applied in administrative adjudicatory proceedings. *See Toledo Edison Co.* (Davis-Besse Nuclear Power Station, Units 1, 2, and 3), ALAB-378, 5 NRC 557, 561, 562-63 (1977). As a general matter, a judicial decision is entitled to the same collateral estoppel effect in a later administrative proceeding as it would be accorded in a subsequent judicial proceeding. *See id.* at 561 (citing 2 Davis § 18.11, at 619). As with the concept of res judicata, and for the same reasons, the existence of public policy considerations could outweigh the jurisprudential policy reasons for applying the doctrine of collateral estoppel. *See Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-79-27, 10 NRC 563, 574-75 (1979). The correctness of the prior decision is not, however, a public policy factor upon which the application of the doctrine of collateral estoppel depends. *See Safety Light Corp.* (Bloomsburg Site Decommissioning and License Renewal Denials), LBP-95-9, 41 NRC 412, 446-47 & n.158 (1995).

MEMORANDUM AND ORDER

(Granting Motion for Summary Disposition Regarding Contention Security-J)

Pending before the Licensing Board in this proceeding concerning the June 1997 application of Private Fuel Storage, L.L.C. (PFS), for authorization to construct and operate a 10 C.F.R. Part 72 independent spent fuel storage installation (ISFSI) in Skull Valley, Utah, is a PFS motion for summary disposition regarding contention Security-J, Law Enforcement. As admitted, contention Security-J, which is sponsored by Intervenor State of Utah (State), challenges the sufficiency of the PFS physical security plan (PSP) on the ground that PFS does not meet the requirements of 10 C.F.R. Parts 72 and 73 regarding the involvement of a local law enforcement agency (LLEA). According to PFS, summary disposition should be entered in its favor on contention Security-J because the Utah laws that the State alleges preclude compliance with Parts 72 and 73 have been declared unconstitutional by the United States District Court for the District of Utah (District Court) such that no genuine dispute of material law or fact remains with respect to the sufficiency of the PFS PSP.

For the reasons set forth below, we grant the PFS request for summary disposition in its favor on contention Security-J.

I. BACKGROUND

A. Procedural History of Contention Security-J

The Commission's regulations regarding physical protection at ISFSIs are set forth in 10 C.F.R. Parts 72 and 73. According to 10 C.F.R. §§ 72.180, 72.184, an applicant must "establish, maintain, and follow a detailed plan for physical protection as described in § 73.51" and have a "safeguards contingency plan for responding to threats and radiological sabotage." Further, section 73.51(b)(1), which details the requirements for physical protection at an ISFSI, states that an applicant must "establish and maintain a physical protection system with the objective of providing high assurance that activities involving spent nuclear fuel and high-level radioactive waste do not constitute an unreasonable risk to public health and safety." To fulfill this requirement, the ISFSI must be capable of meeting performance capabilities that include "timely communication to a designated response force whenever necessary." 10 C.F.R. § 73.51(b)(2). One of the ways that this performance capability can be met is by having a "[d]ocumented liaison with a designated response force or local law enforcement agency " 10 C.F.R. § 73.51(d)(6). In addition, under section 3.d of 10 C.F.R. Part 73, Appendix C, "Contents of the Plan," a PSP must have the following:

Law Enforcement Assistance — A listing of available local law enforcement agencies and a description of their response capabilities and their criteria for response; and a discussion of working agreements . . . for communicating with these agencies.

As part of the PFS June 1997 application for a license to store spent nuclear fuel (SNF) at an ISFSI, which is to be constructed on the reservation of Intervenor Skull Valley Band of Goshute Indians (Skull Valley Band) located within Tooele County, Utah, PFS included a PSP purported to meet the various requirements of Parts 72 and 73. In this regard, based on a cooperative law enforcement agreement (CLEA) between Tooele County, the United States Department of the Interior's Bureau of Indian Affairs (BIA), and the Skull Valley Band that gives the Tooele County sheriff's office the authority and responsibility to provide law enforcement services on the Skull Valley Band reservation, the Tooele County sheriff's office has been identified as the designated local law enforcement agency (LLEA) for the Skull Valley ISFSI that would respond in the event of an incident at the facility.¹

In March 2001, however, the Utah legislature passed and the Governor signed Senate Bill 81 (S.B. 81), which is part of a comprehensive legislative scheme

¹ Previously, the Board had granted summary disposition in favor of PFS regarding State contentions challenging the efficacy of the approval process used for the CLEA between Tooele County, the BIA, and the Skull Valley Band. *See* LBP-99-31, 50 NRC 147 (1999).

regarding the storage of high-level nuclear waste in the state. Among other items, S.B. 81 includes municipal services contract provisions that prohibit counties from entering into agreements with nuclear waste disposal sites to provide "municipal services," which are defined in the statute to include law enforcement services. See Utah Code Ann. §§ 19-3-301(6)(b), 19-3-303(6)(j). Thereafter, in an April 13, 2001 request, the State asked the Board for late-filed admission of contention Security-J. In this issue statement, the State asserts that with the passage of S.B. 81 and its provisions banning county municipal services agreements with ISFSIs, PFS is not in compliance with the requirements of 10 C.F.R. Part 73 because, among other things, it no longer can claim to have a documented liaison with an LLEA.

Although the Staff declared admission of this issue statement was appropriate, PFS opposed admitting late-filed contention Security-J on the ground that a case brought in federal district court in Utah by PFS and the Skull Valley Band challenging the constitutional efficacy of this and other parts of the Utah legislative scheme to address in-state HLW storage would control whether the Utah statute was effective. Alternatively, PFS contested the contention's admissibility based on the Commission's "realism doctrine," under which it is presumed that emergency service providers will perform in accordance with an existing reactor facility emergency response plan when events call upon them to do so.

Agreeing that the outcome of the District Court suit could control, the Board deferred ruling on the admissibility of contention Security-J. See LBP-01-20, 53 NRC 565, 570-72 (2001). After receiving from the parties six periodic status reports regarding the litigation, citing the continuing uncertainty about the timing of the District Court's resolution of the case, the Board admitted contention Security-J in a February 22, 2002 decision. See LBP-02-7, 55 NRC 167, 169 (2002). That issue statement provides:

"The Applicant's Physical Security Plan does not comply with 10 CFR Part 73 because the Applicant does not have valid documented liaison with a designated [LLEA], and redundant communications between onsite security force members and the LLEA, to provide timely response to unauthorized penetrations at the PFS facility. See 10 CFR §§ 72.180; 73.51(d)(6), (8) and (12); and Part 73, Appendix C."

LBP-01-20, 53 NRC at 568.

On April 30, 2002, the Applicant filed a motion requesting summary disposition in its favor regarding contention Security-J. See [PFS] Motion for Summary Disposition of Utah Contention Security J — Law Enforcement (April 30, 2002) [hereinafter PFS Motion]. The State filed a response opposing the motion. See [State] Opposition to PFS's Motion for Summary Disposition of Utah Contention Security J — Law Enforcement (May 31, 2002) [hereinafter State Response]. The Staff filed a response as well, albeit supporting the motion, to which the State subsequently filed a reply. See NRC Staff's Response to [PFS] Motion for

Summary Disposition of Contention Utah Security-J (July 22, 2002) [hereinafter Staff Response]; [State] Reply to Staff's Response to PFS's Motion for Summary Disposition of Utah Contention Security J — Law Enforcement (Aug. 9, 2002) [hereinafter State Reply].

During the latter portion of the briefing process on the PFS motion, however, the District Court ruled on the pending federal litigation. In doing so, the District Court granted a PFS/Skull Valley Band motion for summary judgment and motion to dismiss the State's counterclaims while denying the State's motion for judgment on the pleadings and assertion of lack of jurisdiction, thus deciding the case against the State. See Skull Valley Band of Goshute Indians v. Leavitt, 215 F. Supp. 2d 1232 (D. Utah 2002). The day after this July 30, 2002 ruling, the State notified the Licensing Board of the District Court's decision and indicated it was contemplating seeking reconsideration so as to warrant deferral of any Board ruling based on the District Court decision. See [State] Notification of Actions Relative to Contention Utah Security J (July 31, 2002). Although the Board indicated in an August 1, 2002 issuance that it would await a District Court ruling on such a reconsideration request before seeking further information from the parties regarding the impact of that decision on the pending PFS motion, see Licensing Board Memorandum and Order (Summary Disposition Supplemental Filings Regarding Contention Security-J) (Aug. 1, 2002) at 2-3 (unpublished), the State ultimately did not make such a filing. Thus, in accordance with the Board's August 1, 2002 order, on August 19, 2002, PFS filed a supplement to its dispositive motion seeking a ruling in its favor based on the District Court's decision, to which the State and Staff filed respective responses opposing and supporting the PFS motion, making this matter ripe for decision. See [PFS] Motion Supplement to Motion for Summary Disposition of Utah Contention Security J — Law Enforcement (Aug. 19, 2002) [hereinafter PFS Supplement]; [State] Response to PFS's Supplement to PFS's Motion for Summary Disposition of Utah Contention Security J — Law Enforcement (Aug. 27, 2002) [hereinafter State Response to PFS Supplement]; [Staff] Response to "[PFS] Supplement to Motion for Summary Disposition of Contention Utah Security J — Law Enforcement' (Aug. 28, 2002) [hereinafter Staff Response to PFS Supplement].

B. Utah SNF Legislation

As was noted in Section I.A above, contention Security-J is rooted in the premise that certain of the provisions of S.B. 81 abrogate the existing CLEA to the degree that pact is the vehicle under which Tooele County would, by reason of the facility's proposed location on the Skull Valley Band reservation, provide law enforcement services relative to the PFS ISFSI. As noted by the State in its response to the PFS dispositive motion, *see* State Response at 5, S.B. 81 is part of a comprehensive statutory scheme to control, and seemingly prohibit, the

storage of high-level SNF within Utah, *see* Utah Code Ann. § 19-3-301(1) ("[t]he placement, including transfer, storage, decay in storage, treatment, or disposal, within the exterior boundaries of Utah of high-level nuclear waste or greater than class C radioactive waste is prohibited"), based initially on the supposition that federal law does not sanction a privately owned ISFSI, *see id.* § 19-3-302(2).

Nonetheless, as is noted in the State's response, recognizing that NRC authority to grant a license for a privately owned, away-from-reactor SNF storage facility might be upheld by a court, the Utah legislature included "fall-back" provisions. See State Response at 5 (citing Utah Code Ann. § 19-3-301(2)(a)(ii)). If the NRC's licensing authority is upheld, the State declares, these would come into play to control SNF storage within the State through a state permitting process, allegedly designed to protect vital local economic, environmental, and land-use interests, all pursuant to the State's police power. See id. at 5-6 (citing Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission, 461 U.S. 190, 211-12 (1983)). In its response, the State further asserts that under these fall-back provisions, a county choosing to host an ISFSI must conform with certain specific guidelines that allegedly are intended to regulate an SNF facility, including amending the county's existing general development plan to address specific aspects of the proposed site's health and general welfare effects upon its citizens, thereby essentially becoming a part of the State licensing scheme. See id. at 6-7 (citing Utah Code Ann. § 17-27-301(3)).

Even under these fall-back provisions, however, the degree to which the existing CLEA would survive relative to the PFS PSP is in significant doubt. Utah Code § 19-3-301(6)(a) does allow state agencies to contract to provide municipal services, including law enforcement services, to an ISFSI after meeting certain requirements in accordance with the fall-back scheme. The practical effect of this provision relative to the CLEA is problematic, however, given section 17-34-1(3), which declares that a county may not "provide, contract to provide, or agree in any manner to provide municipal-type services . . . to any area under consideration for" an SNF storage facility; section 19-3-301(6)(b), which prohibits a state political subdivision from entering into a contract with an ISFSI to provide "municipal-type services"; and section 19-3-301(9)(a)(i), (ii), which voids any contract formed with an ISFSI facility to provide "municipal-type services" as being against public policy.²

²Pointing to Utah Code section 17-27-102(2), which provides that "[a] county shall comply with the mandatory provisions of this part [(i.e., Part 1 of Title 17, Chapter 27)] before any agreement or contract to provide . . . municipal-type services to any storage facility . . . for high-level nuclear waste . . . may be executed or implemented," the State declares that the fall-back provisions would be operative to permit counties to enter into contracts to provide municipal services if the general regulatory schem — the outright ban on any nuclear storage in the State — were to be declared void. *See* State Response at 6-7. In relevant part, however, there is no distinction drawn elsewhere in S.B. 81 that would indicate that the provisions nullifying municipal services contracts with ISFSIs do not operate when the general scheme is voided.

C. Parties' Positions Regarding Summary Disposition

1. PFS Dispositive Motion

Based on this statutory scheme, with contention Security-J the State challenged PFS compliance with 10 C.F.R. Parts 72 and 73. On April 30, 2002, PFS moved for summary disposition of contention Security-J. In that motion, PFS contends that no disputed genuine issues of material fact exist relative to contention Security-J in that the contention presents only purely legal questions. In support of this proposition, PFS puts forth three arguments, namely, (1) the enacted Utah legislation is preempted by the Atomic Energy Act of 1954 (AEA), 42 U.S.C. § 2011 *et seq.*;³ (2) the Utah laws are violative of the federal Constitution's Commerce Clause, U.S. Const. art. I, § 8, cl. 3;⁴ and (3) even if the Utah laws are not overturned on constitutional grounds, the Commission's 'realism doctrine' prevents the State from asserting successfully that PFS is not in compliance with Part 73 requirements because of the lack of a valid CLEA.⁵ See PFS Motion at 5-18.

In its post-District Court ruling dispositive motion supplement, PFS asserts that July 30, 2002 decision, "clearly is dispositive of PFS" first ground for summary disposition" that the State legislation is preempted by the AEA. PFS Supplement at 4. Declaring the District Court's decision "explicitly invalidates the particular provisions underlying contention Security J," PFS asserts that the principles of collateral estoppel and res judicata apply to the State's challenge in the NRC proceeding, given that the issue resolved in the District Court's decision "is

³Federal preemption of state laws is a product of the federal Constitution's Supremacy Clause, which provides that the "Constitution, and the Laws of the United States which shall be made in Pursuance thereof . . . shall be the supreme Law of the Land " U.S. Const. art. VI, cl. 2. Federal preemption of state laws occurs in three ways. First, if Congress acts pursuant to its enumerated powers, it can expressly preempt state laws with federal laws. Second, "field preemption" can occur in instances when a scheme of federal regulation is so pervasive as to make reasonable the inference that Congress has left no room to supplement it. Third, even if Congress has not entirely displaced state regulation in a specific area, state law is preempted to the extent that it actually conflicts with federal law. See Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission, 461 U.S. 190, 204 (1983).

⁴Besides granting Congress the express authority to override conflicting state-adopted commercial regulations, the Commerce Clause has been recognized to abridge state authority through negative implication. This "dormant" Commerce Clause concept is based on the idea that, although the Commerce Clause is an affirmative grant of power to Congress to regulate interstate commerce, it also operates to preclude the states from burdening unduly or discriminating against interstate commerce. See Oregon Waste Systems, Inc. v. Department of Environmental Quality of Oregon, 511 U.S. 93, 98 (1994); Fort Gratiot Sanitary Landfill, Inc. v. Michigan Department of Natural Resources, 504 U.S. 353, 359 (1992). In this regard, if a state law discriminates against interstate commerce on its face, it is per se invalid under the dormant Commerce Clause. See Oregon Waste Sys., 511 U.S. at 99. If, however, a state law is even-handed or nondiscriminatory, but still burdens interstate commerce, the law is invalid only if "the burden imposed on such commerce is clearly excessive in relation to the putative local benefits." Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

⁵ As set forth in 10 C.F.R. § 50.47(c)(1)(iii), the realism doctrine "recognize[s] the reality that in an actual emergency, state and local government officials will exercise their best efforts to protect the health and safety of the public." Therefore, if as a result of a lack of state and/or local government participation a nuclear reactor applicant cannot demonstrate that an adequate emergency plan exists, the applicant can develop its own emergency plan and the NRC will evaluate that plan based upon the presumption that state and local officials generally will follow the applicant's plan in the event of an emergency.

precisely the same as that presented in PFS's Motion for Summary Disposition, it is an issue [that was] actually litigated in the Federal District Court, the issue was determined by a valid and final judgment, and the ruling was essential to the Federal District Court's judgment." *Id.* at 4-5. PFS, however, urges the Board to rule on all the issues it has presented, including the validity of the Utah laws under the Commerce Clause and the Commission's realism doctrine "for the purposes of completing the record." *Id.* at 7-8.

2. State Position with Regard to the PFS Motion

The State's main argument in its initial and subsequent responses to the PFS motion and supplemental motion is that the issue of the constitutionality of the Utah legislation's municipal services contract provisions is secondary to the determination whether Congress in the Nuclear Waste Policy Act of 1982 (NWPA), 42 U.S.C. § 10101 et seq., intended to permit a PFS-type ISFSI facility.⁶ See State Response at 8, 11-13; State Response to PFS Supplement at 1-2. The State asserts that the PFS supplement concedes that the District Court decision did not settle this issue, and that the Commission's decision to address on the merits the State's February 11, 2002 suggestion of lack of jurisdiction, see CLI-02-11, 55 NRC 260, 264-66 (2002), constitutes an acknowledgment that the Commission must resolve the threshold issue before considering the constitutionality of the Utah statutes. See State Reply at 6; State Response to PFS Supplement at 3. The State also asserts PFS has ignored long-established Commission precedent that if there is a "special public interest factor" in a case, it will refuse to apply a different adjudicatory body's decision. See State Response to PFS Supplement at 2-3. According to the State, this case presents numerous reasons that qualify for invoking this exception, which PFS has failed to address other than to make the "bald assertion" that no such special interest exists. Id. at 2-3; see State Reply at 8-10 & n.4. In fact, the State declares the "nature and procedural posture" of the District Court's decision, including its "blanket analysis [of] the many varied provisions constituting Utah's general statutory scheme" and the pendency of a Utah appeal of that ruling with the United States Court of Appeals for the Tenth Circuit, make Licensing Board reliance on the decision in granting the PFS motion both unsafe and unwise. State Reply at 8; see State Response to PFS Supplement at 3.

⁶ As framed by the State, this issue concerns the regulatory jurisdiction of the Commission as defined under the NWPA. The State contends that the NWPA prohibits a privately owned, away-from-reactor SNF storage facility, such as the Skull Valley facility. According to the State, the provisions of the NWPA describing ISFSIs and the 'persons' who are authorized to apply for a license to construct and operate an ISFSI prohibit all privately owned, away-from-reactor ISFSI facilities. As a result, the State argues, PFS is not eligible for a license to operate the Skull Valley facility. See State Response at 11; see also Utah's Suggestion of Lack of Jurisdiction (Feb. 11, 2002) at 2-3 (filed with the Commission).

3. Staff Response to PFS Motions

In its July 22, 2002 response to the initial PFS motion, the Staff asserts that S.B. 81 is legally invalid under the doctrine of federal preemption as violative of the AEA and the Commerce Clause. See Staff Response at 9-20. Additionally, in its response to the PFS supplement to its motion, the Staff supports the PFS assertion that summary disposition should be granted because res judicata requires the Board to give full and conclusive effect to the District Court's decision. In that filing, the Staff asserts that even though it was not a party to the District Court litigation, the Staff's nonparticipation in that cause was "of no consequence, in that neither the State nor PFS seeks to apply the doctrine of repose against the Staff," and that the District Court's decision should be given full effect in the absence of any other public policy concerns. Staff Response to PFS Supplement at 5. The Staff also declares that the State's arguments about the "correctness" of the District Court's decision and the filing of an appeal do not negate the effect of res judicata. Id. at 6. Finally, the Staff declares that it "does not oppose the Applicant's suggestion that the Licensing Board rule upon its other stated grounds for summary disposition," noting that the record would then be complete for Commission review. Id. In this regard, the Staff suggests that "[t]o the extent that a ruling on the Applicant's other arguments may be viewed to be akin to an 'advisory opinion' . . . [they] are normally disfavored, but there is no bar to the issuance of such an opinion." Id. at 6 n.10.

II. ANALYSIS

A. Summary Disposition Standards

In an earlier ruling on a PFS motion for summary disposition, the Board summarized the governing standards as follows:

Under 10 C.F.R. § 2.749(a), (d), summary disposition may be entered with respect to any matter (or all of the matters) in a proceeding if the motion, along with any appropriate supporting material, shows that there is "no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law." The movant bears the initial burden of making the requisite showing that there is no genuine issue as to any material fact, which it attempts to do by means of a required statement of material facts not at issue and any supporting materials (including affidavits, discovery responses, and documents) that accompany its dispositive motion. An opposing party must counter each adequately supported material fact with its own statement of material facts in dispute and supporting materials, or the movant's facts will be deemed admitted. See Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102-03 (1993).

LBP-99-23, 49 NRC 485, 491 (1999). We once again use these standards in evaluating the PFS motion relative to contention Security-J.

B. Application of Summary Disposition Standards to Contention Security-J

The PFS April 2002 motion for summary disposition sets forth several major legal theories in support of its argument that there is no genuine dispute of material fact relating to contention Security-J and that on this contention it is entitled to a ruling in its favor as a matter of law. As to one of these — AEA preemption of the Utah law's municipal services contract provisions — initially we are faced with the question whether, in ruling on contention Security-J, it is appropriate as a legal and policy matter for the Board to give full effect to the District Court's decision declaring unconstitutional as preempted by the AEA the Utah legislation at issue relative to this contention. In turn, pivotal to this analysis are the concepts of res judicata and collateral estoppel, also referred to as the doctrines of repose, that we consider in some detail below.

1. Res Judicata and Collateral Estoppel

A classic formulation of the doctrine of res judicata, also known as claim preclusion, was set forth by the United States Supreme Court in the case of *Cromwell v. County of Sac*, 94 U.S. 351, 352 (1876):

[T]he judgment, if rendered upon the merits, constitutes an absolute bar to a subsequent action. It is a finality as to the claim or demand in controversy, concluding parties and those in privity with them, not only as to every matter which was offered and received to sustain or defeat the claim or demand, but as to any other admissible matter which might have been offered for that purpose.

In applying the doctrine of claim preclusion, modern courts look to three factors to determine whether or not a claim should be barred in connection with subsequent litigation: (1) whether there was a final judgment on the merits of the claim by a court of competent jurisdiction; (2) did the prior action involve the same parties or their privies; and (3) did the prior action involve the same claim. *See* 18 James Wm. Moore et al., *Moore's Federal Practice* § 131.01, at 131-12 (3d ed. 1999) [hereinafter Moore].

Similar to the doctrine of res judicata, the precept of collateral estoppel, also known as issue preclusion, prevents the relitigation of issues that already have been adjudicated. Issue preclusion applies only if the issue in the prior

⁷Central to the principle of claim preclusion are the concepts of merger and bar. The doctrine of merger states that when a plaintiff succeeds in litigation and recovers a valid and final judgment, the plaintiff's claim is merged into the judgment, as well as all the defenses to it, including any that have not, but could have been, brought. By the same token, if a plaintiff loses in litigation, the result is a bar on any further claims made by the plaintiff arising from that particular cause of action. *See* 18 James Wm. Moore et al., *Moore's Federal Practice* § 131.01, at 131-11 (3d ed. 1999).

adjudication is identical to that in the subsequent case. Moreover, to apply the doctrine of collateral estoppel: (1) the judgment in the case must be final and entered by a court of competent jurisdiction; (2) the issue must have been the same as that actually litigated and necessary to the outcome of the first action; and (3) the party to which the estoppel is to be applied must have been a party, or in privity with a party, that litigated the issue in the prior proceeding. *See* 18 Moore § 132.01[1]-[2], at 132-10 to 132-11. If so, the issue cannot be relitigated in a subsequent action with a different claim.

While, as a general rule, the doctrine of res judicata can be applied in NRC adjudicatory proceedings, an exception to this customary practice occurs when broad public policy considerations or special public interest factors are involved such that an agency's need for flexibility outweighs the reasons underlying this repose doctrine so as to favor relitigation of a particular issue. See United States Department of Energy (Clinch River Breeder Reactor Plant), CLI-82-23, 16 NRC 412, 420 (1982). For instance, a judicial decision need not be considered binding on an administrative agency if the legislature granted primary authority to decide the substantive issue in question to the administrative agency. See 2 Kenneth C. Davis, Administrative Law Treatise § 18.12, at 627-28 (1958) [hereinafter Davis]. Nor is a change in external circumstances required for an agency to exercise its basic right to change a policy decision and apply a new policy to parties to which an old policy applied. See Clinch River, CLI-82-23, 16 NRC at 420.

The principle of collateral estoppel, like that of res judicata, can also be applied in administrative adjudicatory proceedings. *See Toledo Edison Co.* (Davis-Besse Nuclear Power Station, Units 1, 2, and 3), ALAB-378, 5 NRC 557, 561, 562-63 (1977). As a general matter, a judicial decision is entitled to the same collateral estoppel effect in a later administrative proceeding as it would be accorded in a subsequent judicial proceeding. *See id.* at 561 (citing 2 Davis § 18.11, at 619). As with the concept of res judicata, and for the same reasons, the existence of public policy considerations could outweigh the jurisprudential policy reasons for applying the doctrine of collateral estoppel. *See Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-79-27, 10 NRC 563, 574-75 (1979). The correctness of the prior decision is not, however, a public policy factor upon which the application of the doctrine of collateral estoppel depends. *See Safety Light Corp.* (Bloomsburg Site Decommissioning and License Renewal Denials), LBP-95-9, 41 NRC 412, 446-47 & n.158 (1995).

⁸ Res judicata also does not apply when the foundation for a proposed action arises after the prior ruling advanced as the basis for res judicata or when the party seeking to employ the doctrine had the benefit, when it obtained the prior ruling, of a more favorable standard as to burden of proof than is now available to it. *See Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-349, 4 NRC 235, 245-46 (1976).

2. Application of the Doctrines of Repose to Contention Security-J

In its July 30, 2002 decision, the District Court found that the "issues presented in the motions are primarily legal ones, bearing on the questions of whether the Utah laws violate various Constitutional provisions and whether federal law has preempted the field," and that the factual issues as they related to the pending motions were not in controversy. *Skull Valley Band*, 215 F. Supp. 2d at 1241. The Court also found that PFS "would face significant hardship if the constitutionality of the Utah laws was not resolved at this point" and as a consequence determined that the challenged enactments were ripe for review in that proceeding. *Id.* at 1241, 1243.

The Utah statutes at issue in this proceeding, including Utah Code Ann. § 17-34-1(3), are those provisions regulating municipal services contracts that directly affect the viability of the CLEA in question relative to the PFS facility. The District Court, noting that "[a] refusal to provide municipal services would drastically increase PFS' cost of operation, because the SNF facility would have to provide its own emergency services," held these provisions unconstitutional under the AEA due to the "direct and substantial effect on the decisions made by those who build or operate nuclear facilities concerning radiological safety levels and, thus, fall within the pre-empted field." Id. at 1249 (footnote omitted). As a result of this judicial holding, PFS and the Staff ask this Board to apply principles of res judicata and/or collateral estoppel to contention Security-J, thereby extinguishing this particular State claim that PFS should be denied a license because it has not complied with certain 10 C.F.R. Part 73 requirements. As explained below, regardless of which repose tenet attaches, we find the PFS dispositive motion regarding contention Security-J should be granted because there are no genuine issues of material fact in controversy and PFS is entitled to a ruling in its favor on the motion as a matter of law.

As noted earlier, as a general matter a judicial decision is entitled to the same collateral estoppel or res judicata effect in an administrative proceeding as in a later judicial proceeding, assuming that there are no overriding public policy issues. *See Davis-Besse*, ALAB-378, 5 NRC at 561. And certainly in this instance, whether on the basis of claim or issue preclusion, ⁹ the matters that were resolved

⁹ In this instance, the criteria necessary for res judicata to attach apparently are present, i.e., (1) there was a final judgment on the merits by the District Court; (2) the action involved the same parties as are present before the Board (except for the Staff, which does not object to the use of doctrines of repose and, in any event, in this circumstance might be in privity with PFS); and (3) the prior action involved the same claim, at the heart of which is the question of the constitutionality of the Utah statutes. The same is true for the requirements for collateral estoppel, i.e., (1) the issue regarding the contention before the Board rests on the constitutionality of the Utah statues, which was also the issue before the District Court and was an essential component of its determination; (2) the constitutionality of those statutes was litigated by the State, the party against which estoppel is to be applied; and (3) the decision issued by the District Court was a valid and final judgment. We also note there are no significant differences in circumstances, such as burden of proof, that would prevent us from applying the doctrines in this administrative licensing proceeding.

by the District Court are dispositive of those before the Board in connection with contention Security-J. The State's basis for the contention is that PFS is not in compliance with the Commission's requirements relative to an LLEA because the enactment of the Utah legislation in question, in particular the municipal services contract provisions, eviscerates the underlying CLEA as it applies to the PFS facility. Because the District Court ruled that these statutory provisions have no effect because they are unconstitutional, and the State has made no other showing in connection with this contention indicating that PFS cannot comply with the LLEA-related requirements of Part 73, a determination granting the PFS dispositive motion seems wholly in order.

To be sure, the State has asserted there are overriding policy concerns that weigh against attaching doctrines of repose in this case. The Board finds these arguments meritless, however. First, the District Court did address the "threshold issue" of whether or not the NRC has jurisdiction to license a PFS-type facility, finding in the context of its standing determination that the question of whether PFS has the legal right to own and operate an ISFSI should be resolved by the Commission, and possibly through appeals of that determination to an appropriate federal appellate court, given that PFS in the district court litigation was seeking only to secure the right to proceed in the NRC licensing proceeding unhindered by the State. 10 See Skull Valley Band, 215 F. Supp. 2d at 1240, 1241. Second, we agree with the PFS observation that the District Court's preemption analysis was "more than adequate to strike down the statutory provisions," PFS Supplement at 7, and, contrary to what the State has asserted, see State Response to PFS Supplement at 3, in determining their constitutionality the District Court did address the pertinent statutory provisions distinctly and separately, see 215 F. Supp. 2d at 1243-52. Moreover, while any State qualms with the District Court's analyses and conclusions may be questions for a federal appellate court, they do not provide a basis for not applying the repose doctrines. See Davis-Besse, ALAB-378, 5 NRC at 562-63. The same is true with regard to the State's related argument that the Board should not grant the PFS motion based on the District Court's ruling because "some months from now upon reversal of the [District Court's] Order we will all be right back here going through this drill all over again." State Reply at 9-10. It may well be that if the Tenth Circuit decides to reverse the District Court's ruling, the agency will be at the same point we are at right now — litigating the merits of this State claim. But that is a risk PFS must bear relative to facility licensing. See Davis-Besse, ALAB-378, 5 NRC at 560-61, 563.

¹⁰ In this regard, while (as we noted previously in Section I.C.2) this issue is pending with the Commission currently, the Board has already addressed the question in ruling on the admissibility of contention Utah A, Statutory Authority. See LBP-98-7, 47 NRC 142, 183-84, aff'd on other grounds, CLI-98-13, 48 NRC 26 (1998).

We do, however, disagree with PFS and the Staff in one respect. We find it unnecessary to delve into the merits of the additional arguments made by PFS in support of its motion for summary disposition. Certainly, neither of these parties has suggested that the District Court's determination to strike down the contested statutory provisions as preempted on AEA grounds was not sufficient, in and of itself, to resolve the litigation, thereby alleviating the need for a ruling on the Commerce Clause viability of the Utah enactments. The same is true in the context of contention Security-J. In light of the District Court's AEA preemption ruling, the doctrines of repose fully support our determination regarding the pending PFS motion, so that we need not address the other challenges to the Utah legislation interposed in its filings.

III. CONCLUSION

Under the doctrines of repose, the July 30, 2002 District Court ruling upholding the PFS/Skull Valley Band assertion that the municipal services contract provisions enacted by the Utah State legislature in S.B. 81 are unconstitutional as preempted by the AEA is dispositive of the same issue presented by PFS in its summary disposition motion on contention Security-J. Accordingly, there being no genuine issues of material law or fact in dispute, summary disposition in favor of PFS is appropriate relative to that contention.

For the foregoing reasons, it is, this fifteenth day of October 2002, ORDERED that the April 30, 2002 PFS motion for summary disposition regarding contention Security-J, as supplemented on August 19, 2002, is *granted* and, for the reasons

given in this Memorandum and Order, a decision regarding that contention is rendered in favor of PFS.

THE ATOMIC SAFETY AND LICENSING BOARD¹¹

G. Paul Bollwerk, III ADMINISTRATIVE JUDGE

Dr. Jerry R. Kline ADMINISTRATIVE JUDGE

Dr. Peter S. Lam ADMINISTRATIVE JUDGE

Rockville, Maryland, October 15, 2002.

¹¹Copies of this Memorandum and Order were sent this date by Internet e-mail transmission to counsel for (1) Applicant PFS; (2) Intervenors Skull Valley Band, Ohngo Gaudadeh Devia, Confederated Tribes of the Goshute Reservation, Southern Utah Wilderness Alliance, and the State; and (3) the Staff.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ivan W. Smith, Chairman Dr. Peter S. Lam Thomas D. Murphy

In the Matter of

Docket No. 150-00004-CivP (ASLBP No. 02-802-01-CivP) (EA 01-271)

DECISIVE TESTING, INC. (San Diego, California)

October 16, 2002

MEMORANDUM AND ORDER

(Approving Settlement Agreement and Terminating Proceeding)

I. BACKGROUND

The Licensee, Decisive Testing, Inc., performed industrial radiography aboard the *USS Constellation* in San Diego, California, during 2001. California is an "Agreement State" as provided by 10 C.F.R. § 150.3(b) and normally it would regulate industrial radiography in that state. However, because the *Constellation* is a United States naval vessel, jurisdiction over the activity returns to federal, NRC jurisdiction. In such cases, a licensee would be required to obtain "reciprocity" consent from the NRC and to pay a fee prior to conducting the radiography. The Licensee failed to do so and the NRC Staff issued a Notice of Violation and later imposed a \$6,000 civil penalty. 67 Fed. Reg. 41,741 (June 19, 2002). The Licensee requested a hearing and we granted the request in our Memorandum and Order of August 20, 2002. We also noted that the essential facts of the matter did not seem to be in dispute and we urged the parties to consider a settlement or

to compromise the civil penalty. On October 4, 2002, Decisive Testing and the NRC Staff entered into a settlement agreement which included a provision that the Licensee pay a penalty in the amount of \$3,000. Also on that date, the parties filed a joint motion to approve the settlement agreement in the public interest and to terminate the proceeding, which we do in the Order below.

II. DISCUSSION

The NRC Staff has determined that "Decisive Testing took appropriate corrective actions and that the violation in and of itself posed no threat to public health and safety." Joint Motion at 2. Accordingly the Board agrees that the settlement is in the public interest. In accepting the Staff's position, we also note that the presiding officer, in considering civil penalty compromises, must give due weight to the position of the Executive Director for Operations or the Director's staff designee and that the Director has specific regulatory authority to compromise a civil penalty. 10 C.F.R. §§ 2.303, 2.205(g). A copy of the settlement agreement is attached to this Memorandum and Order.

III. ORDER

The Board finds that settlement of this civil penalty proceeding is in the public interest. The Joint Motion to Approve the Settlement Agreement and Terminate Proceeding is GRANTED. This proceeding is TERMINATED.

It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD

Ivan W. Smith ADMINISTRATIVE JUDGE

Dr. Peter S. Lam ADMINISTRATIVE JUDGE

Thomas D. Murphy ADMINISTRATIVE JUDGE

Rockville, Maryland October 16, 2002

ATTACHMENT

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of Docket No. 150-00004-CivP

(ASLBP No. 02-802-01-CivP)

(EA 01-271)

DECISIVE TESTING, INC. (San Diego, California)

October 4, 2002

SETTLEMENT AGREEMENT

On February 27, 2002, following an NRC investigation into alleged violations of NRC regulations 10 C.F.R. §§ 150.20(a) and 150.20(b)(1), the NRC Staff ("Staff") issued a "Notice of Violation and Proposed Imposition of Civil Penalty — \$6,000" to Michael R. May, President of Decisive Testing, Inc. (hereinafter "NOV"). Subsequently, on June 11, 2002, the Staff issued an "Order Imposing Civil Monetary Penalty — \$6,000" to Mr. Paul May, Chief Executive Officer of Decisive Testing, Inc. (hereinafter "Order"), finding that Decisive Testing, Inc. violated NRC regulations when it failed to file NRC Form 241 before performing radiography in NRC jurisdiction. Following a June 27, 2002, request for a hearing filed by Decisive Testing, Inc., an Atomic Safety and Licensing Board ("Board") was appointed on July 26, 2002. (See 67 Fed. Reg. 48,953.)

The parties in the above-captioned proceeding, the NRC Staff ("Staff") and Decisive Testing, Inc. ("Decisive Testing"), have engaged in negotiation and agree that it is in the public interest to terminate this proceeding without further litigation and without reaching a conclusion on the merits of the Order, subject to approval of the Atomic Safety and Licensing Board.

NOW THEREFORE, IT IS STIPULATED AND AGREED AS FOLLOWS:

- 1. Decisive Testing violated 10 C.F.R. §§ 150.20(a) and 150.20(b)(1), when it failed to file Form 241 prior to performing work in NRC jurisdiction.
- 2. The Staff determined Decisive Testing took appropriate corrective actions and that the violation in and of itself posed no threat to public health and safety.

- 3. In acknowledgment of Decisive Testing's violation of 10 C.F.R. §§ 150.20(a) and 150.20(b)(1), Decisive Testing agrees to pay a penalty in the amount of \$3,000.
- 4. The Staff does not intend to, and consequently agrees not to take any further civil or administrative enforcement action against Decisive Testing based on the matters outlined in the February 27, 2002, NOV and the June 11, 2002, Order.
 - 5. This Settlement is limited to the above-captioned civil proceeding.
- 6. The parties shall jointly move the Atomic Safety and Licensing Board designated in the above-captioned proceeding for an order approving this Settlement Agreement and terminating the above-captioned proceeding.
- 7. The parties agree to waive their rights to a hearing in connection with this matter, and waive any right to contest or otherwise appeal this Settlement Agreement once approved by the Atomic Safety and Licensing Board.

IN WITNESS WHEREOF, Decisive Testing and the Staff have caused this Settlement Agreement to be executed by the Parties or their duly authorized representatives on this 4th day of October, 2002.

Respectfully submitted,

Angela B. Coggins Counsel for NRC Staff

Randall D. Gustafson Counsel for Decisive Testing, Inc.

Dated at Rockville, Maryland, this 4th day of October 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of

Docket No. 50-346 (License No. NPF-3)

FIRSTENERGY NUCLEAR OPERATING COMPANY (Davis-Besse Nuclear Power Station, Unit 1)

October 15, 2002

The Petitioners requested that the Nuclear Regulatory Commission issue an Order to FirstEnergy, the owner of the Davis-Besse nuclear power plant, requiring a Verification by an Independent Party (VIP) for issues related to the reactor vessel head corrosion discovered at Davis-Besse. The Petitioners proposed a VIP team to consist of a material corrosion expert, an instrumentation and control/electrical engineer, a mechanical engineer, a system engineer, and at least one administrative staffer.

The final Director's Decision on this petition was issued on October 15, 2002. In that Decision, the NRC Staff concluded that the information contained in the petition did not warrant NRC Staff action to issue an order to FirstEnergy. The NRC Staff found that its ongoing actions were sufficient to verify the adequacy of the Licensee's performance related to reactor pressure vessel head degradation issues and to reassure the public that all reasonable safety measures have been taken prior to plant restart. The establishment of the Augmented Inspection Team and the Inspection Manual Chapter (IMC) 0350 Oversight Panel as well as the comprehensive technical reviews being performed by the Staff and investigations being performed by the NRC's Office of Investigations were responsive to the degradation problem at Davis-Besse. The Staff has adequate expertise and resources to monitor the Licensee's corrective and preventative actions. Thus, the enforcement-related action requested by the Petitioners for a VIP was not warranted. Additionally, the Licensee was already taking action to provide an

adequate level of independent verification for restart activities. Therefore, the Petitioners' request that the NRC issue an order to the Licensee requiring the establishment of a VIP was denied.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated April 24, 2002, David Lochbaum, on behalf of multiple organizations, filed a petition pursuant to Title 10 of the *Code of Federal Regulations* (10 C.F.R.) section 2.206. The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC) issue an order to FirstEnergy Nuclear Operating Company (the Licensee), the owner of the Davis-Besse Nuclear Power Station, Unit 1 (Davis-Besse), requiring a Verification by an Independent Party (VIP) for issues related to the reactor pressure vessel (RPV) head degradation problem. The Petitioners supported their request by citing the order issued by the NRC on August 14, 1996, to Northeast Nuclear Energy Company, the owner of the Millstone Nuclear Power Station, as a recent and relevant precedent.

The Petitioners met by teleconference with the Office of Nuclear Reactor Regulation (NRR) Petition Review Board on May 9, 2002, to clarify the bases for the petition. The petition and the transcript of this meeting, which was treated as a supplement to the petition, are available in ADAMS under Accession Nos. ML021260444 and ML021490065, respectively, for inspection at the Commission's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records are accessible from the ADAMS Public Electronic Reading Room on the NRC Web site, http://www.nrc.gov/reading-rm/adams.html. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR reference staff at 1-800-397-4209 or 301-415-4737, or by e-mail to pdr@nrc.gov.

The Licensee responded to the petition on May 16, 2002, and the information provided was considered by the Staff in its evaluation of the petition. A copy of the Licensee's response is publicly available in ADAMS under Accession No. ML021410451.

In a letter dated June 4, 2002, the NRC informed the Petitioners that the issues in the petition were accepted for review under 10 C.F.R. § 2.206 and had been referred to NRR for appropriate action. A copy of the acknowledgment letter is publicly available in ADAMS under Accession No. ML021370030.

The NRC sent a copy of the proposed Director's Decision to the Petitioners and to the Licensee for comment on August 16, 2002. The Petitioners responded with

comments on August 29, 2002, and the Licensee responded on August 30, 2002. Copies of these documents are publicly available under ADAMS Accession Nos. ML022260169, ML022260210, ML022530407, and ML022530399, respectively. The comments and the NRC Staff's responses to them are attached to this Director's Decision (but not published herein).

II. DISCUSSION

As a result of the Licensee's identification of extensive degradation of the pressure boundary material of the RPV head on March 6, 2002, the NRC dispatched an Augmented Inspection Team (AIT) to Davis-Besse on March 12, 2002, and issued a Confirmatory Action Letter (CAL) to the Licensee on March 13, 2002, related to commitments for activities to evaluate and resolve the RPV head degradation issue. At the time of the Petitioner's request for enforcement-related action on April 24, 2002, the NRC was still assessing the issue and developing a comprehensive plan for reviewing the broader aspects of the Licensee's performance.

In their request for a VIP, the Petitioners stated that "independent programs serve both to verify the adequacy of plant owner performance and to reassure the public that all reasonable safety measures have been taken." The Petitioners further stated that conditions at Davis-Besse warranted such verification and reassurance.

Pursuant to 10 C.F.R. § 2.206, the Petitioners requested an enforcement-related action, that the NRC issue an order to the Licensee requiring a VIP for issues related to the RPV head degradation and that the VIP be tasked with the following:

- 1. Verifying the adequacy of the problem identification and resolution process;
- 2. Verifying the root-cause evaluation prepared by the Licensee for the damage to the RPV head;
- 3. Verifying that the long-term accumulation of boric acid within the reactor containment did not impair the function of safety-related systems, structures, and components;
- 4. Verifying that the Licensee has taken appropriate actions in response to NRC generic communications;
- 5. Verifying that the Licensee has not deferred other plant modifications without appropriate justification;
- 6. Verifying that all entities responsible for safety reviews (e.g., Quality Assurance, INPO, the nuclear insurer, the plant operating review

- committee, the offsite safety review committee, etc.) are properly in the loop and functioning adequately;
- 7. Documenting its work in a publicly available report;
- 8. Presenting its conclusions to the NRC in a public meeting conducted near the plant site.

Subsequent to April 24, 2002, the NRC took several actions. On May 3, 2002, the NRC formed the Davis-Besse Inspection Manual Chapter (IMC) 0350 Oversight Panel to provide the required oversight throughout the plant's shutdown and restart and issued its Charter and Process Plan. On May 15, 2002, the NRC formed the Davis-Besse Reactor Vessel Head Degradation Lessons-Learned Task Force (LLTF) to conduct an independent evaluation of the NRC Staff's regulatory processes and issued its charter. Also on May 15, 2002, the NRC issued a revised CAL to the Licensee to address the option of replacing the existing RPV head, which the Licensee has decided to pursue in lieu of repairing the damaged head. On July 3 and July 25, 2002, the NRC revised the charter for the IMC 0350 Oversight Panel to reflect changes in its membership. On August 16, 2002, the IMC 0350 Oversight Panel issued a Restart Checklist, which is a list of issues that require resolution before restart can be considered. These actions represent a significant and comprehensive NRC response to the RPV head degradation issue, a response that was not yet implemented at the time of the April 24, 2002, petition.

Subsequent to April 24, 2002, the Licensee took several actions to develop a Return-to-Service Plan, which were initially described in their May 16, 2002, letter responding to the petition. On May 21, 2002, the Licensee submitted to the NRC a Return-to-Service Plan describing its planned course of action for Davis-Besse's safe and reliable return to service. This plan is not a commitment, but is subject to NRC evaluation for adequacy and provides input to the NRC's Restart Checklist. Revisions to the Return-to-Service Plan were submitted on July 12, August 21, and September 23, 2002. Copies of the plan and its revisions are publicly available in ADAMS under Accession Nos. ML021430429, ML022030464, ML022670616, and ML022740488, respectively. The Return-to-Service Plan includes actions to address the issues identified in the petition.

The Licensee has established a Restart Organization, which includes not only reorganized and realigned internal senior leadership, but also four separate and distinct oversight review and verification teams, three of which include independent industry experts. These three teams are the Restart Overview Panel which consists of Licensee and nonlicensee executives and the local Ottawa County Administrator and provides overall oversight of implementation of the Return-to-Service Plan and its components; the Engineering Assessment Board which consists of independent industry experts and members of the Licensee's engineering organization charged with reviewing engineering products

and programs; and the Restart Station Review Board which consists of site managers and independent overseers and makes initial decisions regarding restart-required actions. The evaluations and corrective actions of the Licensee's Restart Organization are discussed in routine public meetings and are also being evaluated by the NRC's Oversight Panel pursuant to IMC 0350.

It should be noted that the NRC Staff shares the Petitioners' concerns about verifying the adequacy of plant owner performance and reassuring the public that all reasonable safety measures have been taken. Each of the Petitioners' proposed tasks for the requested VIP was carefully evaluated and all appropriate regulatory oversight activities are reflected in the charter of the IMC 0350 Oversight Panel. Additionally, the LLTF charter reflects many of the Petitioners' concerns. Both groups have held meetings to discuss their charters and receive input from the public to ensure that concerns such as those identified by the Petitioners are being considered. The Staff has concluded that the Petitioners' concerns are valid and are within the scope of the actions being implemented by the NRC.

IMC 0350 provides regulatory guidelines to be followed when a power reactor licensee plans to restart the reactor after the plant has been shut down as a result of significant performance problems or events. The applicability of IMC 0350 is sufficiently broad to address the Petitioners' concerns. The overall objective of the IMC 0350 Oversight Panel is to provide the required oversight throughout the shutdown and restart to ensure that appropriate regulatory and Licensee actions are implemented and the technical issues resolved before the plant is allowed to restart and operate. The IMC 0350 Oversight Panel continues to hold public meetings periodically with the Licensee's representatives to review the status of activities associated with RPV head degradation issues. These meetings are normally held in the vicinity of the Davis-Besse plant and the results documented in publicly available transcripts and reports. The inspections conducted under the direction of the IMC 0350 Oversight Panel will assess the adequacy of the Licensee's Return-to-Service Plan activities and include independent confirmatory evaluation of the Petitioners' concerns.

In addition to regulatory oversight activities, the NRC created the LLTF to conduct an independent evaluation of the NRC Staff's regulatory processes related to assuring RPV head integrity in order to identify and recommend improvements. The LLTF consists of NRC managers and staff who are not routinely involved with Davis-Besse. The scope of subjects considered by the LLTF includes Reactor Oversight Process Issues, Regulatory Process Issues, Research Activities, International Practices, and Generic Issue Processes. The LLTF periodically briefed NRC senior managers and provided a written report on September 30, 2002, documenting its observations, conclusions, and recommendations. A copy of this report is publicly available in ADAMS under Accession No. ML022760414. The full 96-page report (plus attachments) is also publicly available on the NRC's

Web site at http://www.nrc.gov/reactors/operating/ops-experience/vessel-head-degradation/news.html. After NRC management has had a chance to review the report and develop an Action Plan to address the LLTF's recommendations, the NRC Action Plan will be made publicly available.

In support of their request for enforcement-related action, the Petitioners cite as a recent and relevant precedent the August 14, 1996, Confirmatory Order issued to Northeast Nuclear Energy Company establishing an Independent Corrective Action Verification Program at Millstone Nuclear Power Station, Units 1, 2, and 3 (Millstone). This was a unique enforcement-related action. Millstone had longstanding, repetitive, and widespread performance problems for which the NRC Staff did not have sufficient expertise or resources to evaluate. Additionally, the order was issued only after extensive investigations which identified multiple problems at Millstone related to lack of a safety-conscious working environment, lack of confidence in the level of technical work performed by the Licensee and its contractors, and a chilling environment for employees to raise safety issues. While the Licensee did not detect the RPV head degradation problems in a timely manner, the NRC has not identified performance problems at Davis-Besse that are beyond the NRC Staff's technical and programmatic expertise to evaluate. Therefore, the NRC Staff does not believe that the requested VIP at Davis-Besse is necessary. The IMC 0350 Oversight Panel has adequate access to agency resources to complete its efforts and the LLTF has already completed its efforts. If ongoing activities identify new and/or different issues that warrant consideration of an enforcement-related action similar to that used at Millstone, a change to the current Staff regulatory approach would be considered.

Contrary to the implied assertion by the Petitioners that the NRC Staff is not competent to oversee and conduct a thorough review, the Staff is confident that the ongoing regulatory actions will provide information that will adequately resolve the RPV head degradation safety issues and associated safety concerns at Davis-Besse. The Licensee's own actions to provide for independent verification by industry experts will provide supplementary assurance that their actions are adequate. Although the individual RPV head degradation issues and concerns have not yet been resolved, the issues raised by the Petitioners regarding the regulatory processes for reviewing the broader aspects of the Licensee's performance have been the subject of NRC Staff review and evaluation. The Staff continues to believe that the establishment of the AIT and the IMC 0350 Oversight Panel, as well as the comprehensive technical reviews being performed by the Staff and investigations being performed by the NRC's Office of Investigations, are responsive to the degradation problem, and will ensure the protection of the public health and safety and the environment. The Petitioners' request for the NRC to issue an order to the Licensee requiring the establishment of an additional independent program would create another layer of oversight, representing unnecessary regulatory burden

without an increase in the protection of the public health and safety and the environment.

III. CONCLUSION

The NRC Staff finds that its ongoing actions are sufficient to verify the adequacy of the Licensee's performance related to RPV head degradation issues and to reassure the public that all reasonable safety measures have been taken prior to plant restart. The combined efforts of the AIT and the IMC 0350 Oversight Panel will adequately identify and evaluate the technical and programmatic issues at Davis-Besse. The Staff has adequate expertise and resources to monitor the Licensee's corrective and preventative actions. Thus, the enforcement-related action requested by the Petitioners for a VIP is not warranted. Additionally, the Licensee is already taking action to provide an adequate level of independent verification for restart activities. Therefore, the Petitioners' request for the NRC to issue an order to the Licensee requiring the establishment of a VIP is denied. If further assessment by the IMC 0350 Oversight Panel identifies new and/or different issues that warrant consideration of an enforcement-related action similar to Millstone, a change to the current Staff regulatory approach will be considered.

As provided in 10 C.F.R. § 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Collins, Director Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland, this 15th day of October 2002.

Attachment (not published): Staff Responses to Comments on Proposed Director's Decision DD-02-1

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Martin J. Virgilio, Director

In the Matter of Docket Nos. 50-333

72-12

(License No. DPR-59)

ENTERGY NUCLEAR OPERATIONS, INC. (James A. FitzPatrick Nuclear Power Plant)

October 28, 2002

The Petitioners requested the following: (1) that NRC order Entergy to suspend the dry cask storage program at the FitzPatrick reactor; (2) that NRC require Entergy to demonstrate that the proposed fuel storage program presents no increased risks to the national security or worker or public health and safety beyond what is contemplated in the Certificate of Compliance and General License, pursuant to 10 C.F.R. § 72.212(4)-(5); NRC require Entergy to submit its proposed design changes for technical review in the form of a license amendment application and seek regulatory approval for them pursuant to 10 C.F.R. § 72.244; NRC require Entergy to evaluate its use of the HI-TRAC 100 transfer cask for ALARA standards, per 10 C.F.R Part 50, Appendix I; NRC require Entergy to provide more substantial physical and structural protection of the irradiated fuel and ISFSI to satisfy the requirements of 10 C.F.R. §§ 73.51, 73.55; and NRC require Entergy to demonstrate that the use of the HI-STORM 100 can satisfy these requirements at FitzPatrick, or demonstrate countervailing and compelling reasons to utilize the HI-STORM 100 at FitzPatrick, as opposed to any other casks certified by NRC; (3) that all documents and information filed in relation to the selection of storage casks and the implementation of dry storage at FitzPatrick be put on the docket for public inspection; (4) that the Petition Review Board (PRB) submit this petition to the NRC's Office of the Inspector General (OIG) for review of the Spent Fuel Project Office's compliance with regard to NRC regulations in terms of design changes, licensing, amendments, exemptions, and ALARA

in its permitting process relating to the use of dry cask storage at FitzPatrick; that a review be conducted to determine whether NRC Staff in the Spent Fuel Project Office are complicit or misguided in permitting design changes to these casks without submission of a license amendment; (5) that the NRC conduct an investigation to determine whether Entergy has deliberately circumvented the appropriate technical and regulatory review required to protect worker and public health and safety and the environment.

The final Director's Decision on this petition was issued on October 28, 2002. In that Decision, the Director of the Office of Nuclear Material Safety and Safeguards determined that the safety concerns that the Petitioners raised related to the modified HI-STORM 100 cask design at FitzPatrick were reviewed, and determined not to pose an immediate safety issue. Therefore, the request to require that an order be issued to Entergy to suspend the dry cask storage program at FitzPatrick was denied. In response to the Petitioners' request that Entergy submit an additional safety demonstration of the FitzPatrick storage facility, it was determined, through the NRC inspection program, that Entergy has demonstrated that the proposed fuel storage program presents no increased risks to the national security or worker or public health and safety beyond what is contemplated in the Certificate of Compliance and General License, pursuant to section 72.212(4)-(5). The NRC denied the Petitioners' request that Entergy submit a license amendment, ALARA review, and various other safety evaluations and justifications to the NRC for review for the reasons noted in the detailed discussion in the Director's Decision. The Petitioners' request to require Entergy to provide more substantial physical and structural protection of the irradiated fuel and ISFSI was also denied, as existing security measures, including issuance of an NRC order to Entergy on October 16, 2002, have been determined to be adequate. The Petitioners requested that all documents and information filed in relation to the selection of storage casks and the implementation of dry storage at FitzPatrick be put on the docket for public inspection. Documents and information filed in relation to the selection of storage casks and the implementation of dry storage at FitzPatrick were put on the docket for public inspection by letter dated May 10, 2002, and the additional information was released to the public at that time. The Petitioners' request that the PRB submit this petition to the OIG for review of the SFPO was granted, as noted in the letter dated April 12, 2002. In response to the Petitioners' request to investigate whether Entergy deliberately circumvented the regulatory process, the NRC Staff review of Entergy's 10 C.F.R. § 72.48 evaluation concluded that the proper regulatory process was followed by Entergy, and no further investigation was warranted.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated February 21, 2002, as supplemented by a telephone call with the U.S. Nuclear Regulatory Commission's (NRC) Petition Review Board (PRB) on March 29, 2002, Tim Judson and Deborah Katz of the Citizens Awareness Network (CAN) and Shawn McConnell and Tom Dellwo of the New York Public Interest Research Group (NYPIRG) filed a petition pursuant to Title 10 of the *Code of Federal Regulations*, section 2.206. The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC) take the following actions:

- 1. That the NRC order Entergy Nuclear Operations, Inc. (Entergy) to suspend the dry cask storage program at the James A. FitzPatrick Nuclear Power Plant (FitzPatrick).
- 2. That the NRC require Entergy to:
 - demonstrate that the proposed fuel storage program presents no increased risks to the national security or worker or public health and safety beyond what is contemplated in the Certificate of Compliance and General License, pursuant to 10 C.F.R. § 72.212(4)-(5);
 - submit its proposed design changes for technical review in the form of a license amendment application and seek regulatory approval for them pursuant to 10 C.F.R. § 72.244;
 - evaluate its use of the HI-TRAC 100 transfer cask for ALARA standards, per 10 C.F.R Part 50, Appendix I;
 - provide more substantial physical and structural protection of the irradiated fuel and Interim Spent Fuel Storage Installation (ISFSI) to satisfy the requirements of 10 C.F.R. §§ 73.51, 73.55, and;
 - demonstrate that the use of the HI-STORM 100 can satisfy these requirements at FitzPatrick, or demonstrate countervailing and compelling reasons to utilize the HI-STORM 100 at FitzPatrick, as opposed to any other casks certified by NRC.
- 3. That all documents and information filed in relation to the selection of storage casks and the implementation of dry storage at FitzPatrick be put on the docket for public inspection.
- 4. That the Petition Review Board (PRB) submit this petition to the NRC's Office of the Inspector General (OIG) for review of the Spent Fuel Project Office (SFPO) compliance with regard to NRC regulations in terms of

design changes, licensing, amendments, exemptions, and ALARA in its permitting process relating to the use of dry cask storage at FitzPatrick. Additionally, that a review be conducted to determine whether NRC Staff in the SFPO are complicit or misguided in permitting design changes to these casks without submission of a license amendment.

That the NRC conduct an investigation to determine whether Entergy
has deliberately circumvented the appropriate technical and regulatory
review required to protect worker and public health and safety and the
environment.

The bases for the requests were several safety concerns related to the design changes associated with the HI-STORM 100 cask design, as well as safety concerns related to national security.

The Petitioners participated in a teleconference with the NRC's Office of Nuclear Material Safety and Safeguards PRB on March 29, 2002, to clarify the bases for the petition. The transcript of this meeting was treated as a supplement to the petition and is available in the Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC's public documents. These documents may be accessed through the NRC's Public Electronic Reading Room on the Internet at http://www.nrc.gov/reading-rm/adams.html. The Accession Number is ML021290025. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdf@nrc.gov.

In a letter dated April 12, 2002, the NRC Staff informed the Petitioners that their request to immediately issue an order to suspend the dry cask storage program at FitzPatrick was denied, and that the issues in the petition were being referred to the SFPO for appropriate action. In addition, the NRC Staff informed the Petitioners that their request to submit this petition to the OIG for review of the SFPO's compliance with regard to NRC regulations in terms of design changes, licensing, amendments, exemptions, and ALARA in its permitting process relating to the use of dry cask storage at FitzPatrick was approved, and that the issues in the petition were referred to the OIG for appropriate action.

In a letter dated May 10, 2002, the NRC Staff informed the Petitioners that their request to put all documents and information filed in relation to the selection of storage casks on the docket for public inspection under a Demand for Information was approved. In this letter the NRC Staff also stated that although the NRC is not subject to "Demands for Information," we were, nevertheless, treating the demand as a request for documents, and transmitting the requested information.

The NRC sent a copy of the proposed Director's Decision to the Petitioners and to the Licensee for comment on August 13, 2002. The Petitioners responded with comments on August 27, 2002, and the Licensee responded on August 28,

2002. The comments and the NRC Staff's response to them are Enclosures to this Director's Decision.

II. DISCUSSION

As the basis for their requested actions, the Petitioners raise a number of specific concerns related to the NRC's process for licensing spent fuel storage, and also concerns specifically related to the licensing of FitzPatrick's interim spent fuel storage installation. These concerns, and the evaluations of these concerns by NRC Staff, are as follows:

Concern: The Petitioners state that the NRC gave Holtec permission
to build and redesign casks under a design that was not yet approved
under the condition that Holtec would have to modify or even discard
the manufactured casks if the design was not certified. The NRC already
knew the overpacks would require modification from the original design
when the fabrication exemption was granted.

Evaluation: The NRC granted a fabrication exemption to Holtec to manufacture the original HI-STORM 100 casks (Amendment 0 to the HI-STORM 100 design) prior to Amendment 0 being approved by the NRC. This exemption was granted on the condition that Holtec may need to modify or discard the casks if the design they were manufactured to was not certified. The NRC has granted these types of exemptions several times for other cask manufacturers with similar conditions. These exemptions do not in any way authorize eventual use of a noncertified design, they merely allow a cask designer to begin fabrication at risk. All designs to be used for storage of spent fuel must meet the requirements of 10 C.F.R. Part 72. At the time the fabrication exemption was granted, January 13, 2000, the NRC did not know that the overpacks would require modification for use at FitzPatrick.

On December 13, 2000, NRC Staff participated in a public meeting in Oswego County. That same day, prior to the public meeting, NRC Staff were given a tour of the FitzPatrick site. During this tour, the Licensee mentioned that the transfer cask was too large to be moved out of the fuel handling building in a standard configuration and described several options under consideration. NRC Staff indicated to the Licensee that nonstandard movements of the cask outside of the fuel handling building would require prior NRC approval unless the 10 C.F.R. § 72.48 criteria could be met. The NRC Staff verbally encouraged the Licensee to promptly submit a request for a licensing action, if Entergy determined that one was necessary.

Ultimately, the Licensee did redesign the HI-STORM cask under the auspices of section 72.48. The NRC reviewed the section 72.48 evaluation and determined that the proposed modifications to the cask would not result in a safety issue and met the criteria for design changes under section 72.48. The Licensee's section 72.48 evaluation was subsequently released to the public, in a May 10, 2002, correspondence with the Petitioners. The details of changes made to the HI-STORM cask design are outlined in that document which can be found in ADAMS, under the package Accession Number ML021340256. The NRC has determined that there is no safety-significant concern related to this item in the petition.

2. *Concern:* The Petitioners claim that the NRC withheld its knowledge that the casks were too large to be moved out of the containment building without modification during a public meeting in Oswego County.

Evaluation: As discussed above, on December 13, 2000, NRC Staff participated in a public meeting in Oswego County. That same day, prior to the public meeting, NRC Staff were given a tour of the FitzPatrick site, in which the Licensee mentioned several cask movement options. The Petitioners state that many members of the public asked questions concerning cask movements, safe load path analysis, radiation exposure of workers loading the casks, the transfer casks, etc. However, this particular subject was never discussed at this meeting. As described above, the Licensee did ultimately redesign the HI-STORM cask to allow movement outside of the containment building, under the auspices of section 72.48. The NRC Staff reviewed the Licensee's section 72.48 evaluation, and determined that the proposed modifications to the cask would not result in a safety issue and met the criteria for design changes under section 72.48.

The NRC's goal is to be as open as practical regarding sharing of information with the public. The Petitioners' comment reinforces the need for the Staff to clearly communicate information and be responsive to the public's needs.

 Concern: The Petitioners claim that a Staff Request for Additional Information (RAI) on the HI-STORM 100S (the shorter design) included about seventy-four unresolved items that the Petitioners are not aware of whether they have been resolved.

Evaluation: The HI-STORM 100S design was submitted for NRC review by Holtec International as proposed Amendment No. 1 to the HI-STORM system. During the NRC review of this amendment request, the Staff issued a number of RAIs. Holtec's response to those issues is available to the public in ADAMS at Accession Numbers ML011900075

and ML011900100. These two files are portions of a larger document. All of the files comprising the document are included in a package with Accession Number ML011900259.

It is important to note that the modified cask design being used at FitzPatrick during the first set of cask loadings is not the shorter HI-STORM 100S design, but a similar, shorter design (JAF HI-STORM 100) modified from the originally approved HI-STORM 100 design. The JAF HI-STORM 100 design was approved through a section 72.48 evaluation performed by the Licensee. That section 72.48 evaluation had been under Staff inspection for some time prior to receipt of the petition, and the inspection was eventually completed in April 2002. Evaluations performed by a licensee under section 72.48 do not require NRC approval prior to implementation, but are subject to the NRC's inspection program. A copy of the NRC's Inspection Report is available to the public in ADAMS at Accession Number ML021700752.

In addition to loading the JAF HI-STORM 100 cask design approved under section 72.48, FitzPatrick has also indicated plans to use the HI-STORM 100S design (the design mentioned in the petition) in future loadings. That design received a full technical review by the NRC's Spent Fuel Project Office, during which time the seventy-four technical questions initially posed by NRC Staff were resolved by Holtec International. The NRC's technical review of the amendment to the HI-STORM system went through the rulemaking process, whereby public comments are received prior to final NRC approval.

The Certificate of Compliance (CoC) and Safety Evaluation Report (SER) may be found in ADAMS under Accession Number ML022000176. The *Federal Register* notice for that amendment was published March 27, 2002, and may be found electronically at http://www.access.gpo.gov/su_docs/fedreg/a020327c.html. FitzPatrick was not authorized to use the HI-STORM 100S design until that rulemaking was completed, unless the Licensee chooses to submit an exemption request for NRC approval (and receives approval), or chooses to approve the changes under section 72.48, in which case the Licensee would be required to make the section 72.48 evaluation available for NRC inspection.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

4. *Concern:* The Petitioners describe a discussion with an employee of the NRC's Spent Fuel Project Office (SFPO) where the Petitioners claim that the employee was not aware of all of the design changes Entergy

made (via section 72.48), or the details. The Petitioners state it is their understanding that NRC will not independently analyze the design changes, computer modeling, and testing, but merely review Entergy's section 72.48 evaluation.

Evaluation: At the time the SFPO employee was contacted by the Petitioners, the NRC had only recently received the Licensee's section 72.48 evaluation of the cask design changes, and had not yet reviewed that evaluation, which describes the design changes in detail. As previously explained, NRC Staff subsequently began a technical inspection of the section 72.48 evaluation, including the Holtec and Licensee calculations supporting the design changes.

The process for inspecting a Licensee's evaluation performed under section 72.48 does differ from the NRC's technical review and approval process for design changes requiring NRC submittal. However, in both cases the need to perform independent confirmatory analyses of licensee or cask designer calculations is determined by NRC technical review staff. In this case, the Staff did not require confirmatory analyses to render its safety findings and found FitzPatrick's evaluation in compliance with applicable regulations. Both the inspection process and the cask certification and approval process are designed to ensure public health and safety is not jeopardized.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

5. Concern: The Petitioners claim the NRC had clear reason to require a license amendment application and ALARA review, and that the NRC has failed to provide assurance that the FitzPatrick activities will not pose an increased risk to national security, the community, workers, and the environment.

Evaluation: The provisions of 10 C.F.R. Part 72 allow a general licensee to make changes to the storage casks, provided that the changes do not exceed any of the eight criteria listed in 10 C.F.R. § 72.48(c)(2). NRC Staff determined through their inspection at the FitzPatrick site that these criteria were not exceeded.

If the NRC had found, through inspection of FitzPatrick's section 72.48 evaluation, that the section 72.48 criteria were exceeded, then a license amendment or exemption would have been required. However, this was not the case, and as such, the NRC did not have "clear reason" to require a license amendment application.

The Petitioners' concern regarding the need for an ALARA review, and the risk to the community, workers, and the environment is addressed below under items 9 and 10. The risk to national security is also addressed below under item 12.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

6. *Concern:* The Petitioners claim Entergy's reasons for avoiding a license amendment are financial in nature, and are related to loss of full core offload, future simplification of Private Fuel Storage's regulatory approval for HI-STORM 100 casks, and savings in eventual waste shipments (through use of Holtec's relatively high capacity design).

Evaluation: In determining whether a change to a cask design requires a license amendment or not, licensees are required to evaluate the proposed change against the criteria in section 72.48(c)(2). If the proposed change exceeds one of the criteria, then a license amendment would be required. With respect to the FitzPatrick case, the criteria for submittal of a license amendment were not exceeded.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

7. *Concern:* In the March 29, 2002, phone call with the PRB, the Petitioners added that they "think it really is important to the NRC to look at this process in terms of its abdication of this responsibility to, in fact, include the public in the process."

Evaluation: The NRC continues to work toward increasing public confidence in the area of spent fuel storage, and appreciates the Petitioners' concern with regard to the availability of information to the public. In this case, the design changes were approved through the section 72.48 approval process by the Licensee. These Licensee evaluations are submitted to the NRC in summary form on a biennial basis, as described in 10 C.F.R. § 72.48(d)(2).

Additionally, the provisions of section 72.48, which allow a licensee to approve changes without prior NRC approval and public comment, were added to 10 C.F.R. Part 72 through the NRC's rulemaking process. This modification to the general licensing process provided an opportunity for public comment. At that time, public comments concerning this process were received and evaluated by the NRC.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

8. *Concern:* Entergy's design changes increase the risk of terrorism due to use of lower density concrete in the revised cask design.

Evaluation: The low-density concrete issue relates to the Licensee's determination that some concrete used in the casks did not meet their procurement specifications. However, the concrete used did meet the licensing and safety analysis requirements. Additionally, the modified FitzPatrick cask design actually uses higher density concrete than the HI-STORM 100 cask design originally approved by the NRC, as mentioned by the Licensee in the March 29, 2002, phone call with the PRB, and in the Licensee's section 72.48 evaluation.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

Concern: Entergy's use of the HI-STORM casks does not adequately
protect workers because Entergy plans on using the HI-TRAC 100 transfer
cask, which has higher worker dose rates than the HI-TRAC 125 transfer
cask.

Evaluation: Any general licensee has the option to use either the HITRAC 100, or the HI-TRAC 125. The Certificate of Compliance No. 1014, includes the following in the description of the HI-STORM 100 Cask System, "Two types of HI-TRAC transfer casks are available: the 125-ton HI-TRAC and the 100-ton HI-TRAC."

Both transfer casks have undergone NRC technical review, and have been subject to comment during the rulemaking process. The technical review performed by the NRC Staff is documented in a Safety Evaluation Report, and can be found in ADAMS, under the Accession Number ML003711865 for Amendment No. 0, and ML022000249 for Amendment No. 1.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

10. Concern: Entergy's design changes will increase radiation exposure to workers and the environment because the revised design involves lowering of the pedestal and realigning the canister closer to the vents, creating a streaming path.

Evaluation: The design change would have resulted in a local increase in dose rates at the inlet and outlet vents. However, the Licensee also required a modified gamma shield be put in place as part of the overall redesign to limit dose rates to workers and the public. The modified gamma shield is discussed in the Licensee's section 72.48 evaluation that was inspected by NRC Staff. NRC Staff have determined that the

modified cask continues to meet 10 C.F.R. Part 72 regulatory requirements for worker and public radiation exposure.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

11. Concern: Entergy's design changes could increase the possibility that the casks will leak through lowering of the pedestal and realigning the canister closer to the vents. The Petitioners also added during the March 29, 2002, phone call with the PRB that the change "involves significant modifications to the heat removal systems [for] this cask."

Evaluation: For a leak to be caused due to lowering of the pedestal, the spent fuel would have to heat up to an unsafe temperature due to a lack of sufficient air flow or other heat removal mechanisms. Air enters the cask through the vents. This air flow dissipates the heat generated from the fuel, maintaining the spent fuel at safe temperatures. With the redesigned cask pedestal, the canister is closer to the vents, but the air flow through the vents under the redesign remains sufficient to cool the canister and spent fuel. The Licensee evaluated the effect on heat removal capability due to the cask redesign in their section 72.48 evaluation that was inspected by NRC Staff. This inspection determined that the Licensee's evaluation was acceptable with respect to the thermal impact, and that the heat removal capability of the cask was maintained.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

12. Concern: The current storage area provides little or no structural protection against many kinds of terrorism scenarios, and this is an unnecessary risk to national security and public health and safety. The Petitioners also further elaborated in a conference call with the PRB on March 29, 2002, that loading the casks and placing them outside (away from the spent fuel pool) merely "shifts the risk around" and "creates more risk by creating more targets." The Petitioners also stated that Entergy should "entertain putting the casks further apart and [place each in a] berm so they would not be such a great terrorist target."

Evaluation: With regards to security measures, we understand and share your concerns following the events of September 11, 2001. The NRC has taken a number of measures to protect the public. Since the September 11 events, the Commission has issued a series of advisories to licensees, including those operating independent spent fuel storage installations (ISFSIs), to augment certain aspects of their security plans and capability. In addition, on October 16, 2002, the NRC issued orders to those

licensees operating ISFSIs to require compliance with interim safeguards and security compensatory measures. In general, the advisories and orders address increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and limited access of personnel and vehicles to the site, among other measures. NRC has audited FitzPatrick to verify implementation of the security measures addressed and will continue to periodically review the Licensee's security program.

Furthermore, we are undertaking a top-to-bottom review of the agency's safeguards and physical security programs, including the basic assumptions of current programs, in light of the continuing uncertainty about future terrorist intentions. This review involves U.S. national security organizations and is part of a broader review being undertaken by the federal government.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

13. *Concern:* The NRC should "look into what the increased risks are because of [the] shortening of the pedestal" (Comment from the March 29, 2002, PRB phone call).

Evaluation: As mentioned previously, NRC Staff have inspected the Licensee's section 72.48 evaluation with respect to all aspects of the cask redesign, including the shortening of the pedestal, to ensure that the changes maintain public safety, and that the changes were allowed under the provisions of section 72.48. The result of this inspection was that the design changes were determined to maintain safety, and comply with the requirements of Part 72.

NRC Staff have determined that there is no safety-significant concern related to this item in the petition.

Based on the specific items noted above and cited by the Petitioners as the bases for their petition, the following requests of the Petitioners are dispositioned as follows:

The Petitioners asked that an order be issued to Entergy to suspend the
dry cask storage program at FitzPatrick. In our letter dated April 12,
2002, we notified the Petitioners that we found no safety basis for an
immediate order, but would continue to evaluate the need for an order
as we continued our safety review of the petition. Based on the Staff's
safety review, as detailed in the specific items above, we find no basis for

- issuance of an order to Entergy to suspend the dry cask storage program at FitzPatrick. The request to issue such an order is therefore denied.
- 2. We denied the Petitioners' request that Entergy submit an additional safety demonstration of the FitzPatrick storage facility. We determined, through our inspection program, that Entergy has demonstrated that the proposed fuel storage program presents no increased risks to the national security or worker or public health and safety beyond what is contemplated in the Certificate of Compliance and General License, pursuant to 10 C.F.R. § 72.212(4)-(5). We are denying the Petitioners' request that Entergy submit a license amendment, ALARA review, and various other safety evaluations and justifications to the NRC for review for the reasons noted above in the detailed discussion of the various technical items. We also deny the Petitioners' request to require Entergy to provide more substantial physical and structural protection of the irradiated fuel and ISFSI, as existing security measures have been determined to be adequate.
- 3. We granted the Petitioners' request that all documents and information filed in relation to the selection of storage casks and the implementation of dry storage at FitzPatrick be put on the docket for public inspection by letter dated May 10, 2002, and we provided the additional information to be released to the public at that time.
- 4. We granted the Petitioners' request that the PRB submit this petition to the OIG for review of the SFPO, as noted in our letter dated April 12, 2002, to the Petitioners.
- 5. We also now deny the Petitioners' request to investigate whether Entergy deliberately circumvented the regulatory process. The NRC Staff review of Entergy's section 72.48 evaluation concluded that the proper regulatory process was followed by Entergy, and no further investigation is warranted.

III. CONCLUSION

We have granted portions of this petition as follows: (a) request that all documents and information filed in relation to the selection of storage casks and the implementation of dry storage at FitzPatrick be put on the docket for public inspection by letter dated May 10, 2002, and we provided the additional information to be released to the public at that time, and; (b) request that the PRB submit this petition to the OIG for review of the SFPO, as noted in our letter dated April 12, 2002, to the Petitioners.

We have denied portions of this petition as follows: (a) request of issuance of an order to Entergy to suspend the dry cask storage program at FitzPatrick; (b) request to investigate whether Entergy deliberately circumvented the regulatory process; and, (c) request that Entergy submit an additional safety demonstration of the FitzPatrick storage facility, request that Entergy submit a license amendment, ALARA review, and various other safety evaluations to the NRC for review, and request to require Entergy to provide more substantial physical and structural protection of the irradiated fuel and ISFSI.

As provided in 10 C.F.R. § 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

Martin J. Virgilio, Director Office of Nuclear Material Safety and Safeguards

Dated at Rockville, Maryland, this 28th day of October 2002.

Enclosures (not published):

- 1. Petitioners' Comments on the Proposed Director's Decision
- 2. NRC Staff Response to Petitioners' Comments
- 3. Licensee's Reply to the Proposed Director's Decision

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 50-423-LA-3 (Facility Operating License No. NPF-49)

DOMINION NUCLEAR
CONNECTICUT, INC.
(Millstone Power Station, Unit 3)

November 21, 2002

In this license amendment proceeding to increase the storage capacity of the spent fuel pool at the Millstone Unit 3 reactor through the use of high-density storage racks, the Commission grants review and affirms the Board's order denying the Intervenors' request for a 10 C.F.R. Part 2, Subpart K evidentiary hearing on a reopened contention.

RULES OF PRACTICE: APPELLATE REVIEW
REGULATIONS: INTERPRETATION (10 C.F.R. PART 2,

SUBPART K)

Review of final decisions of the licensing board in a Subpart K proceeding is governed by 10 C.F.R. § 2.786. As Subpart K has no review provisions of its own, the Subpart G rule is applicable by virtue of 10 C.F.R. § 2.1117.

RULES OF PRACTICE: HEARING PROCEDURES FOR SPENT FUEL POOL EXPANSION PROCEEDINGS

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART K)

The criteria for the board to designate issues for an adjudicatory hearing after the parties' written submissions and oral argument in a Subpart K proceeding are set out in 10 C.F.R. § 2.1115.

RULES OF PRACTICE: APPELLATE REVIEW

A petition for review of a final board decision must contain concise statements of why the decision is erroneous and why the Commission should exercise review. *See* 10 C.F.R. § 2.786(b)(2)(iii)-(iv).

RULES OF PRACTICE: APPELLATE REVIEW

The Commission may grant review when there is a substantial question with regard to one or more of the following considerations:

- (i) A finding of material fact is clearly erroneous or in conflict with a finding as to the same fact in a different proceeding;
- (ii) A necessary legal conclusion is without governing precedent or is a departure from or contrary to established law;
 - (iii) A substantial and important question of law, policy or discretion has been raised;
 - (iv) The conduct of the proceeding involved a prejudicial procedural error; or
 - (v) Any other consideration which the Commission may deem to be in the public interest.

10 C.F.R. § 2.786(b)(4)(i)-(v). *See also Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-93-8, 37 NRC 181, 184 (1993).

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART K)

RULES OF PRACTICE: HEARING PROCEDURES FOR SPENT FUEL POOL EXPANSION PROCEEDINGS

Section 2.1115 of 10 C.F.R. describes a two-part test to determine whether a contention in a Subpart K proceeding warrants a full evidentiary hearing:

(1) There must be a genuine and substantial dispute of fact which can only be resolved with sufficient accuracy by the introduction of evidence in an adjudicatory hearing; and (2) the decision of the Commission is likely to depend in whole or in part on the resolution of that dispute.

Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), CLI-01-3, 53 NRC 22, 26 (2001). Thus, to go forward after the parties' written submissions and oral argument, there must be specific factual controversies, and additional documentary evidence or live testimony must be necessary for the board to decide those facts, and the facts in question must require resolution for the board to decide the case.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART K)

LICENSING BOARDS: AUTHORITY; RESOLUTION OF ISSUES

Subpart K "authorizes the board to *resolve* disputed facts based on the evidentiary record made in the abbreviated hearing, without convening a full evidentiary hearing, if the board can do so with 'sufficient accuracy.'" *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-01-11, 53 NRC 370, 385 (2001). In short, Subpart K (which implements the Nuclear Waste Policy Act, 42 U.S.C. §§ 10131 *et seq.*) "contemplate[s] merits rulings by licensing boards based on the parties" written submissions and oral arguments, except where a board expressly finds that 'accuracy' demands a full-scale evidentiary hearing." *Id.*

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART K)

RULES OF PRACTICE: HEARING PROCEDURES FOR SPENT FUEL POOL EXPANSION PROCEEDINGS

Unsupported factual allegations are inadequate to produce a controversy that requires a Subpart K evidentiary hearing. *See Millstone*, CLI-01-3, 53 NRC at 27.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART K)

RULES OF PRACTICE: HEARING PROCEDURES FOR SPENT FUEL POOL EXPANSION PROCEEDINGS

"The proponent of a contention must supply, at the written submission and oral argument stages of a Subpart K proceeding, all of the facts upon which it intends to rely at the formal evidentiary hearing, should one prove necessary." *Shearon Harris*, CLI-01-11, 53 NRC at 388.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART K)

RULES OF PRACTICE: APPELLATE REVIEW

In a Subpart K proceeding, the Commission "generally will defer to our licensing boards' judgment on when they will benefit from hearing live testimony and from direct questioning of experts or other witnesses." *Shearon Harris*, CLI-01-11, 53 NRC at 386.

RULES OF PRACTICE: COMMISSION REVIEW OF LICENSING BOARD DECISIONS; BURDEN OF PROOF

ADJUDICATORY PROCEEDINGS: SCOPE

The Board accurately defined the scope of the current inquiry to be a comparison of the circumstances and practices at the time of the loss at Millstone 1 with the current circumstances and practices at Millstone 3 to determine whether Millstone 3 is vulnerable to a similar loss *now*. As the Board held, the record here amply shows the dissimilarities in procedures and practices in the two settings. *See* LBP-02-16, 56 NRC 83, 90-93 (2002). Dominion and the NRC Staff supplied the Board the information it needed to make the relevant determination. CCAM/CAM merely complained in the most general terms. Given the disparity in evidence, Dominion easily met its burden of proof regarding reopened Contention 4.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART K)

RULES OF PRACTICE: REOPENING OF PROCEEDINGS; BURDEN OF PROOF; BURDEN OF GOING FORWARD

To reopen the proceeding, the Intervenors bear the burden of establishing that the criteria of 10 C.F.R. § 2.734 are met. Thereafter, to move on to a further Subpart K evidentiary hearing, the Intervenors' written submission and oral argument had to meet the criteria described in 10 C.F.R. § 2.1115. However, after the Intervenors met their threshold burden, the ultimate burden of proof rested with the proponent of the license amendment. Dominion amply met that burden here. Of course, it is not possible for a licensee to provide proof that uncertain future events could *never* occur. *See Millstone*, CLI-01-3, 53 NRC at 27.

RULES OF PRACTICE: CONTENTIONS (SCOPE); REOPENING OF PROCEEDINGS

When CCAM/CAM sought to reopen Contention 4, they raised the Licensee's alleged discovery violation regarding notification about the missing fuel rods, but the Board excluded this matter when it set the boundaries for the reopened proceeding. Thus, the discovery violation was not properly within the reopened proceeding.

RULES OF PRACTICE: CONTENTIONS (SCOPE)

During the course of the Subpart K oral argument, the Intervenors shifted the focus of the reporting issue from the alleged discovery violation to an alleged failure to report the loss of the fuel rods to the NRC Staff and the Board. But CCAM/CAM had never mentioned this in their contention or in the reconsideration motion. The Board certainly did not admit it. As we reiterated just recently, "[t]he NRC's 'longstanding practice requires adjudicatory boards to adhere to the terms of admitted contentions' in order to give opposing parties 'advance notice of claims and a reasonable opportunity to rebut them.'" Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, 157 (2002), quoting Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 105 (1998).

RULES OF PRACTICE: HEARING PROCEDURES FOR SPENT FUEL POOL EXPANSION PROCEEDINGS

REGULATIONS: INTERPRETATION (10 C.F.R. PART 2, SUBPART K)

LICENSING BOARDS: AUTHORITY

RULES OF PRACTICE: CONTENTIONS (SCOPE)

The advance notice policy regarding contentions is particularly important in a Subpart K proceeding, as the parties must submit their evidentiary case 15 days prior to the oral argument. Strict adherence to the 10 C.F.R. § 2.1113 procedure is necessary to prevent one party from ambushing another with last-second new theories or claims. It was impermissible, in short, for CCAM/CAM to litigate a "failure to report" claim that they had not raised in their contention. That claim was not properly before the Board in the reopened proceeding. As a result, the Board should not have entertained discussion of it during oral argument.

RULES OF PRACTICE: CONTENTIONS

We place strict limits on "character" contentions; specifically, they must relate directly to the proposed licensing action. See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 365-67 (2001), reconsideration denied, CLI-02-1, 55 NRC 1 (2002), and references cited therein. In the instant case, CCAM/CAM attempt to insert a "character" issue into a license amendment proceeding raising chiefly technical matters. The Board recognized that CCAM/CAM did not establish the required link between past behavior and the licensing action contested in this case. In particular, CCAM/CAM fail to explain how NNECO's reporting delay, if indeed there was one, bears on the ability of a new licensee, Dominion Nuclear, to implement administrative criticality controls that the NRC Staff and the Board have found fully protective of the public health and safety.

MEMORANDUM AND ORDER

This reactor license amendment proceeding arises from Northeast Nuclear Energy Company's ("NNECO") request, dated March 19, 1999, to increase the storage capacity of the spent fuel pool at the Millstone Unit 3 ("Millstone 3") reactor through the use of high-density storage racks. On August 8, 2002, the Licensing Board denied the request of the Intervenors, Connecticut Coalition Against Millstone and Long Island Coalition Against Millstone (collectively, "CCAM/CAM"), for an evidentiary hearing on a reopened contention and terminated the proceeding. CCAM/CAM petitioned the Commission for review. We grant review but affirm the Board's decision. We give our reasons below.

I. BACKGROUND

On March 19, 1999, NNECO submitted a license amendment application to increase the capacity of its Millstone 3 spent fuel pool from 756 to 1860 fuel assemblies. CCAM/CAM filed a joint petition to intervene, followed by a supplemental petition containing eleven proposed contentions. The Board admitted three contentions, including Contention 4, the sole contention at issue here. Contention 4 challenged use of "administrative controls" to prevent a

¹On March 31, 2001, Dominion Nuclear Connecticut, Inc., became the Licensee and party in interest in this matter.

criticality accident in the spent fuel pool.² The Board summarized and restated Contention 4 as follows:

Undue and Unnecessary Risk to Worker and Public Health and Safety

The new set of administrative controls trades reliance on physical protection for administrative controls to an extent that poses an undue and unnecessary risk of a criticality accident, particularly due to the fact that the licensee has a history of not being able to adhere to administrative controls with respect, *inter alia*, to spent fuel pool configuration.³

After oral argument pursuant to 10 C.F.R. Part 2, Subpart K, the Board found that "NNECO has demonstrated that it can adhere to administrative controls, with adequate safety margin and defense-in-depth, without posing an undue or unnecessary risk to plant workers or the public." In reaching this conclusion, the Board pointed to several factors: the conservatively estimated error rate for fuel assembly misplacement; safety margins maintained by rack reactivity requirements; the use of soluble boron to add defense-in-depth; and additional margin introduced by conservative assumptions in criticality calculations. We denied CCAM/CAM's petition for review of the Board's fact finding on Contention 4 because we found the Board's conclusion "well grounded in the extensive original record."

While their petition for review was pending, CCAM/CAM filed a motion to reopen the record based on recent reports of two fuel rods missing (since approximately 1980) at another NNECO reactor at the Millstone site, Millstone Unit 1 ("Millstone 1"). CCAM/CAM also alleged a discovery violation by

²The other admitted contentions also involved criticality concerns. The parties resolved Contention 5, dealing with the surveillance schedule for soluble boron in the spent fuel pool, by an agreed-upon license condition, subsequently adopted by the Board. See Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), LBP-00-26, 52 NRC 181, 201 (2000). After oral argument, the Board denied CCAM/CAM's request for a further evidentiary hearing on Contention 6, which questioned the Licensee's ability to take credit in criticality calculations for enrichment, burnup, and decay time limits. See id. at 202-14. On petition for review, the Commission solicited briefs from the parties in this case and in a similar ongoing proceeding. See Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), CLI-01-3, 53 NRC 22 (2001). Ultimately, the Commission approved the Board's decision on the purely legal question raised in Contention 6. See CLI-01-10, 53 NRC 353 (2001).

³LBP-00-2, 51 NRC 25, 34 (2000).

⁴LBP-00-26, 52 NRC at 200.

⁵ See id.

⁶CLI-01-3, 53 NRC at 26. CCAM/CAM provided no probative evidence regarding human factors and expressly accepted NNECO's criticality calculations, which showed that criticality would not occur in the spent fuel pool even with concurrent misplacements of several fuel assemblies and substantial dilution of the soluble boron. See id. at 27. To demonstrate that an evidentiary hearing is warranted, a party must support factual allegations with experts or documents. NNECO presented specific facts. CCAM/CAM, however, made only general allegations insufficient to trigger an evidentiary hearing under Subpart K. See id.

The reactor core at Millstone 1, a boiling water reactor, consisted of 580 fuel assemblies. The fuel assembly from which the missing fuel rods were removed contained 49 such rods. Other fuel assemblies at Millstone 1 contained either 49 or 64 fuel rods. At Millstone 3, a pressurized water reactor, the core consists of 193 fuel assemblies, each containing 264 individual fuel rods. See "NRC Staff Brief and Summary of Relevant Facts, Data and Arguments upon Which the Staff Proposes To Rely at Oral Argument on Contention 4 in the Reopened Proceeding" with attached Affidavit of Antone C. Cerne, Cerne Affidavit ¶ 9 (Mar. 18, 2002) ("Cerne Affidavit").

NNECO in not updating prior discovery responses to include information on the missing fuel rods. We referred the motion to reopen to the Board.

CCAM/CAM's motion had two prongs. First, they alleged that, had the Board been aware that NNECO could not account for two fuel rods, it would have been unable to make its fact finding that NNECO has demonstrated that it can adhere to administrative controls with an adequate safety margin. Second, CCAM/CAM stated that NNECO had a duty to amend its prior discovery response on the question of fuel handling mishaps at Millstone Station. The Board initially denied the CCAM/CAM motion.⁸ The Board held that, despite the missing fuel rods, its conclusion — that, following restart of Millstone 3, NNECO had demonstrated the ability to carry out administrative controls adequately — did not change. Further, the Board ruled that the Licensee did not have an obligation to update discovery after the Board's decision in LBP-00-26, which was issued on October 26, 2000, because NNECO "apparently did not become aware of the missing fuel rods until November 2000."

CCAM/CAM sought reconsideration. They asserted that the adjudicatory record was incomplete regarding the missing rods, that it was likely that the Licensee was aware of the missing rods during discovery, and that there was no sworn testimony on this point. Upon reconsideration, the Board found that most of CCAM/CAM's claims, including their discovery claim, lacked merit and did not require reopening the record. But the Board expressed concern that NNECO's loss of the fuel rods "could credibly be attributable to a failure of the administrative controls governing accountability for fuel rods [at Millstone 1]." The Board decided to inquire whether any "failure" of administrative controls at Millstone 1 "could carry over" to implementing administrative controls at Millstone 3. The Board therefore reopened the record on Contention 4, but limited its inquiry to the commonality of administrative controls at Millstone 1 and Millstone 3:

[W]e find it appropriate to grant CCAM/CAM's motion for reconsideration . . . to the extent it bears upon both the adequacy of administrative controls at the Millstone-3 [spent fuel pool] and DNC's ability or willingness to implement such controls successfully. The scope of this reconsideration is limited to the procedures or controls for management of the [spent fuel pools] and their modes of execution that may be common to Millstone-1 and Millstone-3.¹²

After a second round of written submissions and oral argument by the parties, the Board denied CCAM/CAM's request for a further evidentiary hearing on

⁸ See CLI-01-3, 53 NRC at 29; LBP-01-1, 53 NRC 75 (2001).

⁹ See LBP-01-1, 53 NRC at 79-80. The Board was mistaken. Actually, the record now indicates that NNECO had first discovered the possibility that the rods were missing in September 2000.

¹⁰LBP-01-17, 53 NRC 398, 406-07 (2001).

¹¹ *Id.* at 408.

¹² Id. (emphasis added).

reopened Contention 4 and terminated the proceeding.¹³ In its denial order, the Board described the circumstances surrounding the loss of the two fuel rods and contrasted fuel handling procedures now used at Millstone 3 with those used at Millstone 1 at the time the loss occurred.14 The Board concluded that the deficiency at Millstone 1 was a result of unusual circumstances; that the missing rods are unlikely to cause a public health or safety problem; that the current Millstone 3 program adequately implements the requirements for locating spent fuel bundles properly; and that CCAM/CAM had not demonstrated "any significant factual disputes of a type that would warrant an evidentiary hearing." ¹⁵ The Board viewed NNECO's alleged failure to timely report the missing fuel rods as "mere confusion as to what had occurred" and as "information . . . peripheral at best to the Licensee's ability or willingness to carry out . . . administrative controls adequately."16

CCAM/CAM again petitioned for Commission review.¹⁷

II. DISCUSSION

A. Governing Legal Standards

Review of final decisions of the Board in a Subpart K proceeding is governed by 10 C.F.R. § 2.786.18 The criteria for the Board to designate issues for an adjudicatory hearing after the parties' written submissions and oral argument are set out in 10 C.F.R. § 2.1115. We outline these standards below in order to provide a framework for evaluating the CCAM/CAM petition for review.

1. 10 C.F.R. § 2.786

A petition for review of a final board decision must contain concise statements of why the decision is erroneous and why the Commission should exercise review.¹⁹ The Commission may grant review when there is a substantial question with regard to one or more of the following considerations:

¹³ See LBP-02-16, 56 NRC 83 (2002).

 $^{^{14}}See\ id.$ at 88-92.

¹⁵ See id. at 97-98.

¹⁶ See id. at 95.

¹⁷ During the pendency of the reopened proceeding, CCAM/CAM offered a late-filed terrorism contention. The Board rejected the contention, but referred its ruling to the Commission. See LBP-02-5, 55 NRC 131 (2002). We accepted the referral, which remains under Commission consideration. See CLI-02-5, 55 NRC 161 (2002).

¹⁸As Subpart K has no review provisions of its own, the Subpart G rule is applicable by virtue of 10 C.F.R. § 2.1117.

19 See 10 C.F.R. § 2.786(b)(2)(iii)-(iv).

- (i) A finding of material fact is clearly erroneous or in conflict with a finding as to the same fact in a different proceeding;
- (ii) A necessary legal conclusion is without governing precedent or is a departure from or contrary to established law;
 - (iii) A substantial and important question of law, policy or discretion has been raised;
 - (iv) The conduct of the proceeding involved a prejudicial procedural error; or
 - (v) Any other consideration which the Commission may deem to be in the public interest.²⁰

CCAM/CAM's petition nominally invokes a combination of the first and third considerations. CCAM/CAM first assert that the Board has decided a substantial and important question of law, policy, and discretion erroneously and that the decision "has potential to perpetuate much mischief, not just in terms of the present licensee but in all future adjudications." But the essence of the petition is CCAM/CAM's assertion, under the "clearly erroneous" ground, that the Board improperly found the absence of significant factual disputes of a type that would warrant a Subpart K evidentiary hearing. We ordinarily do not review fact-specific Board decisions, absent obvious error. Here, though, we have decided to review the Board decision so that we can offer clarification of the parties' roles in a Subpart K adjudicatory proceeding, and set out our own reasons, in addition to the Board's, for why CCAM/CAM's reopened Contention 4 lacks merit.

2. 10 C.F.R. § 2.1115

As we explained earlier in this proceeding, 10 C.F.R. § 2.1115 describes a two-part test to determine whether a contention in a Subpart K proceeding warrants a full evidentiary hearing:

(1) There must be a genuine and substantial dispute of fact which can only be resolved with sufficient accuracy by the introduction of evidence in an adjudicatory hearing; and (2) the decision of the Commission is likely to depend in whole or in part on the resolution of that dispute.²⁴

Thus, to go forward after the parties' written submissions and oral argument, there must be specific factual controversies, *and* additional documentary evidence or

²⁰ 10 C.F.R. § 2.786(b)(4)(i)-(v). See also Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-8, 37 NRC 181, 184 (1993).

²¹ Petition for Review at 6-9 (Aug. 23, 2002).

²² Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), CLI-01-11, 53 NRC 370, 382 (2001), aff'd sub nom. Orange County v. Nuclear Regulatory Commission, Docket No. 01-1073 and 01-1246, unpublished decision (D.C. Cir. Sept. 19, 2002). For reasons set forth in Section II.C.2 of this Order, the Board's factual error described in note 9, supra, is immaterial.

²³ See 10 C.F.R. § 2.786(b)(4)(v) (Commission may grant review for "any other consideration" it deems in "the public interest"); see generally Safety Light Corp. (Bloomsburg Site Decontamination and License Renewal Denials), CLI-92-13, 36 NRC 79, 85-86 (1992).

²⁴CLI-01-3, 53 NRC at 26.

live testimony must be necessary for the Board to decide those facts, *and* the facts in question must require resolution for the Board to decide the case.

As we held last year, Subpart K "authorizes the board to *resolve* disputed facts based on the evidentiary record made in the abbreviated hearing, without convening a full evidentiary hearing, if the board can do so with 'sufficient accuracy.'" In short, Subpart K (which implements the Nuclear Waste Policy Act, 42 U.S.C. §§ 10131 *et seq.*) "contemplate[s] merits rulings by licensing boards based on the parties' written submissions and oral arguments, except where a board expressly finds that 'accuracy' demands a full-scale evidentiary hearing." Unsupported factual allegations are inadequate to produce a controversy. The proponent of a contention must supply, at the written submission and oral argument stages of a Subpart K proceeding, all of the facts upon which it intends to rely at the formal evidentiary hearing, should one prove necessary."

Before evaluating whether the Board correctly applied the law to the facts, we turn now to a description of the facts, issues, and arguments that were — or were not — before the Board when it made its decision.

B. Information Before the Board

In its written presentation, Dominion Nuclear Connecticut (which replaced NNECO as Licensee in 2001) submitted abundant information in the form of a summary, exhibits, and sworn testimony consisting of affidavits of a supervisor from the reactor engineering team at Millstone 3, the supervisor for nuclear operations and support for Millstone 3, and an outside expert panel. These witnesses relied on the report of the Fuel Rod Accountability Project (FRAP Report), which was an investigation NNECO undertook regarding the loss of the two fuel rods, and a root-cause analysis of the FRAP report. The NRC Staff provided a written summary, along with affidavits of several experienced scientists and engineers, including NRC's senior resident inspector at Millstone 3, Antone Cerne.

These submissions described in detail the extensive investigation of the loss of the two fuel rods; the likely modes of disposition of the rods; the differences in fuel handling procedures used at Millstone 1 at the time of the loss and at Millstone 3 today; and the two most recent (and successful) refuelings at Millstone 3. This information directly addressed the question the Board defined when it reopened the adjudicatory proceeding: i.e., whether there is any commonality between fuel

²⁵ Shearon Harris, CLI-01-11, 53 NRC at 385.

²⁶ Id.

²⁷ See Millstone, CLI-01-3, 53 NRC at 27.

 $^{^{28}\}mathit{Shearon\ Harris},$ CLI-01-11, 53 NRC at 388.

handling procedures at the time of the accountability failure at Unit 1 and the present methods in use at Millstone 3.29

CCAM/CAM, in their written submission, did not adequately controvert any of the Dominion-Staff information on the commonality issue; indeed, they failed to dispute most of the information at all. Instead, they stressed a perceived problem in discovery during this adjudication — a topic the Board had not included in its reconsideration order — and in informing the Board about the loss of the two fuel rods. The latter topic was not even within the scope of CCAM/CAM's original contention or its motions to reopen and reconsider. CCAM/CAM continued to assert that NNECO had an obligation to inform them of the missing rods immediately by updating one of NNECO's discovery responses in this proceeding. The sole declaration CCAM/CAM provided was given by one of its members, a former employee of NNECO, who provided neither technical expertise nor relevant eyewitness observations. CCAM/CAM also submitted four other items: an NRC inspection report; a report, entitled "Failure to Report Missing or Lost Radioactive Fuel Rods in a Timely Manner," prepared by NRC's Office of Investigations; a newspaper article; and a licensee event report regarding Millstone 2.30 None addressed the commonality issue.

CCAM/CAM formally acknowledged that the Board had limited the scope of the reopened proceeding to the commonality issue.³¹ They nonetheless dwelt on NNECO's allegedly untimely disclosure of the missing fuel rods to CCAM/CAM, the Board, and the NRC Staff — issues far outside the scope the Board had established.

At the Subpart K oral argument, CCAM/CAM strayed even further from the limited subject of the reopened proceeding.³² They concentrated nearly exclusively on what they considered the "pervasive issue," the "culture" at Millstone,³³ an issue not comprehended within the reopened Contention 4. More important

²⁹ As noted, *supra*, the Board summarized the circumstances surrounding the loss of the two fuel rods and the differences between administrative controls at Millstone 1 and Millstone 3 in its recent decision. *See* LBP-02-16, 56 NRC at 88-92. The Board based its narrative on the voluminous affidavits, other documents, and arguments submitted by Dominion and the NRC Staff. We see no need to elaborate here on the Board's description and conclusions.

³⁰ See "Connecticut Coalition Against Millstone and Long Island Coalition Against Millstone Detailed Written Summary Pursuant to 10 CFR Section 2.1113" (Mar. 18, 2002).

³¹ See id. at 2-3.

³²As an example, CCAM/CAM's attorney at the beginning of her presentation outlined the three questions she planned to address:

When does the energy level taken to create a paper mountain in these proceedings equal the energy that is being given off and will be in the future from two missing high level radioactive spent fuel rods, and is there a point when that energy level will be equal to the energy being emitted by those spent fuel rods, and is there a point under law that will make it all right at that point, if the rods are never found? The second question is, of course, where are the rods? And the third question is, why wasn't the fact of the missing rods disclosed during the earlier portion of these proceedings when we went through a rather intensive time-limited discovery process?

Transcript of Hearing at 708-09 (Apr. 2, 2002) ("Tr.").

³³ See Tr. at 728; see also, e.g., Tr. at 730, 736, 740, 744, 826, 836, 837, 839.

than what CCAM/CAM did before the Board was what they did not do. They cited no specific deficiencies in Millstone 3 procedures, and they provided no factual basis to suggest that Millstone 3's current procedures for accounting and control of special nuclear material remotely resemble the procedures in place at Millstone 1 in 1980, when Millstone's former operator lost track of the two fuel rods.

C. Analysis of the Board's Decision

Against this backdrop, the Board found that the procedures used at Millstone 3 "are sufficient to preclude, with high reliability, an accidental criticality in the [spent fuel pool]."³⁴ A further evidentiary hearing is not necessary for us to uphold this conclusion. The Commission "generally will defer to our licensing boards' judgment on when they will benefit from hearing live testimony and from direct questioning of experts or other witnesses."³⁵

1. Loss of the Fuel Rods

In their petition for Commission review, CCAM/CAM continue to emphasize the loss of the fuel rods, *per se*, and the timing of NNECO's reporting of the loss. They apparently believe that the loss of the rods "speaks for itself" and would have the Commission deny Dominion's license amendment on a ground akin to the tort doctrine of *res ipsa loquitur*; i.e., they ask us to infer negligence and/or poor safety culture and/or wrongdoing because the occurrence of the loss would not happen in the ordinary course of events without the fault of the Licensee. The Board found the loss itself sufficient to *reopen* the proceedings. Indeed, the Board stated that the one matter giving support to the Intervenors' motion for reconsideration was "the loss of the fuel rods itself and the failure of DNC thus far, after more than 4 months' search, to have located the rods or accounted for their disposition." Although the loss of the fuel rods at *Millstone 1* may warrant a hard look at the Millstone 3 situation, we will not rescind the *Millstone 3* license amendment on this basis alone. "The commission of the rescind the *Millstone 3* license amendment on this basis alone."

The obligation of CCAM/CAM did not end with the reopening of this proceeding. Without presenting probative technical evidence of their own, they

³⁴ LBP-02-16, 56 NRC at 93.

 $^{^{35}\}mathit{Shearon\ Harris},$ CLI-01-11, 53 NRC at 386.

³⁶LBP-01-17, 53 NRC at 407. The Board reopened the proceeding specifically because none of the Licensee's affidavits provided information regarding the relationship, if any, between current operations at Millstone Unit 3 and the errors leading to the misplacement or loss of the two fuel rods from Millstone Unit 1.

³⁷The NRC Staff issued the requested license amendment on November 28, 2000, after concluding that the amendment posed "no significant hazards considerations" under 10 C.F.R. § 50.92. *See* 65 Fed. Reg. 75,736 (Dec. 4, 2000).

have tried to stretch a 20-some-year-old loss at a different reactor (indeed, a different kind of reactor),³⁸ under different ownership, into a justification for denying a spent fuel expansion amendment at the Millstone 3 unit today. As the Board held, the record here amply shows the dissimilarities in procedures and practices in the two settings.³⁹

Some examples of the differences between Millstone 1 (in 1980) and Millstone 3 (today) are: (1) procedures to implement reactivity limits at Millstone 3 include dual review of the determination that an assembly meets the limits; (2) comprehensive special nuclear material accounting procedures at Millstone 3 cover both fuel assemblies and fuel rods (unlike the older Millstone 1, which had no procedure for individual rods); (3) fuel location at Millstone 3 is tracked on both a paper card file and a computer-based system called "Shuffleworks," which was not used at Millstone 1 when the loss occurred; (4) individual fuel rods at Millstone 3 are controlled in a fuel storage box, which is placed in a basket and stored in the same manner as a fuel assembly; and (5) Millstone 3, a pressurized water reactor, does not have local power range monitors, the devices for which the missing rods at Millstone 1 are believed to have been mistaken when they were removed from the spent fuel pool. This list is by no means exhaustive. We also note that the Millstone 3 license amendment deals with the storage of fuel assemblies, while the Millstone 1 event involved fuel rods.

The Board accurately defined the scope of the current inquiry to be a comparison of the circumstances and practices at the time of the loss at Millstone 1 with the current circumstances and practices at Millstone 3 to determine whether Millstone 3 is vulnerable to a similar loss now.⁴¹ Dominion and the NRC Staff supplied the Board the information it needed to make the relevant determination. CCAM/CAM merely complained in the most general terms. Given the disparity in evidence, Dominion easily met its burden of proof regarding reopened Contention 4.⁴²

 $^{^{38}}$ Millstone 1 is a boiling water reactor, while Millstone 3 is a pressurized water reactor. See note 7.

³⁹ See LBP-02-16, 56 NRC at 90-93.

⁴⁰ See "Summary of Facts, Data, and Arguments on Which Dominion Nuclear Connecticut Will Rely at the Reopened Proceeding Subpart K Oral Argument" at 9-21 (Mar. 18, 2002).

⁴¹ Antone Cerne inspected and supervised other NRC inspectors during Millstone 3 refueling activities in May-June 1999, and in February-March 2001. He stated that

the entire body of administrative controls employed in the refueling operations that I have inspected contains both the procedural specificity and the redundancy necessary to preclude a single human error from presenting a challenge to nuclear safety at Millstone Unit 3.

Cerne Affidavit ¶ 14.

⁴²To reopen the proceeding, the Intervenors bear the burden of establishing that the criteria of 10 C.F.R. § 2.734 are met. Thereafter, to move on to a further evidentiary hearing, the Intervenors' written submission and oral argument had to meet the criteria described in 10 C.F.R. § 2.1115. However, after the Intervenors met their threshold burden, the ultimate burden of proof rested with the proponent of the license amendment. Dominion amply met that burden here. Of course, it is not possible for a Licensee to provide proof that uncertain future events could *never* occur. *See* CLI-01-3, 53 NRC at 27. For a fuller discussion of the Board's role in resolving fact questions in Subpart K proceedings, *see Shearon Harris*, CLI-01-11, 53 NRC at 383-86.

2. Reporting the Loss

As to the timeliness of NNECO's reporting the loss of the fuel rods, the Board described this issue as "peripheral at best to the Licensee's ability or willingness to carry out [spent fuel pool] administrative controls adequately." When CCAM/CAM sought to reopen Contention 4, they raised the Licensee's alleged discovery violation regarding notification about the missing fuel rods, but the Board excluded this matter when it set the boundaries for the reopened proceeding. Thus, the discovery violation was not properly within the reopened proceeding.

During the course of the Subpart K oral argument, the Intervenors shifted the focus of the reporting issue from the alleged discovery violation to an alleged failure to report the loss of the fuel rods to the NRC Staff and the Board. But CCAM/CAM had never mentioned this in their contention or in the reconsideration motion. The Board certainly did not admit it. As we reiterated just recently, "[t]he NRC's 'longstanding practice requires adjudicatory boards to adhere to the terms of admitted contentions' in order to give opposing parties 'advance notice of claims and a reasonable opportunity to rebut them.' "45 This policy is particularly important in a Subpart K proceeding, as the parties must submit their evidentiary case 15 days prior to the oral argument. This submission includes:

a detailed written summary of all the facts, data, and arguments which are known to the party at such time and on which the party proposes to rely at the oral argument either to support or to refute the existence of a genuine and substantial dispute of fact. Each party shall also submit all supporting facts and data in the form of sworn written testimony or other sworn written submission Only facts and data in the form of sworn written testimony or other sworn written submission may be relied on by the parties during oral argument, and the presiding officer shall consider those facts and data only if they are submitted in that form. ⁴⁶

Strict adherence to this procedure is necessary to prevent one party from ambushing another with last-second new theories or claims. It was impermissible, in short, for CCAM/CAM to litigate a "failure-to-report" claim that they had not raised in their contention. That claim was not properly before the Board in the reopened proceeding.⁴⁷

⁴³LBP-02-16, 56 NRC at 95.

⁴⁴ The alleged discovery violation did not prejudice CCAM/CAM. They became aware of the missing rods, the proceeding was reopened, and CCAM/CAM had every opportunity to argue its point of view on the import of the missing Millstone 1 fuel rods for spent fuel handling and storage at Millstone 3.

⁴⁵ Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, 157 (2002), quoting Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 105 (1998).
⁴⁶ 10 C.F.R. § 2.1113.

⁴⁷ As a result, the Board should not have entertained discussion of it during oral argument.

In any event, as the Board held, the "failure to inform" issue is "peripheral" to the main question raised by CCAM/CAM's Contention 4—i.e., the reliability of administrative controls for criticality control in the Millstone 3 spent fuel pool.⁴⁸ As CCAM/CAM sees the case, the failure-to-report issue is a subset of a key "culture" or character issue that lies at "the heart" of Contention 4.⁴⁹ CCAM/CAM also contend that the Board erred in considering the alleged failure to report in isolation, apart from NNECO's "dismal history of admitted criminal conduct and flagrant violation of its license and federal requirements governing operations of nuclear power plants." Further, they maintain that the Board failed to consider NNECO's retaliatory employment practices and fostering a work environment that was not safety-conscious. But it is not self-evident why allegations concerning *NNECO's* past behavior relate to the proper implementation of *Dominion's* current license. And CCAM/CAM have certainly offered no evidence on the links, if any, between past acts and the amendment.

In another recent *Millstone* case, we addressed the "character" issue and the part it plays in NRC adjudications. ⁵² There, we noted the strict limits that we place on such contentions; specifically, we said they must relate *directly* to the proposed licensing action. ⁵³ In that case, CCAM and another petitioner had raised the events leading to NNECO's guilty plea and conviction in the mid-1990s, but made no attempt to demonstrate how these past events had a direct bearing on the specific license amendments then before a different licensing board. We concluded that "[t]here simply has been no link established between the individuals or direct management responsible for falsifying reactor operator examination results years ago, at issue in the NNECO conviction, and Millstone's effluent monitoring program or the managers currently responsible for overseeing it." We stated that we expect character issues to be "directly germane to the challenged licensing action." ⁵⁵

⁴⁸ See LBP-02-16, 56 NRC at 95. This is not to say that the alleged reporting delay is insignificant. The NRC's Office of Investigations conducted a thorough inquiry into whether there was any deliberate effort to delay reporting the loss to the NRC. The investigation is described in a written report that CCAM/CAM attached as an exhibit to their cursory written summary. The Office of Investigations ''did not substantiate that either the licensee or licensee personnel/contractors deliberately delayed properly reporting to the NRC that two fuel rods/pins were unaccounted for/missing/lost'' from the Millstone 1 spent fuel pool. Office of Investigations Report on Case No. 1-2001-007, ''Millstone Nuclear Power Station, Unit 1: Failure to Report Missing or Lost Radioactive Fuel Rods in a Timely Manner'' at 1 (Sept. 28, 2001).

⁴⁹ Petition for Review at 9.

⁵⁰ *Id.* at 7.

⁵¹CCAM/CAM, however, did not offer any sworn testimony or documents pertaining to the character issue in their written summary in the reopened proceeding, nor did they develop the issue adequately during their initial presentation regarding Contention 4. *See* note 6, *supra*, and LBP-00-26, 52 NRC at 189-91, 197-200; CLI-01-3, 53 NRC at 25-27.

⁵² See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 365-67 (2001), reconsideration denied, CLI-02-1, 55 NRC 1 (2002), and references cited therein.

⁵³ See CLI-01-24, 54 NRC at 366.

⁵⁴*Id*.

⁵⁵ *Id.* at 367.

Similarly, in the instant case, CCAM/CAM attempt to insert a "character" issue into a license amendment proceeding raising chiefly technical matters. Here, as in the prior *Millstone* case, the Board recognized that CCAM/CAM did not establish the required link between past behavior and the licensing action contested in this case. In particular, CCAM/CAM fail to explain how *NNECO's* reporting delay, if indeed there was one, bears on the ability of a *new licensee*, Dominion Nuclear, to implement administrative criticality controls that the NRC Staff and the Board have found fully protective of the public health and safety.

III. CONCLUSION

For the foregoing reasons, the Commission grants review and affirms LBP-02-16.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 21st day of November 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 72-26-ISFSI

PACIFIC GAS AND ELECTRIC COMPANY (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)

November 21, 2002

The Commission denies the request of several Petitioners to suspend this independent spent fuel storage installation licensing proceeding pending the Commission's comprehensive review of measures to protect against terrorist attack.

RULES OF PRACTICE: SEEKING RELIEF WITHOUT FORMAL PARTY STATUS

As the San Luis Obispo Chapter of the Surfrider Foundation has never made a hearing request or sought permission to participate in this adjudication on any other basis, it has no legitimate place in this proceeding. *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-28, 54 NRC 393, 398 (2001), *reconsideration denied*, CLI-02-2, 55 NRC 5 (2002).

RULES OF PRACTICE: SCOPE OF PROCEEDING; CHALLENGE TO COMMISSION REGULATIONS

The San Luis Obispo Mothers for Peace ("SLOMFP") is not free to use an adjudication as a means to enhance existing NRC orders or regulations. *See Bellotti v. NRC*, 725 F.2d 1380 (D.C. Cir. 1983) (hearing petitioners may not seek requirements more extensive than those imposed by NRC order); *Private Fuel Storage*, *L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459, 470 (2001) (hearing petitioners may not challenge NRC rules). *See also* 10 C.F.R. § 2.758. Thus, we decline SLOMFP's request to expand the current ISFSI proceeding to litigate the usefulness of the particular security measures that SLOMFP suggests.

RULES OF PRACTICE: SCOPE OF PROCEEDING; LITIGABILITY OF ISSUES

SLOMFP requested relief extending to the two Diablo Canyon power plants and to power plants and ISFSIs at other sites. The 10 C.F.R. Part 50 Diablo Canyon power plant licenses are not at issue in this 10 C.F.R. Part 72 proceeding. And SLOMFP's even broader requests involving other licensees are also not cognizable in this individual adjudicatory proceeding. *See Savannah River*, CLI-01-28, 54 NRC at 399 n.9.

RULES OF PRACTICE: MOTIONS

Because SLOMFP's request does not fit comfortably in any specific category, we will treat it as a general motion brought under the procedural requirements of 10 C.F.R. § 2.730. Such a motion should initially be addressed to the Presiding Officer when a proceeding is pending. See 10 C.F.R. § 2.730(a). The Commission does not encourage participants in adjudicatory proceedings to attempt to bypass the Board by filing motions or petitions directly with the Commission. See Savannah River, CLI-01-28, 54 NRC at 398 n.7.

RULES OF PRACTICE: SUSPENSION OF PROCEEDING TERRORISM

By not suspending operating licenses in the 14 months that have elapsed since the terrorist attacks of September 11, 2001, the Commission has implicitly concluded that *continued operation* of power plants and ISFSIs does not pose an imminent risk to the public health and safety and is not inimical to the common defense and security.

RULES OF PRACTICE: SUSPENSION OF PROCEEDING TERRORISM

Last year we enunciated the considerations we apply to *pending licensing proceedings* to decide whether to postpone them to await ongoing review of the agency's terrorism-related policies. "[W]e consider whether moving forward with the adjudication will jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge from our important ongoing evaluation of terrorism-related policies." *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 380 (2001); *accord Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 389-90 (2001); *Savannah River*, CLI-01-28, 54 NRC at 399.

RULES OF PRACTICE: SCOPE OF PROCEEDING

In an individual adjudicatory proceeding, a request to suspend other proceedings is not cognizable. *See Savannah River*, CLI-01-28, 54 NRC at 399.

RULES OF PRACTICE: SUSPENSION OF PROCEEDING TERRORISM

SLOMFP has not advanced any arguments that alter our perception that immediate suspension of licensing proceedings is unwarranted. Indeed, we continue to believe that licensing proceedings can move forward in parallel with our comprehensive security review, undertaken in the aftermath of the September 11, 2001 terrorist attacks, and the interim compensatory measures (including additional protections at ISFSIs) we have ordered.

RULES OF PRACTICE: SUSPENSION OF PROCEEDING; BALANCING OF COMPETING PUBLIC INTERESTS

There is no reason to believe that any danger to public health and safety would result from *mere continuation of this adjudicatory proceeding*. The instant licensing proceeding is in its early stages and, even if the NRC approves the requested ISFSI license, construction is not scheduled to begin until early 2004 and loading of the first casks will not occur until 2006. On the other hand, suspending this proceeding would prove an obstacle to fair and efficient decisionmaking. As always, we balance the applicants' and licensees' interest in a prompt decision on their application against the petitioners' interest in an opportunity for a hearing.

See Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 24 (1998).

RULES OF PRACTICE: SUSPENSION OF PROCEEDING EFFICIENT LICENSING AND REGULATION

It is not sensible to postpone consideration and resolution of various safety and environmental issues having little or nothing to do with the Commission's ongoing review of security requirements. The Commission supervises its adjudicatory docket with a view toward "sound case management." *McGuire*, CLI-01-27, 54 NRC at 391, *quoting Hydro Resources*, *Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 40 (2001).

EFFICIENT LICENSING AND REGULATION

NUCLEAR WASTE POLICY ACT

Congress has recognized the need for and encouraged spent fuel storage at reactor sites and, to this end, has even mandated an *expedited* hearing process. *See* Nuclear Waste Policy Act, 42 U.S.C. §§ 10151 *et seq*.

RULES OF PRACTICE: SUSPENSION OF PROCEEDING; OPPORTUNITY FOR PARTIES TO ADDRESS ISSUES

Moving forward with this adjudication will not prevent appropriate implementation of any rule or policy changes arising from our ongoing evaluation of terrorism-related policies. SLOMFP may have an opportunity to file late contentions in this proceeding or reopen the record, if policy or rule changes take place and the timing is appropriate. See 10 C.F.R. §§ 2.714(a), 2.734. And every license the Commission issues is subject to the possibility of additional requirements. The Commission can modify license requirements by rule, regulation, or order; and changes can be applicable to both applicants and licensees. See, e.g., 10 C.F.R. § 72.62, the backfitting rule for ISFSIs. ("The Commission will require backfitting of an ISFSI . . . if it finds that such action is necessary to assure adequate protection to occupational or public health and safety, or to bring the ISFSI . . . into compliance with a license or the rules or orders of the Commission " 10 C.F.R. § 72.62(b).) Thus, as in *Private Fuel Storage*, "holding up these proceedings is not necessary to ensure that the public will realize the full benefit of our ongoing regulatory review" at the Diablo Canyon facility. Private Fuel Storage, CLI-01-26, 54 NRC at 383.

RULES OF PRACTICE: SUSPENSION OF PROCEEDING EFFICIENT LICENSING AND REGULATION

Both national policy and the principles of sound case management militate against suspending this ISFSI proceeding in its early stages.

MEMORANDUM AND ORDER

This proceeding stems from Pacific Gas & Electric Company's ("PG&E") application to construct an independent spent fuel storage installation ("ISFSI") at the site of its two Diablo Canyon nuclear power plants. Several intervention petitioners have directly requested the Commission to suspend the proceeding pending the Commission's comprehensive review of measures to protect against terrorist attack. We deny the petition.

I. BACKGROUND

On December 21, 2001, PG&E filed an application for a materials license authorizing storage of spent nuclear fuel in a dry storage cask system at its Diablo Canyon Power Plant (''DCPP'') site. The NRC published notice of the application and opportunity for a hearing.¹ The Secretary of the Commission received three petitions to intervene from the following individuals and groups: Lorraine Kitman; San Luis Obispo County Supervisor Peg Pinard and the Avila Valley Advisory Council; and the San Luis Obispo Mothers for Peace, representing itself and eight other organizations.²

Twelve of the Petitioners filed a motion to stay the licensing proceeding on June 25, 2002.³ The motion was based on PG&E's pending bankruptcy proceeding, California's claims of fraud against PG&E's parent corporation, and PG&E's application to transfer the Diablo Canyon power plant licenses in accordance with its bankruptcy plan of reorganization.⁴ The Petitioners asserted, in essence, that there are too many uncertainties requiring resolution before it is sensible to proceed with the ISFSI application. The Board, noting that all

¹ See Pacific Gas and Electric Co.; Notice of Docketing, Notice of Proposed Action, and Notice of Opportunity for a Hearing for a Materials License for the Diablo Canyon Independent Spent Fuel Storage Installation, 67 Fed. Reg. 19,600 (Apr. 22, 2002).

² After these petitions were filed, various amendments and realignments, not relevant to our decision today, have occurred.

³By e-mail, two other individual requests, from persons who are not intervention petitioners, were addressed to the Commission's Chairman.

⁴ PG&E filed for protection under Chapter 11 of the United States Bankruptcy Code prior to filing its ISFSI license application with the NRC.

of the Petitioners' concerns "involve PG&E's bankruptcy and the impacts that flow from that action vis-à-vis various other federal and state judicial and/or administrative proceedings," denied the motion.⁵

The Board heard oral argument on the issues of standing of the Petitioners and admissibility of their contentions on September 10-11, 2002, but has not yet decided these matters.

On September 9, 2002, a group of eleven intervention Petitioners and one additional group filed, directly with the Commission, a petition to suspend this proceeding pending comprehensive review of the adequacy of design and operation measures to protect against terrorist attack and other acts of malice or insanity.⁶ The Commission denies the petition for the reasons we give below.

II. DISCUSSION

SLOMFP has requested that the Commission suspend the ISFSI licensing proceeding "pending the implementation of new and more rigorous measures to protect the public from the threat of a terrorist attack or other acts of malice or insanity against the Diablo Canyon nuclear complex." In the alternative, it requests expansion of the scope of the ISFSI license proceeding to consider what interim measures should be imposed during the Commission's deliberation about longer-term measures. The gravamen of the petition, according to SLOMFP, "is that the Commission may not license the ISFSI unless and until it improves protection of the entire Diablo Canyon nuclear complex from terrorist attacks or other acts of malice or insanity." SLOMFP declares an urgent need for protective measures because it sees the risk already posed as significant and unacceptable, and the planned ISFSI, SLOMFP maintains, would compound the attractiveness and vulnerability of the Diablo Canyon complex to attacks. The ISFSI, in SLOMFP's estimation, cannot be viewed in isolation from the existing operation of the two power plants. Moreover, SLOMFP contends that the NRC's "design

⁵ See LBP-02-15, 56 NRC 42, 47 (2002).

⁶The eleven intervention Petitioners who joined in the motion are: Avila Valley Advisory Council, San Luis Obispo Mothers for Peace, Peg Pinard, Cambria Legal Defense Fund, Central Coast Peace and Environmental Council, Environmental Center of San Luis Obispo, Nuclear Age Peace Foundation, San Luis Obispo Chapter of Grandmothers for Peace International, San Luis Obispo Chapter of Cancer Action Now, Santa Lucia Chapter of the Sierra Club, and Ventura County Chapter of the Surfrider Foundation. We shall refer to these groups collectively as "SLOMFP." The San Luis Obispo Chapter of the Surfrider Foundation also joined in the September 9 filing. Since that organization has never made a hearing request or sought permission to participate in this adjudication on any other basis, it has no legitimate place in this proceeding. See Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-01-28, 54 NRC 393, 398 (2001), reconsideration denied, CLI-02-2, 55 NRC 5 (2002). We shall hereafter refer to SLOMFP's filing as "Petition."

Petition at 1.

⁸ *Id.* at 10.

basis threat" is inadequate and the compensatory measures the Commission has recently required do not correct this deficiency.

The relief SLOMFP seeks from the Commission is fourfold: (1) complete a comprehensive review of the adequacy of NRC safety requirements to protect against the terrorist threat; (2) suspend the pending ISFSI license proceeding while the NRC conducts its review; (3) expand the scope of the pending proceeding to allow consideration of interim measures (if the Commission declines to suspend the proceeding); and (4) provide for public participation in considering new requirements. SLOMFP provides a list of interim measures it requests that we adopt.

Below, we consider and reject SLOMPF's request to suspend the Diablo Canyon ISFSI proceeding. As for SLOMFP's other requests, we consider them beyond the scope of this adjudication. We note, however, that some of what SLOMPF seeks already has taken place. For example, we have undertaken a comprehensive review of our security rules and policies. Consequently, we have adopted (recently) interim security measures for ISFSIs. 10 SLOMFP also seeks public participation on security-related issues, but the Atomic Energy Act already provides for appropriate public participation, for both licensing actions and rulemakings. 11 SLOMFP is free to make its positions known during this adjudication (as they relate to this proceeding) and in any rulemakings that emerge from our comprehensive security review. We are referring SLOMFP's current petition (and attachments) to the NRC Staff for appropriate consideration as the Staff continues its review of security measures.

A. Nature of the Petition

Before responding to the merits of the filing that is now before us, we shall attempt to characterize it. The Petitioners themselves reject characterization of their request as a petition for rulemaking or enforcement. Although SLOMFP desires that we ultimately strengthen our physical protection regulations —

⁹The "design basis threat" is the postulated threat that the physical protection system must have the capability to withstand. Design basis threats are "used to design safeguards systems to protect against acts of radiological sabotage and to prevent the theft of special nuclear material." 10 C.F.R. § 73.1(a). Current design basis threats for radiological sabotage and for theft or diversion of formula quantities of strategic special nuclear material are described in 10 C.F.R. § 73.1(a)(1) and 10 C.F.R. § 73.1(a)(2), respectively.

¹⁰ See Order Modifying Licenses (Effective Immediately), 67 Fed. Reg. 65,150 (Oct. 23, 2002) (affecting 10 C.F.R. Part 50 licenses) and Order Modifying Licenses (Effective Immediately), 67 Fed. Reg. 65,152 (Oct. 23, 2002) (affecting 10 C.F.R. Part 72 licensees). SLOMFP is not free to use an adjudication as a means to enhance existing NRC orders or regulations. See Bellotti v. NRC, 725 F.2d 1380 (D.C. Cir. 1983) (hearing petitioners may not seek requirements more extensive than those imposed by NRC order); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459, 470 (2001) (hearing petitioners may not challenge NRC rules). See also 10 C.F.R. § 2.758. Thus, we decline SLOMFP's request to expand the current ISFSI proceeding to litigate the usefulness of the particular security measures that SLOMFP suggests.

¹¹ See AEA § 189a, 42 U.S.C. § 2239(a).

¹² See Petition at 7.

a matter more appropriate for a generic rulemaking petition — SLOMFP's immediate objectives are site-specific, rather than generic, and thus inappropriate for a rulemaking petition.¹³ We also take SLOMFP at its word that it is not requesting enforcement relief under 10 C.F.R. § 2.206.¹⁴

SLOMFP also requested relief extending to the two Diablo Canyon power plants and to power plants and ISFSIs at other sites. The 10 C.F.R. Part 50 Diablo Canyon power plant licenses are not at issue in this 10 C.F.R. Part 72 proceeding. And SLOMFP's even broader requests involving other licensees are also not cognizable in this individual adjudicatory proceeding.¹⁵

According to SLOMFP, it brings its petition "under the Atomic Energy Act's provisions which prohibit licensing actions that would pose unreasonable risk to public health and safety or be inimical to the common defense and security." SLOMFP states that it has brought the petition directly to the Commission because only the Commission has the authority to determine what measures, beyond current regulatory requirements, must be imposed to meet the AEA's standard for protection of the public. 17

Because SLOMFP's request does not fit comfortably in any specific category, we will treat it as a general motion brought under the procedural requirements of 10 C.F.R. § 2.730. Such a motion should initially be addressed to the Presiding Officer when a proceeding is pending, ¹⁸ and the Commission does not encourage participants in adjudicatory proceedings to attempt to bypass the Board by filing motions or petitions directly with the Commission. ¹⁹ Nevertheless, because we have ultimate supervisory control over our proceedings, we choose here to address the merits of SLOMFP's petition.

B. Merits of the Petition

By not suspending operating licenses in the 14 months that have elapsed since the terrorist attacks of September 11, 2001, the Commission has implicitly concluded that *continued operation* of power plants and ISFSIs does not pose an imminent risk to the public health and safety and is not inimical to the common

¹³ See Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 345-46 (1999) (remedy for petitioners dissatisfied with Commission's generic approach lies in rulemaking process, not specific adjudication).

^{14 &}quot;Any person may file a request to institute a proceeding pursuant to § 2.202 to modify, suspend, or revoke a license, or for any other action as may be proper." 10 C.F.R. § 2.206(a). The Commission's vehicle to institute such a proceeding is 10 C.F.R. § 2.202.

¹⁵ See Savannah River, CLI-01-28, 54 NRC at 399 n.9.

¹⁶ Petition at 7. See also AEA, 42 U.S.C. §§ 2011 et seq.

¹⁷ See Petition at 8.

¹⁸ "All motions shall be addressed to the Commission or, when a proceeding is pending before a presiding officer, to the presiding officer." 10 C.F.R. § 2.730(a).

¹⁹ See Savannah River, CLI-01-28, 54 NRC at 398 n.7.

defense and security. Last year we enunciated the considerations we apply to *pending licensing proceedings* to decide whether to postpone them to await ongoing review of the agency's terrorism-related policies.

[W]e consider whether moving forward with the adjudication will jeopardize the public health and safety, prove an obstacle to fair and efficient decisionmaking, or prevent appropriate implementation of any pertinent rule or policy changes that might emerge from our important ongoing evaluation of terrorism-related policies.²⁰

We have expressly denied direct requests for suspensions and/or dismissals of licensing actions in *Private Fuel Storage*, ²¹ *Savannah River*, ²² and *McGuire*. ²³ *Private Fuel Storage* is a 10 C.F.R. Part 72 proceeding involving an application to build an ISFSI much larger than the proposed Diablo Canyon ISFSI. An intervenor, the State of Utah, requested that the "licensing proceeding be stopped until applicable laws and regulations can be brought into 'conformity with present realities.'" ²⁴ Utah asked the Commission to stay proceedings until Congress and the Commission revise the law and regulations to account for the increased threat of domestic terrorism. We denied Utah's request. The Commission determined that moving forward with the proceeding 'would neither present a threat to public safety nor interfere with our ongoing regulatory review, and halting it would interfere with our goal of adjudicatory efficiency.''²⁵

Here, SLOMFP has not advanced any arguments that alter our perception that immediate suspension of licensing proceedings is unwarranted. Indeed, we continue to believe that licensing proceedings can move forward in parallel with our security review and the interim compensatory measures²⁶ we have ordered:

The Commission believes that its response to [the September 11, 2001 terrorist attacks] has been expeditious and that the current safeguards and physical security programs provide for a very high level of security at NRC-licensed facilities. However, in the aftermath of the terrorist attacks and the continuing uncertainty about future terrorist intentions, we have commenced

²⁰ Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 380 (2001); accord Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 389-90 (2001); Savannah River, CLI-01-28, 54 NRC at 399.

²¹ See Private Fuel Storage, CLI-01-26, 54 NRC 376.

²² See Savannah River, CLI-01-28, 54 NRC 393. Like SLOMFP here, the intervenor in the Savannah River mixed oxide fuel fabrication facility proceeding made a broad request. It maintained that current NRC regulations are inadequate and the Commission should "suspend proceedings in which applicable standards are inadequate to ensure protection of public health and safety until the regulatory review the Commission has mandated is complete." Id. at 399. The Savannah River intervenor also made the request, not cognizable in an individual adjudicatory proceeding, that we suspend other proceedings. See id.

²³ See McGuire, CLI-01-27, 54 NRC 385. In McGuire, the intervenor sought to dismiss a reactor license renewal proceeding because it considered major changes in security and safeguards requirements to be inevitable after the September 11, 2001, terrorist attacks. The intervenor claimed that meaningful review of the application would require consideration of future increased security costs. See id. at 390.

²⁴ Private Fuel Storage, CLI-01-26, 54 NRC at 380, citing intervenor's brief.

²⁵ *Id.* at 384

 $^{^{26}\,\}text{Those}$ measures include additional protections at ISFSIs. See note 10 supra.

a thorough review of our safeguards and physical security programs, from top to bottom, including those applicable to independent spent fuel storage installations. The review will include a comprehensive examination of the programs' basic underlying assumptions.²⁷

There certainly is no reason to believe that any danger to public health and safety would result from *mere continuation of this adjudicatory proceeding*. The instant licensing proceeding is in its early stages and, even if the NRC approves the requested ISFSI license, construction is not scheduled to begin until early 2004 and loading of the first casks will not occur until 2006.²⁸

On the other hand, suspending this proceeding would prove an obstacle to fair and efficient decisionmaking. As always, we balance the applicants' and licensees' interest in a prompt decision on their application against the petitioners' interest in an opportunity for a hearing.²⁹ In the instant case, the Petitioners have requested a hearing and have proffered eight contentions, including the contention that the Applicant has failed to address the environmental impacts of destructive acts of malice or insanity. The other seven contentions have little or no relationship to terrorism. For example, the Petitioners have advanced five technical contentions that are not linked to terrorism: (1) inadequate seismic analysis; (2) insufficient financial qualifications; (3) license applicant is not the real party in interest; (4) inadequate description of financial relationships between corporate entities; and (5) insufficient description of construction and operation costs. Further, they have presented two environmental contentions, failure to fully describe the purposes of the proposed action and failure to evaluate the environmental impacts of transportation at the end of the license term, that are, at most, peripherally related to terrorism. Nevertheless, SLOMFP asks the Commission to postpone action on all of the other issues while the Commission completes its thorough assessment of the post-September 11, 2001 implications of terrorism.

However, it is not sensible to postpone consideration and resolution of various safety and environmental issues having little or nothing to do with the Commission's ongoing review of security requirements. The Commission supervises its adjudicatory docket with a view toward "sound case management." Efficient and expeditious decisionmaking is particularly important in this case, as PG&E has stated that, to preserve the capability for a full core offload, it needs to operate the proposed ISFSI at the beginning of 2006. Accordingly, PG&E has requested issuance of the license by the end of 2003

²⁷ Private Fuel Storage, CLI-01-26, 54 NRC at 379.

²⁸ See "Opposition of Pacific Gas and Electric Company to Requests for Stay of Proceeding" at 2 (July 2, 2002) ("Opposition").

²⁹See Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 24 (1998).

³⁰ McGuire, CLI-01-27, 54 NRC at 391, quoting Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 40 (2001).

and filed its license application 2 years ahead of its target date.³¹ Congress has recognized the need for and encouraged spent fuel storage at reactor sites and, to this end, has even mandated an *expedited* hearing process.³²

Lastly, moving forward with this adjudication will not prevent appropriate implementation of any rule or policy changes arising from our ongoing evaluation of terrorism-related policies. SLOMFP may have an opportunity to file late contentions in this proceeding or reopen the record, if policy or rule changes take place and the timing is appropriate.³³ And *every license* the Commission issues is subject to the possibility of additional requirements. The Commission can modify license requirements by rule, regulation, or order; and changes can be applicable to both applicants and licensees.³⁴ Thus, as in *Private Fuel Storage*, "holding up these proceedings is not necessary to ensure that the public will realize the full benefit of our ongoing regulatory review" at the Diablo Canyon facility.³⁵

In summary, the instant licensing proceeding neither conflicts with the Commission's ongoing review of terrorism-related matters nor forecloses the implementation of potential new rules. And both national policy and the principles of sound case management militate against suspending this ISFSI proceeding in its early stages.

III. CONCLUSION

The Commission *denies* SLOMFP's petition to suspend this proceeding or, in the alternative, to adopt interim safety measures.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 21st day of November 2002.

³¹ See Opposition at 2.

³² See Nuclear Waste Policy Act, 42 U.S.C. §§ 10151 et seq.

³³ See 10 C.F.R. §§ 2.714(a), 2.734.

³⁴ See, e.g., 10 C.F.R. § 72.62, the backfitting rule for ISFSIs. "The Commission will require backfitting of an ISFSI... if it finds that such action is necessary to assure adequate protection to occupational or public health and safety, or to bring the ISFSI... into compliance with a license or the rules or orders of the Commission..." 10 C.F.R. § 72.62(b).

³⁵ Private Fuel Storage, CLI-01-26, 54 NRC at 383.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Ann Marshall Young, Presiding Officer **Lester S. Rubenstein**, Special Assistant

In the Matter of

Docket No. 30-03754-MLA (ASLBP No. 02-799-01-MLA)

ABB PROSPECTS, INC.
(Combustion Engineering Windsor Site)

November 27, 2002

ORDER (Terminating Proceeding)

On November 18, 2002, an Order was issued approving an agreement of the parties to conclude this proceeding, in which the State of Connecticut Department of Environmental Protection (CDEP) had, on May 8, 2002, petitioned to intervene and requested a hearing in response to an April 10, 2002, *Federal Register* Notice (67 Fed. Reg. 17,472) regarding a January 7, 2002, license amendment request and decommissioning plan submitted by ABB Prospects, Inc. (ABB), for portions of its Combustion Engineering (CE) Windsor site in Windsor, Connecticut. After the filing of CDEP's petition and various negotiations by the participants, ABB submitted an amended request on August 9, 2002, which the NRC approved on October 17, 2002, specifically "to deconstruct the buildings of Building Complexes 2, 5 and 17 down to the building slabs/foundations at grade level only," providing also that "[n]o work may be performed on the slabs/foundations or soil without prior approval by the [NRC]."

On October 25, 2002, CDEP withdrew its hearing request, and following a telephone conference held October 31, 2002, to clarify the terms of the withdrawal,

the participants submitted their agreed order, which was subsequently issued by the undersigned on November 18, 2002, finding, as agreed by the parties, that

License Amendment No. 53, the action taken by the NRC on October 17, 2002 on ABB's license amendment request originally noticed in the *Federal Register* (67 Fed. Reg. 17,472, April 10, 2002), moots the issues of the CDEP's request for hearing and petition to intervene and concludes action on the ABB amendment request noticed in the *Federal Register* on April 10, 2002.

The order also approved the parties' agreement

that any further work performed on the slabs or foundations or soil associated with Building Complexes 2, 5 and 17, which are addressed in license amendment No. 53, will be the subject of a license amendment request on the part of ABB, notice of which will be published in the *Federal Register* along with notice of an opportunity for a hearing with regard to it, consistent with the provisions of 10 C.F.R. Part 2, and that if any such work is performed without a license amendment request, a request for action pursuant to 10 CFR § 2.206 may be filed requesting the NRC Staff to issue an enforcement letter for violation of the restrictions of the limitations of the license amendment No. 53.

Based upon the preceding Order of November 18, 2002, approving the parties' agreement to conclude this proceeding on the terms set forth above, this proceeding is hereby terminated.

It is so ORDERED.

BY THE PRESIDING OFFICER¹

Ann Marshall Young ADMINISTRATIVE JUDGE

Rockville, Maryland, November 27, 2002

¹Copies of this Memorandum and Order were sent this date by internet e-mail or facsimile transmission to all known participants or counsel for participants.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Jon R. Johnson, Deputy Director

In the Matter of Docket Nos. 50-272

50-311 50-354

50-219

(License Nos. DPR-70

DPR-75 NPF-57

DPR-16)

PSEG NUCLEAR LLC (Salem Nuclear Generating Station, Units 1 and 2; Hope Creek Generating Station)

AMERGEN ENERGY COMPANY, LLC (Oyster Creek Nuclear Generating Station)

November 1, 2002

The Petitioner requested that the Nuclear Regulatory Commission take the following actions:

- Order either the closure of, or an immediate security upgrade at, the Salem Nuclear Generating Station, Units 1 and 2 (Salem), Hope Creek Generating Station (Hope Creek), and Oyster Creek Nuclear Generating Station (Oyster Creek).
- Order the plants' defenses to be upgraded to withstand a jet crash similar to that which occurred at the World Trade Center (WTC) on September 11, 2001.

- Require all spent fuel pools to be brought into the containment buildings, or a new containment building, able to withstand a jet crash, should be built for them.
- Cancel all plans for a dry cask storage at any of New Jersey's plants until a jet-bomber-proofed containment is built for them.
- Triple the number of Operational Safeguards Response Evaluation (OSRE) security inspections.
- Cancel proposals to allow nuclear plants to conduct their own security inspections.

As a basis for the request, the Petitioner cited the terrorist attacks on September 11, 2001, stating that New Jersey's four nuclear power plants are vulnerable to terrorist attack.

The final Director's Decision on this petition was issued on November 1, 2002. In that Decision, the NRC Staff concluded that the information contained in the petition did not warrant NRC Staff action to issue an order to PSEG Nuclear or Amergen for the immediate shutdown of Salem, Hope Creek, or Oyster Creek nuclear stations. The Staff concluded that current regulations, as augmented by the interim compensatory security measures set forth by orders issued on February 25, 2002, and the actions taken by various other federal agencies, adequately addressed the threat environment in a consistent manner throughout the nuclear industry.

Therefore, the NRC concluded that it has, in effect, partially granted the Petitioner's request for increased security at Salem, Hope Creek, and Oyster Creek to the extent that many of the concerns raised by the Petitioner are included within the scope of the orders issued to all nuclear power plants on February 25, 2002, or are a part of the NRC Staff's comprehensive review to evaluate the agency's security and safeguards programs. The orders required that all commercial nuclear power plant licensees implement interim compensatory security measures for the generalized high-level threat environment. The remainder of the Petitioner's requests are denied.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated September 17, 2001, Mr. Norm Cohen, on behalf of the UNPLUG Salem Campaign (Petitioner), requested that the U.S. Nuclear Regulatory Commission (Commission or NRC) take the following actions:

- Order either the closure of, or an immediate security upgrade at, the Salem Nuclear Generating Station, Units 1 and 2 (Salem), Hope Creek Generating Station (Hope Creek), and Oyster Creek Nuclear Generating Station (Oyster Creek).
- Order the plants' defenses to be upgraded to withstand a jet crash similar to that which occurred at the World Trade Center (WTC) on September 11, 2001.
- Require all spent fuel pools to be brought into the containment buildings, or a new containment building, able to withstand a jet crash, should be built for them.
- Cancel all plans for a dry cask storage at any of New Jersey's plants until a jet-bomber-proofed containment is built for them.
- Triple the number of Operational Safeguards Response Evaluation (OSRE) security inspections.
- Cancel proposals to allow nuclear plants to conduct their own security inspections.

As a basis for the request described above, the Petitioner cited the terrorist attacks on September 11, 2001, stating that New Jersey's four nuclear power plants are vulnerable to terrorist threats, including a suicide airplane attack similar to the attack on the WTC.

On December 7, 2001, the NRC Staff informed the Petitioner in a telephone call that the Commission had decided to treat the letter dated September 17, 2001, as a petition pursuant to section 2.206 of Title 10 of the *Code of Federal Regulations* (10 C.F.R. § 2.206). In addition, the NRC Staff informed the Petitioner that because the September 17, 2001, letter raised sensitive security issues, the Commission was deferring application of certain public aspects of the process described in Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions," pending further developments related to the NRC's security review. Accordingly, the NRC Staff did not offer the Petitioner the opportunity to provide, in a public forum, additional information to support the September 17, 2001, letter before the NRC's Office of Nuclear Reactor Regulation Petition Review Board. Rather, the NRC Staff requested that the Petitioner forward any additional information related to the petition to the assigned petition manager.

By an acknowledgment letter dated December 20, 2001, the NRC Staff formally notified the Petitioner that the letter dated September 17, 2001, met the criteria for review under section 2.206, and that the NRC Staff would act on the request within a reasonable time. The acknowledgment letter further stated that the Commission had, in effect, partially granted the Petitioner's request for immediate actions in that the NRC took action immediately after September 11,

2001, to enhance security at all nuclear facilities, including the four nuclear power plants located in New Jersey. The NRC Staff also informed the Petitioner in the acknowledgment letter that the issues raised in the petition were being referred to NRR for appropriate action.

The Petitioner responded to the acknowledgment letter by electronic mail on January 9 and 10, 2002, and provided additional information that the Staff considered in its evaluation of the petition.

In a January 9, 2002, letter forwarded by electronic mail described as "Supplemental Additions to the 2.206 Petition," the Petitioner identified additional individuals and organizations who wished to sign the petition, including: Bill Smirnow, representing Nuclear Free New York, Huntington, NY; Len and Rena Amada, Parkway Whiting, NJ; Jennifer Ann Vickers, Point Pleasant Beach, NJ; Mike and Janet Turco, Absecon, NJ; William deCamp, Jr., Mantoloking, NJ; Karin Westdyk, representing MothersAlert.org, Hewitt, NJ; Mary Jo Christian (no address provided); John Guyon, representing NJ PIRG, Trenton, NJ; Laura Cayford, Asbury Park, NJ; Alan Muller, representing Green Delaware, Port Penn, DE; and Michael Mariotte, Director, Nuclear Information and Resource Service (NIRS). The Petitioner also further clarified his original request to close all nuclear power plants in New Jersey, as follows:

- The NRC should halt and reverse all permits associated with Oyster Creek that have allowed the construction of dry cask storage of nuclear waste. No dry cask storage should be allowed to be built without the NRC first holding an adjudicatory public hearing, and without all of our security requests being met. Dry cask storage, which will be placed within 400 feet of U.S. Route 9, is an obvious terrorist target. Because Oyster Creek failed an OSRE test, and because of the nearness of the waste storage to a busy highway, all dry cask storage plans should be halted.
- Oyster Creek and Salem must demonstrate that they have viable security
 plans to protect the water intake systems from terrorist attack, and Salem
 must demonstrate a viable plan in the event of a commando attack from
 the Delaware Bay.
- Oyster Creek must demonstrate that its containment will withstand an Oklahoma City-type truck bomb.
- Salem must demonstrate that it has a viable plan to protect the nuclear
 plant in the event of a terrorist attack that cuts off electric power to the
 plant, in conjunction with an attack on the diesel generators.
- The NRC must require PSEG Nuclear LLC (PSEG) to replace all
 questionable electrical raceway fire barriers and combustible fire seals
 at Salem. In addition, the NRC must require that the Licensee replace

all wiring that violates NRC rules for cable separation. The NRC must reverse any recent changes in these rules.

- The NRC shall direct the New Jersey Department of Emergency Management and the State Police to allow citizen stakeholder groups such as UNPLUG Salem and Jersey Shore Nuclear Watch to observe and comment upon emergency planning and evacuation drills. The NRC must direct the above to include nuclear terrorism as a subject of evacuation drills and emergency planning.
- The NRC shall agree to reopen the entire NRC Web site to stakeholder groups like UNPLUG Salem and Jersey Shore Nuclear Watch, with acceptable means of security involved.

In separate electronic mail transmissions dated January 9 and 10, 2002, UNPLUG Salem forwarded three reports prepared by the Union of Concerned Scientists (UCS) after September 11, 2001, titled "Nuclear Reactor Security," "Spent Fuel Security," and "Vulnerabilities of New Jersey's Nuclear Power Plants to Radiological Sabotage." The UCS "Nuclear Reactor Security" report raised concerns and offered recommendations regarding the NRC's OSRE program. Among the short-term solutions, this report recommended that potassium iodide be readily available to persons living in the vicinity of all nuclear reactors. The UCS "Spent Fuel Security" report raised issues associated with protecting fuel assemblies that are stored in a plant's spent fuel pool or dry cask storage facilities. The UCS report on "Vulnerabilities of New Jersey's Nuclear Power Plants to Radiological Sabotage" claimed that the spent fuel pools at Oyster Creek and Hope Creek have certain associated vulnerabilities, and there is the potential for sabotage by fire at Oyster Creek, Salem, and Hope Creek.

In two other electronic mail transmissions, both dated January 9, 2002, the Petitioner forwarded copies of information associated with Salem and Oyster Creek. One of these transmissions forwarded a copy of NRC Inspection Report 0500219/2001-011, which discusses the results of the Oyster Creek OSRE that was completed on May 10, 2001. The Petitioner stated that the report shows that the Oyster Creek security response team was unable to prevent the simulated intruders from destroying all of the equipment that is necessary to cool the reactor core.

The Petitioner also provided comments on selected excerpts taken from an NRC report entitled "Safety Evaluation Report Related to Operation of Salem Nuclear Generating Station," dated October 1974. In particular, the electronic mail transmission questioned the ability of the Salem plant to withstand the impact of an aircraft.

Following its initial review of the petition, the NRC Staff sent a copy of the proposed Director's Decision to the Petitioner, PSEG, and Exelon Generation

Company LLC (Exelon) for comment on May 16, 2002. The Petitioner responded with comments on August 4, 2002. The UCS also provided input on the Petitioner's behalf in a letter dated August 7, 2002. PSEG, the Licensee for Salem and Hope Creek, responded by letter dated June 21, 2002, and Exelon, the Licensee for Oyster Creek, informed the petition manager by telephone that it did not have any comments. The comments and the Staff's response to them are available in ADAMS or for inspection at the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and from the ADAMS Public Library component on the NRC Web site, http://www.nrc.gov/reading-rm.html (the Public Electronic Reading Room). The applicable ADAMS Accession Nos. are ML022480149, ML022480163, ML022480173, and ML022470402.

II. DISCUSSION

PHYSICAL PROTECTION OF NUCLEAR POWER PLANTS

The Petitioner raised a number of issues associated with protecting our nation's nuclear power plants from terrorism. However, long before the tragic events of September 11, 2001, the Commission had recognized the need for strict safeguards and security measures at these facilities. When Congress first authorized the civilian use of atomic power through the Atomic Energy Act of 1954 (the Act), it recognized that public health and safety must be protected. The Act, as amended, gives the NRC the responsibility and authority to determine the requirements, including rules governing security, that are necessary to ensure that public health and safety are protected when commercial nuclear power plant licenses are issued.

The regulations for protecting all nuclear power plants, including those located in New Jersey, are provided in 10 C.F.R. Part 73, "Physical Protection of Plants and Materials." These rules represent an important cornerstone of the NRC's regulatory oversight responsibilities. In particular, the regulations include detailed, specific requirements designed to protect nuclear power plants against acts of radiological sabotage, prevent the theft of special nuclear material, and protect safeguards and classified information against unauthorized release.

In order to provide high assurance that the operation of a nuclear power plant does not constitute an unreasonable risk to public health and safety, licensees are required to implement the NRC's safeguards and security regulations described in 10 C.F.R. § 73.55, "Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors Against Radiological Sabotage." Specifically, licensees are to design a physical protection system to provide the following means of protection against the design-basis threat (DBT) of radiological sabotage:

- Maintain a well-equipped and highly trained physical security organization.
- Install physical barriers to protect vital equipment.
- Implement access requirements to control all points of personnel and vehicle access into a protected area. These requirements include the identification and search of individuals and vehicles for firearms, explosives, and incendiary devices.
- Provide access authorization programs and procedures (e.g., routine worker screening, badging, etc.).
- Install detection, surveillance, and alarm systems with the capability to detect unauthorized penetrations into protected areas.
- Ensure that all guards and armed response individuals have the ability to communicate with a continuously manned alarm station.
- Establish effective testing and maintenance programs to verify that all
 physical barriers, detection, and alarm systems are capable of meeting
 NRC requirements.
- Provide a safeguards contingency plan to respond to threats, thefts, and radiological sabotage related to the nuclear facility.

SECURITY ORGANIZATION

All operating nuclear power plant licensees are required to establish and maintain a site security organization. Such site security organizations include the designated managers, guard force, and personnel for checking worker backgrounds and issuing badges, as well as detailed access control and response procedures. To become a member of the security organization at a nuclear power plant, an individual must meet several stringent requirements, including satisfactorily performing qualification and requalification training. Specifically, 10 C.F.R. § 73.55(b)(4) expressly states that "licensee[s] may not permit an individual to act as a guard, watchman, armed response person, or other member of the security organization unless the individual has been trained, equipped, and qualified to perform each assigned security job duty" in accordance with NRCestablished criteria for security personnel. Furthermore, each licensee shall establish, maintain, and follow an NRC-approved training and qualifications plan outlining the processes by which guards, watchmen, armed response persons, and other members of the security organization will be selected, trained, equipped, tested, and qualified to ensure that these individuals meet NRC requirements. These qualifications include specific requirements to demonstrate competence in

the use of assigned weapons. In addition, guards, watchmen, armed response persons, and other members of the security organization are subject to the NRC's medical examination, physical fitness, and fitness-for-duty requirements. These security organizational requirements exist in order to implement the defense-in-depth philosophy for safeguarding vital plant areas, and are designed to help provide an effective deterrence against potential terrorist activities directed at nuclear power plants.

ACCESS AUTHORIZATION AND CONTROL

In order to ensure that only authorized individuals are able to enter vital and other protected areas of a nuclear plant, licensees are required to implement and maintain access authorization and control programs. The objective of these programs is to provide high assurance that individuals who are allowed unescorted access to a nuclear power plant are trustworthy and reliable, and do not constitute an unreasonable risk to public health and safety including the potential to commit radiological sabotage. In order to achieve this objective, NRC regulations require licensees to: (1) perform background checks on workers who are granted unescorted access to the plant; (2) implement a picture badge identification system to identify those persons who are authorized to enter specific plant areas; (3) search personnel, packages, and vehicles entering the protected area; (4) search for firearms and explosives; (5) monitor entry into identified areas of the plant; and (6) maintain a detection and alarm system.

Worker background checks include an investigation to verify an individual's true identity and to develop information concerning the individual's employment, education, and credit history; military service; and character and reputation, including a psychological assessment, to evaluate trustworthiness and reliability. The checks also include a criminal history check conducted via fingerprint cards submitted to the Federal Bureau of Investigation (FBI). These requirements are designed to prevent unauthorized access of persons, vehicles, and materials into protected areas, and to ensure that only persons who are deemed trustworthy are authorized to have unescorted access to vital plant equipment.

PROTECTION OF VITAL EQUIPMENT

Paragraph (a)(1) of 10 C.F.R. § 73.1 defines the design-basis threat from which vital areas must be protected. The regulation requires licensees to assume that potential terrorists have the following characteristics:

• are dedicated and well trained (including military training and skills);

- have inside assistance, which may include a knowledgeable individual
 who attempts to participate in a passive role (e.g., provide information),
 an active role (e.g., facilitate entrance and exit, disable alarms and
 communications, participate in violent attack), or both;
- possess suitable weapons, up to and including hand-held automatic weapons, equipped with silencers and having effective long-range accuracy;
- possess hand-carried equipment, including incapacitating agents and explosives for use as tools of entry or for otherwise destroying reactor, facility, transporter, or container integrity, or features of the safeguards system;
- have a four-wheel-drive land vehicle available for transporting personnel and their hand-carried equipment to the proximity of vital areas.

NRC regulations in 10 C.F.R. § 73.1(a)(1)(iii) also require licensees to protect against a four-wheel-drive land-vehicle bomb. In order to safeguard a nuclear plant against this threat, 10 C.F.R. § 73.55 requires all licensees to: (1) establish vehicle control measures, including vehicle barriers, to protect against the use of a land vehicle as a means of transportation to gain unauthorized proximity to vital areas; (2) compare the vehicle control measures established in accordance with 10 C.F.R. § 73.55(c)(7) for protection against a land-vehicle bomb; or (3) develop a process to use alternative measures for protection against a land-vehicle bomb (i.e., for those licensees with a particularly difficult site configuration). The alternative measures must provide substantial protection against a land-vehicle bomb and must be supported by a licensee analysis.

In brief, Congress understood the inherent need for strict security measures at commercial nuclear power plants, and NRC regulations have ensured that these are among the most hardened and secure industrial facilities in our nation. The many layers of protection offered by robust plant design features, sophisticated surveillance equipment, a professional security force, and regulatory oversight are an effective deterrence against a spectrum of potential terrorist activities that could target equipment that is vital to nuclear safety.

NRC RESPONSE TO THE SEPTEMBER 11, 2001, TERRORIST ATTACKS

When the events of September 11, 2001, unfolded, U.S. nuclear power plants already possessed a strong capability to prevent and respond to many types of terrorist acts that could be directed at them. Consequently, the NRC determined that certain actions, such as ordering the immediate closure of nuclear power plants, including Salem, Hope Creek, and Oyster Creek, were not necessary to

provide adequate protection of public health and safety. However, the NRC did take other immediate actions and advised all nuclear power plants to go to the highest level of security. The NRC also issued more than thirty threat advisories to address specific concerns or vulnerabilities in the aftermath of September 11, 2001. In addition, NRC security specialists performed numerous onsite physical security vulnerability assessments at licensed facilities to evaluate the effectiveness of the enhanced security measures that were put into place. These assessments demonstrated that the industry responded promptly and appropriately to the NRC threat advisories. To this day, all nuclear power plant facilities remain at a heightened security level.

The events of September 11, 2001, were unprecedented, and since that time, the NRC has taken appropriate steps to protect public health and safety. For example, the NRC quickly recognized the need to reexamine basic assumptions underlying the current civilian nuclear facility security and safeguards programs. Chairman Richard A. Meserve, with the full support of the rest of the Commission, directed the Staff to undertake a comprehensive review of the NRC's security and safeguards programs. This is an ongoing review and as results become available, they will be evaluated and, if appropriate, incorporated into NRC's regulatory processes. The comprehensive review takes advantage of insights gained by the NRC in consultation with the Office of Homeland Security, FBI, Department of Transportation (DOT), Department of Energy (DOE), and others. This cooperation further allows the NRC to keep abreast of the current threat environment, and communicate its actions to other federal agencies to ensure an appropriate response to security concerns throughout the nation's entire critical energy infrastructure.

In light of the current threat environment, the Commission concluded that specific security measures, including those outlined in threat advisories and voluntarily implemented by nuclear power plant licensees, should be embodied in an order consistent with the NRC's established regulatory framework. On February 25, 2002, the NRC issued orders to all operating power reactor licensees to require that certain interim compensatory measures (ICMs) for security be taken beyond those called for by current regulations. These new requirements will remain in effect pending notification from the Commission that a significant change in the threat environment has occurred, or until the Commission determines that other changes are needed following the comprehensive review of current safeguards and security programs. The orders were effective immediately upon issuance. For the most part, the orders formalized a series of steps that nuclear power plant licensees had been advised to take by the NRC in the aftermath of the terrorist attacks on September 11, 2001; however, the Commission included certain additional security enhancements in the orders. Details of certain new security requirements cannot be made public, but some of the specific measures implemented by the licensees in response to the advisories and ICMs included

increased patrols, augmented security forces and capabilities, additional security posts, installation of additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities, and more restrictive site access controls for all personnel. The orders also required that licensees provide a schedule for their implementation of the ICMs, and that all ICMs be implemented by August 31, 2002. Based on the NRC Staff's review of the responses to the reporting requirements of the order, the Staff concludes that licensees have taken adequate measures to comply with the requirements of the order by the required date of August 31, 2002. The Staff is verifying that licensees are in compliance with the ICMs by conducting independent inspections at licensee sites.

The NRC Staff has similarly issued orders to all independent spent fuel storage installation (ISFSI) licensees on October 16, 2002, to require implementation of ICMs designed to enhance security at these facilities.

The NRC continues to reexamine its activities to determine any significant safeguards vulnerabilities. If a vulnerability is identified, the NRC Staff will revise physical protection, material control, and other requirements, as appropriate. Also, the NRC will continue to assist the Office of Homeland Security and other federal agencies to evaluate threats beyond the feasible response capabilities of NRC licensees in order to consider the need to augment the site security organization with public assets, such as local law enforcement personnel.

EVALUATION OF PETITIONER'S CONCERNS

The Petitioner presented certain general and specific concerns about the vulnerability of nuclear power plants to terrorism. In addition, the Petitioner provided suggestions to improve security readiness oversight, and identified issues related to emergency planning and the availability of information to the public. The following is the NRC Staff's evaluation of the Petitioner's concerns.

A. Vulnerabilities to Specific Threats

The Petitioner raised several concerns regarding the following possible threats to nuclear power plants:

- Oklahoma City-type truck bomb,
- waterborne terrorist attacks,
- airborne attacks,
- sabotage by fire,

- spent fuel security,
- sabotage that results in a complete loss of AC power.

1. Explosive Devices Transported by Vehicles (Truck Bomb)

a. Petitioner's Concerns

In the supplemental information provided on January 9, 2002, the Petitioner stated that Oyster Creek must be able to demonstrate that its containment could withstand an Oklahoma City-type truck bomb.

b. NRC Response

As previously stated, 10 C.F.R. § 73.55 requires licensees to, among other things, establish vehicle control measures to protect vital equipment from damage due to a land-vehicle bomb. NRC regulations require all vital areas to be located within a protected area such that access to vital equipment requires passage through at least two physical barriers. Because the explosive effects of a land-vehicle bomb diminish with distance, protected-area barriers are located at a distance to provide an appropriate buffer between vital-area barriers and a potential land-vehicle bomb. The distance between a vital area and the potential explosive blast at the protected-area barrier is referred to as the "standoff distance."

Notwithstanding the measures that were in place on September 11, 2001, to protect plants from the DBT vehicle bomb in effect at that time, the NRC issued orders to all nuclear power plant licensees on February 25, 2002, to address the changing threat environment. The orders formalized steps that licensees had voluntarily taken in response to NRC threat advisories, and included additional measures to further protect nuclear power plants. These measures included a review of the adequacy of existing vehicle barrier systems and increasing standoff distances to ensure sufficient protection from a land-vehicle bomb based on the current threat environment. The size of the bomb used to calculate standoff distances is determined by various federal agencies involved in threat assessment, and the NRC cannot publicly disclose specific information or other similar details included in the orders issued on February 25, 2002.

Therefore, to the extent that the Licensee has taken measures in response to the orders issued on February 25, 2002, the NRC has, in effect, granted the Petitioner's request that Oyster Creek be able to withstand the effects of an explosive device transported by a vehicle.

2. Waterborne Attack

a. Petitioner's Concerns

In the supplemental information provided on January 9, 2002, the Petitioner stated that Oyster Creek must demonstrate that it has viable security plans to protect the water intake systems from terrorist attack. In addition, the Petitioner stated that Salem must be able to demonstrate that it has a viable plan to protect its water intake system from a terrorist or commando attack from the Delaware Bay.

b. NRC Response

Water intake structures are generally located inside the protected area, which is the case for Oyster Creek and Salem. As previously stated, section 73.55 requires that licensees must prevent the unauthorized access of persons, vehicles, and materials into protected and vital areas by using detection and barrier systems, and security personnel must be able to respond to unauthorized penetrations of the protected area. In addition, 10 C.F.R. § 50.63, "Loss of All Alternating Current Power," requires that licensees have procedures in place to maintain adequate cooling for a period of time if alternating current (ac) power is lost. In the short term, these procedures would ensure adequate core cooling. Therefore, on September 11, 2001, nuclear plants already had measures in place to address a potential waterborne attack. However, in order to address the current threat environment, the NRC issued orders to all nuclear power plant licensees on February 25, 2002. The orders included additional measures to evaluate potential vulnerabilities to a loss of the intake structure, and to implement additional protective measures, as appropriate. Details of the additional actions taken by the licensees is considered safeguards information and cannot be made available to the public.

Therefore, to the extent that the licensees have taken measures to meet current regulatory requirements and have implemented additional steps in response to the Orders issued on February 25, 2002, the NRC has, in effect, granted the Petitioner's request that Salem and Oyster Creek have a plan to protect their respective water intake systems from a terrorist or commando attack.

3. Airborne Attack

a. Petitioner's Concerns

The Petitioner requested that the NRC order plant defenses to be upgraded to withstand a jet crash similar to that which occurred at the WTC on September 11, 2001. The Petitioner also raised concerns that a large aircraft filled with jet fuel

could strike a nuclear power plant and start a fire in more than a single room or area, thus rendering certain safe shutdown equipment inoperable. The Petitioner concluded that the Oyster Creek, Hope Creek, and Salem nuclear power plants are vulnerable to radiological sabotage from the air.

b. NRC Response

In the aftermath of September 11, 2001, the federal government took a number of steps to improve aviation security and minimize the threat of terrorists using airplanes to damage facilities critical to our nation's infrastructure. The Commission views that the efforts associated with protecting our nation from terrorist attacks by air should be directed toward enhancing security at airports and on airplanes. Thus, the Commission endorses the prompt response by the Congress to strengthen aviation security under the Aviation and Transportation Security Act of 2001, because this legislation provides for improved protection against air attacks on all industrial facilities, both nuclear and nonnuclear. The NRC further supports the steps taken by the Federal Aviation Administration (FAA) to improve aircraft security, including enhanced passenger and baggage screening, strengthening of cockpit doors, and the Air Marshal program. The U.S. intelligence community and various federal law enforcement agencies have also increased efforts to identify potential terrorists and prevent potential attacks before they occur. For example, the FAA and DOD have acted more than once to protect airspace above nuclear power plants from what were thought to be credible threats against certain specific sites. These potential threats were later judged to be noncredible.

The FAA and DOD also concluded that a Notice to Airmen (NOTAM) was an appropriate means to help protect the airspace above sensitive sites. Accordingly, the FAA issued a NOTAM strongly urging pilots to:

not circle or loiter over the following sites: Nuclear/Electrical power plants, power distribution stations, dams, reservoirs, refineries, or military installations, unless otherwise authorized by air traffic control or as required to land or depart at towered/non-towered airports.

This notice is still in effect. Should additional restrictions be deemed appropriate as a result of changing or more specific threats, our communication with the other federal agencies will allow a prompt and coordinated response.

Since September 11, 2001, there have been no specific credible threats against any NRC-licensed facility. However, in view of the intelligence information at hand, enhancements to site security, and steps taken to improve aviation security, the NRC has concluded that it is appropriate to allow nuclear power plants to continue to operate without modifying the facilities to withstand an aircraft attack.

Therefore, the NRC is denying the Petitioner's request that the NRC immediately order plant defenses to be upgraded to withstand a jet crash.

In denying the Petitioner's request, the NRC Staff acknowledges that nuclear plants were not specifically designed to withstand a deliberate aircraft crash. Prior to September 11, 2001, the U.S. intelligence community and the NRC did not consider a deliberate aircraft attack against a nuclear power plant to be a credible threat.

Nevertheless, the Staff recognizes that design and construction considerations could contribute to a nuclear power plant's survivability in the event of an aircraft impact. The NRC requires that these facilities be designed with a defense-indepth philosophy to withstand events such as tornadoes (and missiles generated by tornadoes), hurricanes, fires, floods, and earthquakes. This has resulted in nuclear power plant designs that afford a measure of protection against deliberate aircraft impacts because the defense-in-depth philosophy requires plants to have hardened containments, and redundant and separated systems in order to ensure safety. Ultimately, the capability of a plant to successfully cope with an aircraft crash will depend upon a number of factors, including the plant's specific design features, the design and flight characteristics of the aircraft, the point of impact, the ability of the licensees' staff to utilize remaining backup systems, and the response of onsite and offsite resources.

In its orders issued to all operating nuclear power plants on February 25, 2002, the Commission also directed licensees to develop specific guidance and strategies to respond to an event resulting in damage to large areas of the plant due to explosions or fire. These strategies are intended to assist in identifying and utilizing any remaining equipment and capabilities to maintain or restore reactor core, containment, and spent fuel cooling, including both onsite and offsite resources.

The Staff further notes that the NRC, in conjunction with DOE laboratories, is continuing a major research and engineering effort to evaluate the vulnerabilities and potential effects of a large commercial aircraft impacting a nuclear power plant. This effort also includes consideration of possible additional preventive or mitigative measures to further protect public health and safety in the event of a deliberate aircraft crash into a nuclear power plant or spent fuel storage facility. The final results from that analysis are not yet available. If the ongoing research and security review recommends any other security enhancements, the NRC will take appropriate action.

4. Sabotage by Fire

a. Petitioner's Concerns

The Petitioner raised concerns about fires in multiple rooms and areas, and that fire hazards analysis (FHA) information developed by licensees in response to the Browns Ferry fire could be used by saboteurs to disable critical emergency systems that are needed to cool the reactor core.

In addition, the Petitioner stated that "the NRC must cancel it's [sic] plans to allow PSE&G to not replace all of it's [sic] bogus raceway fire barriers, and instead require PSE&G to indeed replace ALL the fire wrap in question" at Salem. The Petitioner added that Salem should not be allowed to operate with combustible fire seals, and instead, the NRC should require PSEG to replace all its combustible fire seals.

b. NRC Response

The Petitioner referred to a scenario in which saboteurs could use FHA information to start multiple fires and disable critical emergency systems that are needed to cool the reactor core. The NRC Staff recognizes that it could contemplate a variety of plausible scenarios that result in a broad spectrum of damage and potential adverse consequences at a nuclear facility. Each scenario would involve varying elements of complexity: (1) number of saboteurs, (2) potential target(s), (3) weapons and/or devices necessary to carry out the terrorist mission, and (4) various tactical considerations. In order for the specific scenarios presented by the Petitioner to be carried out, saboteurs would have to successfully penetrate and/or circumvent a number of defense-in-depth security practices that currently exist, including:

- · access authorization measures;
- routine searches of personnel entering controlled areas of the plant;
- routine searches for explosives and weapons entering controlled areas;
- multiple physical barriers, sophisticated surveillance equipment, and access control systems;
- · routine maintenance work control practices;
- routine radiological area access controls;
- other "barriers" (e.g., plant workers observing suspicious behavior on the part of potential terrorists).

In addition, the defense-in-depth design philosophy has resulted in plants having redundant fire detection and suppression systems and other fire barriers in order to ensure safety. Consequently, the saboteurs would have to also be successful at preventing these fire mitigation systems, fire brigade personnel, and plant operators from responding to and/or extinguishing the fires in a timely manner. As previously stated, the Commission directed licensees to develop specific guidance and strategies to respond to scenarios resulting in damage to large areas of the plant due to explosions or fire. These strategies are now in place, and will support those responsible for maintaining and/or restoring reactor core, containment, and spent fuel cooling in the event of a large fire or terrorist attack.

Therefore, to the extent that appropriate measures are now in place to limit the accessibility of vital plant areas to terrorists, and that mitigative measures are in place to address potential fires or explosions, the NRC has, in effect, partially granted the Petitioner's request that action be taken to protect nuclear power plants from large-scale or multiple fires.

With respect to the Petitioner's concerns about fire wrap materials at Salem, the Staff is aware that PSEG is implementing various corrective actions in response to a 1997 violation associated with the failure to adequately qualify certain electrical raceway fire barrier systems installed at the plant. The NRC Staff concludes that the defense-in-depth protection afforded by fire detection and suppression systems and other fire protection measures is adequate to ensure public health and safety while the Licensee corrects items identified in the violation.

5. Spent Fuel Security

a. Petitioner's Concerns

The UCS report on spent fuel security recommends that the NRC address the issue of spent fuel storage at all U.S. nuclear power plants. The Petitioner contends that the storage of spent fuel presents "a softer target that could yield graver consequences than an aircraft crashing through the reactor containment structure." As a result, the Petitioner concludes that "all of the spent fuel pools must be brought into the containment building, or a new containment building, able to withstand a jet crash, should be built for them." The Petitioner also states that the NRC should cancel any plans for dry cask storage at any of New Jersey's plants, until a jet-bomber-proofed containment is built for them. Similarly, the Petitioner requests that: (1) the NRC should halt and reverse all permits that have allowed the construction of dry cask storage of nuclear waste at Oyster Creek; and (2) no dry cask storage should be allowed to be built without the NRC first holding an adjudicatory public hearing, without all of the Petitioner's security requests being met.

The basis for the Petitioner's concerns with respect to spent fuel pool security is related to the ability of the spent fuel pool structure to withstand the impact of

a large jet aircraft. The requests associated with the Oyster Creek interim spent fuel storage facility are partially based upon concerns about the proximity of this facility to a nearby highway, and that dry cask systems are above ground instead of buried.

b. NRC Response

As previously stated, the NRC Staff concluded that, in view of the intelligence information at hand, enhancements to site security, and steps taken to improve aviation security, nuclear power plants should continue to be allowed to operate. The NRC Staff's determination considered spent fuel pools since the pools are located within the protected area and are afforded protection under the same physical security protection program as the nuclear power plant.

The Staff notes that certain spent fuel pool design features could contribute to ensuring public health and safety in the event of a deliberate attempt to crash an aircraft into a spent fuel pool. Specifically, spent fuel pools are small in size relative to the rest of the plant. This characteristic would make the pools difficult to target. In addition, the NRC's requirements that spent fuel pools be designed to withstand a variety of design-basis events such as tornadoes (and missiles generated by tornadoes), hurricanes, fires, floods, and earthquakes have resulted in nuclear plant designs that afford a measure of protection against deliberate aircraft impacts. Spent fuel pools are massive structures with thick walls constructed of reinforced concrete. Furthermore, the defense-in-depth design philosophy used in nuclear facilities means that systems critical to the safety of stored fuel have redundant and separated systems in order to ensure safety.

Notwithstanding the defense-in-depth design features of the Salem, Hope Creek, and Oyster Creek facilities, including the spent fuel pools, the NRC identified additional physical protection measures that all licensees should implement given the current threat environment. These measures were first communicated to licensees in safeguards advisories. NRC inspectors subsequently verified that plants had implemented the enhanced requirements outlined in the advisories. On February 25, 2002, the Commission issued orders to all operating nuclear power plants requiring compliance with specified ICMs involving spent fuel pools.

The Staff recognizes that additional requirements beyond those provided by existing regulations and the ICMs may be warranted. The comprehensive review of the NRC's safeguards and physical security programs initiated by Chairman Meserve following the September 11, 2001, terrorist attacks includes specific studies on the impacts of aircraft on nuclear power plant facilities, including the spent fuel pool. The review also includes an evaluation of the potential consequences of terrorist attacks using various explosives or heat-producing

devices on spent fuel pools and spent nuclear fuel dry casks at spent nuclear fuel storage sites. The Staff will use the insights gained from these studies as it considers the need for further security enhancements.

However, during this intervening period, the NRC concludes that, based on the intelligence information at hand, additional measures implemented by the licensees to enhance spent fuel pool security, and steps taken to improve aviation security, there is reasonable assurance that nuclear power plants can continue to operate safely without the need to construct containments around spent fuel pools. Therefore, the NRC Staff denies the Petitioner's request that all spent fuel pools be brought into the containment, or that a new containment building be constructed for spent fuel.

The Petitioner also requested that: (1) the NRC halt and reverse all permits associated with Oyster Creek that have allowed the construction of dry cask storage of nuclear waste; and (2) no dry cask storage should be allowed to be built without the NRC first holding an adjudicatory public hearing, without the Petitioner's security requests being met.

The rule that established the process for the general licensing of independent spent fuel storage installations (ISFSIs) at operating reactors became effective in 1990, and implemented the requirements of the Nuclear Waste Policy Act of 1982 (NWPA). Before the rule became effective, the public was offered the opportunity to comment on the rulemaking for this general licensing process. Also, under this process, the NRC approves and certifies spent fuel storage casks for use under the general licensing provisions. As each cask design is certified, it is added to the list of certified casks in 10 C.F.R. § 72.214 through a separate rulemaking effort. The rulemaking process for cask certification includes opportunities for public comment.

AmerGen Energy Company, LLC (AmerGen) is licensed by the NRC to operate the Oyster Creek nuclear power reactor under the provisions of 10 C.F.R. Part 50. The Licensee has also been granted a general license under the provisions of 10 C.F.R. Part 72 to operate an ISFSI at the Oyster Creek reactor site. AmerGen will be using dry storage cask designs at Oyster Creek that the NRC has already approved for use. Because there are no pending licensing or other agency actions before the Commission, there is no additional process available to the Petitioner for which an adjudicatory hearing might be appropriate. Consequently, the Petitioner's request for an adjudicatory hearing is denied.

The Petitioner also raised concerns about the proximity of the Oyster Creek ISFSI to U.S. Route 9, stating that it was vulnerable to a terrorist attack. The Petitioner is also concerned that, since ISFSIs are located above ground, they are more exposed to the possibility of a successful terrorist attack. Security requirements for the Oyster Creek ISFSI are outlined in 10 C.F.R. § 73.51, "Requirements for the physical protection of stored spent nuclear fuel and high-level radioactive waste." This section requires the licensee to establish

and maintain a physical protection system with the objective of providing high assurance that activities involving spent nuclear fuel and high-level radioactive waste do not constitute an unreasonable risk to public health and safety. This is accomplished, in part, by:

- storing spent nuclear fuel and high-level radioactive waste only within a protected area;
- granting access to the ISFSI's protected area only to individuals who are authorized to enter the protected area;
- providing barriers, systems, and procedures necessary to detect and assess unauthorized penetration of, or activities within, the protected area;
- providing timely communication to a designated response force whenever necessary.

The Licensee has taken additional security measures in response to threat advisories issued following September 11, 2001, and the facility remains at a heightened security level. Furthermore, the dry cask storage containers used at Oyster Creek are designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, lightning, hurricanes, floods, tsunamis, and seiches. The NRC requires that all ISFSI components important to safety must be designed and located so that they can continue to perform their safety functions effectively under credible fire and explosion exposure conditions. As a result, dry cask storage containers inherently afford a high level of protection. Therefore, based upon the additional security measures being taken by the Licensee, and the inherent level of protection already provided by the dry cask storage container design, the Petitioner's request to halt and reverse all permits associated with the Oyster Creek ISFSI is denied.

Although the enforcement action requested by the Petitioner is denied, the NRC Staff has determined that additional measures should be taken to enhance ISFSI security and, on October 16, 2002, issued orders to all licensees of ISFSIs requiring compliance with interim safeguards and security compensatory measures. In addition, the NRC's comprehensive review includes the potential consequences of terrorist attacks using various explosives or heat-producing devices on spent nuclear fuel dry casks at ISFSIs. As the results of this review become available, the NRC will determine if additional safety or physical protection actions or requirements need to be taken at ISFSIs and will take appropriate actions to implement those measures.

6. Complete Loss of AC Power

a. Petitioner's Concerns

The Petitioner stated that Salem must demonstrate that it has a viable plan to protect the plant in the event of a terrorist attack that cuts off all electric power, in conjunction with an attack on the diesel generators. The concern is that equipment that is vital to plant safety would not be available when necessary.

b. NRC Response

Section 50.63 of 10 C.F.R., "Loss of all alternating current power," requires that each nuclear power plant be able to withstand and recover from a station blackout (SBO) for a specified period of time. SBO is defined as the complete loss of ac electric power to the essential and nonessential switchgear buses in a nuclear power plant. A plant's specified SBO duration is based on an engineering evaluation that considers the following factors:

- redundancy of the onsite emergency ac power sources,
- reliability of the onsite emergency ac power sources,
- expected frequency of loss of offsite power,
- probable time needed to restore offsite power.

NRC rules further require that the reactor core and associated coolant, control, and protection systems, including station batteries and any other necessary support systems, must also provide sufficient capacity and capability to ensure that the core is cooled and appropriate containment integrity is maintained in the event of an SBO. The minimum SBO coping time for Salem Units 1 and 2, based on the Licensee's conservative analysis, is 4 hours.

Hot shutdown is generally the mode that plants are designed to achieve following a design-basis event (such as a large earthquake or loss-of-coolant accident). If offsite power is lost, but the emergency diesel generators are unaffected, a plant can stay in a hot shutdown condition for an extended period of time. If an SBO condition exists, the time in which the reactor core could be damaged would depend upon the status of important parameters such as station battery capacity, environmental effects, water inventory in emergency tanks, and reactor coolant pump seal leakage. During an SBO, plant operators could employ certain strategies (i.e., use steam-driven auxiliary feedwater pumps and atmospheric dump valves) to cool the reactor. Provided that the operators retain the capability to replenish water in tanks, and station batteries have sufficient charge for control and instrument power, nuclear power plants can operate for extended periods at hot shutdown while ac power is being restored.

The NRC Staff considers that, even under the current threat environment, there is a very low likelihood that saboteurs would be able to successfully damage all offsite and onsite sources of ac power at Salem. This conclusion is based on the separate and redundant sources of offsite and onsite ac power that are available at the plant, as well as the heightened security measures that the Licensee is taking in conjunction with the orders issued on February 25, 2002. Therefore, to the extent that the Licensee is implementing additional measures in response to the orders, the NRC is partially granting the Petitioner's request that action be taken to protect nuclear power plants from the loss of ac power resulting from postulated acts of sabotage.

B. Other Concerns and Recommendations

1. Operational Security Readiness Evaluation (OSRE) Requirements

a. Petitioner's Concerns

The Petitioner raised several concerns about the NRC's program to verify security readiness through inspections and tests conducted under the OSRE program. The concerns included an observation that the NRC does not use force-on-force exercises to demonstrate security compliance at reactors that have permanently shut down, nonpower reactors, spent fuel storage at operating reactors and reactors that have permanently shut down, and "operating reactors during outages where dozens of temporary workers, with minimal background checks, are allowed onsite."

On the basis of a report prepared by the UCS, the Petitioner also contends that NRC force-on-force tests have revealed serious security problems at approximately half of the operating plant sites, and that the majority of plant sites have only been tested once. The UCS report concluded that there is "little assurance that sites failing an OSRE several years ago have adequate security today." As a result, the Petitioner recommends that: (1) the NRC should conduct OSRE tests at all operating nuclear power plants, reactors that have permanently shut down with onsite spent fuel storage, and nonpower reactors; (2) OSRE tests must be expanded to include spent fuel as a sabotage target; (3) OSRE tests must account for an active role by multiple insiders; (4) the frequency of the OSRE tests must be no less than once every 4 years; (5) OSRE tests should be administered by NRC headquarters rather than by its regional offices to ensure consistent quality; and (6) the NRC should cancel the proposal to allow nuclear plants to conduct their own security inspection.

b. NRC Response

As previously stated, 10 C.F.R. § 73.55 requires all licensees to establish a physical protection system and a security organization with the objective of providing high assurance that activities involving special nuclear material are not inimical to the common defense and security, and do not constitute an unreasonable risk to the public health and safety. The physical protection system is required to protect against the DBT of radiological sabotage.

Licensees are also required to develop physical security plans (PSPs) in accordance with 10 C.F.R. § 73.55(a), and these plans must be submitted to the NRC for approval before they are implemented. Prior to establishing the OSRE program, NRC regional security teams conducted routine inspections that were designed to evaluate compliance with commitments made in approved PSPs and to assess the capabilities of the licensees' security programs. Although these commitments were intended to ensure that the security organizations were able to protect against the DBT, the inspections carried out to evaluate compliance with these commitments did not provide for performance testing of tactical response capabilities or evaluation of the effectiveness of these commitments to protect against the DBT.

As a result, the NRC established the OSRE program in 1991. The OSRE program, which is performance based, was designed to enhance regional inspection efforts by using force-on-force exercises conducted by licensees as a method of evaluating their response capabilities, and it included the validation of licensees' target sets. A target set consists of interrelated equipment or components that if disabled or destroyed would result in core damage, assuming no credit for operator intervention or emergency response action. Between August 1991 and August 2001, the NRC conducted eighty-one OSRE inspections. During these inspections, OSRE teams identified weaknesses at thirty-seven plants. In general, these weaknesses were attributed to deficiencies in the licensees' contingency response plan, training, or execution of the plan. No one issue dominated the weaknesses found. The Staff also notes that for the fifteen OSREs conducted between April 2000 and August 2001, weaknesses were identified in nine of fifty-nine exercises or 15% of the time; hence the attacking force was not able to accomplish its objective and commit radiological sabotage 85% of the time.

The performance of licensees in OSRE exercises is sometimes mischaracterized. OSRE exercises are tough commando-style raids, designed to identify shortcomings in security personnel performance or strategy. Prior to the exercise, the attacking force is made aware of the licensee's defensive strategies as well as its methods and provisions for protecting target sets and critical equipment. In addition, plant operators and emergency response personnel are not allowed to intervene during the exercise to mitigate the consequences of the attacking force's actions. The NRC Staff is not aware of any comparable performance

testing of security measures for any other type of commercial industrial facilities. Identification of a weakness during an exercise leads to immediate corrective or compensatory measures to ensure that the security programs remain effective.

Following the events of September 11, 2001, the NRC temporarily discontinued force-on-force exercises under the OSRE program because the conduct of these exercises would be a significant distraction from actual site security and could elicit inappropriate responses by armed security personnel. The NRC had also diverted its limited security inspection resources to Staff response centers to monitor and evaluate licensees' heightened security posture. The NRC has recently reinitiated OSRE-type tests by initially implementing the tabletop component of these exercises. For the first time, these tests involve a wide array of federal, state, and local law enforcement and emergency planning officials. The NRC expects to expand the exercises to include a force-on-force component at the beginning of next year. Full security performance reviews, including force-on-force exercises, are planned to be carried out at each nuclear power plant on a 3-year cycle instead of the 8-year cycle that had been used prior to September 11, 2001.

Moreover, the Staff notes that actions associated with the Safeguards Performance Assessment (SPA) task force were also affected by the events of September 11, 2001. The SPA task force was created in 1998 to study the lessons learned from the OSRE program, and make recommendations for future tactical response evaluations. One recommendation included a proposal for the industry to assume a greater role in assessing licensee tactical response capability. However, further developments associated with this proposed program have been suspended pending completion of the NRC's comprehensive security review.

Finally, the other recommendations raised by the Petitioner (items 1, 2, 3, and 5) concerning the current OSRE program, such as the administration, frequency, assumed threat scenarios, and types of plants (e.g., decommissioned plants and ISFSIs) within the scope of these programs, have been included as a part of NRC's comprehensive security program review. Thus, the NRC has, in effect, partially granted the Petitioner's requests to the extent that: (1) tabletop drills have resumed; (2) force-on-force drills will resume in the near future on a planned 3-year cycle; and (3) the other issues raised by the Petitioner concerning the OSRE program are being examined as a part of the NRC's comprehensive security review.

2. Availability of Potassium Iodide

a. Petitioner's Concerns

On the basis of a report prepared by the UCS, the Petitioner requested that the NRC require potassium iodide (KI) be readily available for people living in the vicinity of all nuclear reactors. The Petitioner stated that this step would ensure

that people would be protected to the fullest extent possible in the event of a successful sabotage attack against a nuclear reactor.

b. NRC Response

Potassium iodide is a salt, similar to table salt. Its chemical symbol is KI, and it is routinely added to table salt to make it "iodized." If taken as a pill within the appropriate time and at the appropriate dosage, KI blocks the uptake of radioactive iodine by the thyroid gland, thereby reducing the risk of thyroid cancers and other diseases that might otherwise be caused by thyroid uptake of radioactive iodine that could be dispersed in a severe reactor accident.

On April 19, 2001, the NRC revised its regulations to permit states or tribes with a population within the 10-mile emergency planning zone of commercial nuclear power plants to consider including KI as a protective measure for the general public to supplement sheltering and evacuation in the unlikely event of a severe nuclear power plant accident. Concomitant with this action, the Commission decided to provide funding for an initial supply of KI for a state or tribe that chose to incorporate KI for the general public in its emergency plans. Individual states and tribes were given the responsibility to further decide how best to stockpile and/or distribute KI to affected localities and citizens.

Following the events of September 11, 2001, the NRC expedited its process for providing KI to the states. On December 20, 2001, the Commission showed its continued support for the KI program by announcing its intent to supply KI to requesting states within approximately 30 days.

As of October 21, 2002, seventeen states — Massachusetts, Connecticut, Maryland, Vermont, Delaware, Florida, Alabama, Arizona, New York, New Jersey, North Carolina, South Carolina, Pennsylvania, California, Ohio, Virginia, and New Hampshire — have requested and/or received KI tablets. Delaware and New Jersey have received their requested amounts of KI. Each state is developing an implementation program to ensure that KI will be readily available should the need arise. Therefore, to the extent that KI will be available to the general public in the states of Delaware and New Jersey residing within 10 miles of Salem, Hope Creek, and Oyster Creek, the Petitioner's request regarding the distribution of KI has been satisfied.

3. Emergency Planning Oversight

a. Petitioner's Concerns

The Petitioner recommended that the NRC direct the New Jersey Department of Emergency Management and the State Police to allow citizen stakeholder groups such as UNPLUG Salem and Jersey Shore Nuclear Watch to observe

and comment upon emergency planning (EP) and evacuation drills. In addition, the Petitioner suggested that the NRC should direct the above to include nuclear terrorism as a subject of evacuation drills and emergency planning.

b. NRC Response

The response to a radiological emergency at a nuclear facility involves a number of interrelated functions performed by onsite and offsite components of each site's emergency response organization. The effectiveness of this organization is critical to ensure the health and safety of the public. In recognition of this important function, 10 C.F.R. § 50.47(b)(14) requires that licensees must conduct periodic drills and exercises. This regulation is further supported by Appendix E to 10 C.F.R. Part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities." Appendix E requires that EP drills and exercises must be conducted as close to actual accident conditions as practical, and must involve the principal functional areas of the licensees' emergency response capabilities.

The stated purpose for EP drills and exercises is to develop and maintain key skills, including: (1) testing the adequacy of timing and content of implementing procedures and methods; and (2) testing emergency equipment, communication networks, and public notification systems. Appendix E further directs that: (1) the EP training program provide for the training of employees through periodic drills and exercises to ensure that employees of the licensee are familiar with their specific emergency response duties; and (2) other persons whose assistance may be needed in the event of a radiological emergency must participate in the training and drills. The licensee's emergency response training program must comprise the following categories of plant workers:

- directors and/or coordinators of the plant emergency organization,
- · personnel responsible for accident assessment,
- control room shift personnel,
- radiological monitoring teams,
- fire control (fire brigades) and damage control (repair) teams,
- first aid and rescue teams and medical support personnel,
- licensee's headquarters support personnel,
- security personnel.

In addition, a radiological orientation training program should be made available to local services personnel (e.g., local emergency services/Civil Defense, local law enforcement personnel, and local news media).

The NRC's regulations further address the need for licensees to promptly rectify problems identified during drills and exercises. This is accomplished, in part, through formal critiques conducted by licensees in order to identify any weak or deficient areas in need of correction. Consequently, licensees are expected to perform an effective performance evaluation following a drill or exercise, and NRC inspectors scrutinize the licensees' critique process. Any deficiency or observation noted by NRC inspectors is processed through the Significance Determination Process under the Reactor Oversight Process (ROP), and these findings will be formally documented in an Inspection Report. Inspection Reports are available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of NRC's electronic records system (ADAMS). ADAMS is accessible from the NRC Web site at: http://www.nrc.gov/reading-rm.html (the Public Electronic Reading Room)

The NRC uses inspection findings together with objective performance indicators (PIs) to assess plant performance within a regulatory framework of seven cornerstones of safety: (1) initiating events; (2) mitigating systems; (3) integrity of barriers to release of radioactivity; (4) emergency preparedness; (5) occupational radiation safety; (6) public radiation safety; and (7) physical protection. PIs and inspection findings are evaluated and given a color designation based on their safety significance. Green inspection findings or PIs indicate a very low risk significance and therefore have little or no impact on safety. White, yellow, or red inspection findings or PIs each, respectively, represent a greater degree of safety significance. The performance indicators, inspection findings, and the assessment letters describing plant performance — including emergency preparedness performance — are posted on the NRC Web site at: http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html.

The NRC and the Federal Emergency Management Agency (FEMA) are the two federal agencies responsible for evaluating emergency preparedness at and around nuclear power plants. The NRC is responsible for assessing the adequacy of onsite emergency plans developed by the licensee, while FEMA is responsible for assessing the adequacy of offsite emergency planning. Although the NRC regulates its licensees' EP programs, FEMA serves as the lead federal agency for planning preparedness for all types of peacetime radiological emergencies. The NRC works in consultation with FEMA on a number of emergency preparedness issues. As the lead agency, FEMA issues policy and guidance to assist state and local governments in developing and implementing their radiological emergency response plans and procedures. Much of this guidance is developed with the assistance of the Federal Radiological Preparedness Coordinating Committee (FRPCC) and its member agencies. The exercise demonstration provides an input to the review process in order for the NRC and FEMA to evaluate the state of emergency preparedness. The NRC relies on FEMA's reasonable assurance

findings to determine that adequate protective measures can and will be taken in the event of a radiological emergency to protect public health and safety.

Although citizen groups such as UNPLUG Salem and Jersey Shore Nuclear Watch may be key stakeholders within their communities, they are not a part of the Licensee's emergency response organization and do not have a stated or active emergency response role at Salem, Hope Creek, or Oyster Creek. As stated above, FEMA and the NRC are the agencies legally charged with regulatory oversight of nuclear power plant emergency planning. The inclusion of nonparticipating individuals or groups would thus not contribute to the stated purpose of the drills and exercises. Furthermore, the NRC lacks the authority to direct a state or local government agency to permit citizen groups to participate in emergency response drills or exercises. Individuals or groups desiring to observe EP drills need to contact the New Jersey Office of Emergency Management (NJOEM) directly. Therefore, the NRC is denying the Petitioner's request to direct the NJOEM and the State Police to allow citizen stakeholder groups to observe and comment upon EP drills and exercises.

As previously stated, current regulations require that major portions of a licensee's emergency response capabilities must be exercised. The scenarios used during EP exercises, along with minimum frequencies, are developed by licensees in consultation with state emergency planning representatives in order to demonstrate specific response capabilities. The NRC Staff expects that the scenarios will vary from exercise to exercise, such that all major elements of the plans and emergency response organizations are tested. The specific details of any particular scenario are best left to the participating organizations to be mutually determined. Because nuclear power plant security is an important cornerstone in protecting public health and safety, some states have included security-related events as one of the emergency plan elements tested.

Therefore, to the extent that security-related events are already considered among other possible EP drill scenarios tested, the Petitioner should consider that the request, that the NRC direct the NJOEM and the State Police to include nuclear terrorism as a subject of EP exercises and drills, has been satisfied.

4. Miscellaneous Recommendations

a. Petitioner's Concerns

The Petitioner raised other concerns that were not specific to the nuclear power plants located in New Jersey:

 Existing security regulations do not provide adequate protection against known terrorist threat capabilities. For example, the regulations do not require protection against attacks by aircraft, boats, and trucks. Therefore, the NRC should revise the design-basis threat to include attacks by aircraft, boats, and trucks and ensure that all nuclear reactors are adequately protected against the revised design-basis threat.

- Regulations assume that only a single insider will attempt sabotage. The
 events of September 11, 2001, demonstrated that terrorists may devote
 the time and effort necessary to place more than one individual working
 at a nuclear reactor site.
- The NRC assumes that its regulations governing access control and authorization are fully effective in preventing sabotage by an insider. These regulations require background checks, drug and alcohol screening, and continuing behavior observation. But while background checks and the drug and alcohol screening have resulted in individuals being denied access or having their access privileges withdrawn, the continuing behavior observation has seldom, if ever, identified a potential problem. Thus, all individuals getting past the background checks and screenings have virtually unfettered ability to sabotage the nuclear reactor and spent fuel.
- Existing regulations governing changes to nuclear reactor facilities and
 their operating procedures require prior NRC approval for changes that
 reduce safety margins. But nuclear reactor owners routinely make changes
 without NRC approval even though they have not evaluated whether
 the proposed changes make it easier for insiders to carry out sabotage.
 Therefore, the NRC should require all nuclear reactor owners to formally
 evaluate the risk of sabotage by an insider when they make physical
 modifications to facilities and revise procedures.

b. NRC Response

The Petitioner made a number of recommendations associated with the current DBT, access authorization requirements, and facility changes that could potentially impact plant security. As previously stated, the NRC is conducting a comprehensive review of the agency's security and safeguards programs. This effort includes a thorough review of the adequacy of the DBT described in 10 C.F.R. Part 73, as well as current access authorization requirements. As the results of this ongoing effort become available, individual recommendations will be evaluated and, if appropriate, incorporated into NRC's regulatory processes. With respect to modifications to plant facilities and procedures, the site security plan describes the critical features of the plant design necessary to defend against radiological sabotage. Paragraph 50.54(p)(2) to 10 C.F.R. states that the licensee may make changes to the security plan without prior NRC approval if the changes do not decrease the safeguards effectiveness of the plan. Therefore,

existing regulations ensure that changes to facility design or procedures that affect the security plan are evaluated for their impact. Changes that would reduce the effectiveness of the security plan need NRC review and approval prior to implementation.

5. Availability of Information to the Public

a. Petitioner's Concerns

The Petitioner requested that NRC shall agree to reopen its entire Web site to stakeholder groups like UNPLUG Salem and Jersey Shore Nuclear Watch, with acceptable means of security involved.

b. NRC Response

Soon after September 11, 2001, the NRC withdrew information that could be sensitive or useful to potential terrorists from its public Web site. On December 3, 2001, the NRC deployed Release 1 of its redesigned Web site, and, since that time, has gradually added new information to the Web site as the Staff continues to review potential sensitive information. The NRC will continue to make additional information available as it completes more reviews. The NRC considers all members of the public to be stakeholders in its activities, and appreciates the public's patience as the agency proceeds with the task of rebuilding its Web site. However, in the NRC's continued effort to ensure the safeguarding of nuclear material and safety at U.S. nuclear power plants, the NRC is denying the Petitioner's request for special access to sensitive information by public interest groups on its Web site.

III. CONCLUSION

The Petitioner raised a number of issues and policy questions concerning public health and safety associated with the possibility of terrorist activity directed at the four nuclear power plants located in the State of New Jersey. The NRC Staff maintains that the immediate closure of Salem, Hope Creek, and Oyster Creek is not necessary to provide adequate protection of public health and safety. The Staff considers that current regulations, as augmented by the interim compensatory security measures set forth by the orders issued on February 25, 2002, and the actions taken by various other federal agencies, adequately address the current threat environment in a consistent manner throughout the nuclear industry.

Therefore, the NRC concludes that it has, in effect, partially granted the Petitioner's request for increased security at Salem, Hope Creek, and Oyster Creek

to the extent that many of the concerns raised by the Petitioner are included within the scope of the orders issued to all nuclear power plants on February 25, 2002, or are a part of the NRC Staff's comprehensive review to evaluate the agency's security and safeguards programs. The orders required that all commercial nuclear power plant licensees implement interim compensatory security measures for the generalized high-level threat environment. The remainder of the Petitioner's requests are denied for the reasons previously stated in the Director's Decision.

The NRC Staff further notes that the orders do not obviate the need for licensees to continue to implement protective measures in response to changes in the threat environment as described in NRC Regulatory Issue Summary 2002-12A, "NRC Threat Advisory and Protective Measures System," and maintain the effectiveness of existing security measures taken in response to the events of September 11, 2001. The requirements will remain in effect pending notification from the Commission that a significant change in the threat environment has occurred, or until the Commission determines that other changes are needed following a more comprehensive reevaluation of current safeguards and security programs, presently under way.

A copy of this Decision will be filed with the Secretary of the Commission so that the Commission may review it in accordance with 10 C.F.R. § 2.206(c). As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR
REGULATORY COMMISSION

Jon R. Johnson, Deputy Director Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland, this 1st day of November 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Jon R. Johnson, Deputy Director

In the Matter of

ALL NUCLEAR POWER REACTOR LICENSEES

November 1, 2002

The Petitioner requested that the NRC take immediate short-term and long-term corrective actions to protect the public against the possibility of terrorists seizing control of a large commercial jetliner and crashing it into a nuclear power plant in the United States. In addition, the Petitioner requested that the U.S. Nuclear Regulatory Commission (NRC or the Commission) take compensatory measures, as set forth in the petition, to protect the public and environment from the catastrophic impacts of any type of terrorist attack on a nuclear power plant or a spent fuel pool. The Petitioner also requested that the NRC ensure that these compensatory measures are immediately implemented, and that the NRC issue permanent rules.

The final Director's Decision on this petition was issued on November 1, 2002. In that Decision, the NRC Staff concluded that the information contained in the petition did not warrant further NRC Staff action. The Staff concluded that the concerns have been reasonably addressed by actions of Congress and the Federal Aviation Administration to enhance aviation security, actions taken by various federal agencies to deter terrorist activities, and the issuance of orders by the NRC to the operating nuclear power plants. The Staff believes that the compensatory measures, as set forth in the orders, are prudent, interim measures to adequately address the current threat environment in a consistent manner throughout the nuclear power industry.

The NRC concluded that it has, in effect, partially granted the Petitioner's request for increased security to the extent that many of the concerns raised by the Petitioner are included within the scope of the orders issued to all nuclear power plants on February 25, 2002, or are a part of the NRC Staff's

comprehensive review to evaluate the agency's security and safeguards programs. The orders required that all commercial nuclear power plant licensees implement interim compensatory security measures for the generalized high-level threat environment.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated October 24, 2001, Mr. Michael D. Kohn, on behalf of the National Whistleblower Center (Petitioner), submitted a petition pursuant to section 2.206 of Title 10 of the *Code of Federal Regulations* (10 C.F.R. § 2.206), for corrective action to protect the public against the possibility of terrorists seizing control of a large commercial airliner and crashing it into a nuclear power plant in the United States. In addition, the Petitioner requested that the U.S. Nuclear Regulatory Commission (NRC or the Commission) take compensatory measures, as set forth in the petition, to protect the public and environment from the catastrophic impacts of any type of terrorist attack on a nuclear power plant or a spent fuel pool. The Petitioner also requested that the NRC ensure that these compensatory measures are immediately implemented, and that the NRC issue permanent rules, as discussed in the petition.

Additionally, by letter dated January 16, 2002, Mr. Nicholas Reynolds of Winston & Strawn submitted comments on the petition on behalf of several NRC licensees. The NRC considered the licensees' comments in preparing this Director's Decision. By letter dated January 27, 2002, Mr. Michael D. Kohn submitted an amended petition. The amended petition included the names of six additional Petitioners who wished to be added to the petition.

As a basis for the request described above, the Petitioner stated that:

- No commercial nuclear power plant located in the United States can withstand the impact
 of a large commercial airliner.
- The NRC intentionally misled the public about its failure to adequately consider risks associated with an air assault on a nuclear facility.
- The NRC knew or should have known that the current design and security measures at the
 spent fuel pools [SFPs] located at each nuclear power plant are incapable of protecting
 the population from the catastrophic release of radiation from a potential terrorist attack
 and immediate and long-term compensatory measures are needed to protect the United
 States and its citizens.
- The NRC [sic] radioactive material contained in the spent fuel pools are [sic] extremely vulnerable to terrorist attack within 6 months of a refueling outage. Immediate and

long-term compensatory measures are needed to protect the United States and its citizens from an attack on a spent fuel pool within this 6-month window.

- The NRC must work directly with other security offices in approving compensatory security measures and in approving utility security plans and must re-evaluate its 1979 EIS [Environmental Impact Statement] and 1998 Final Rule regarding SFPs.
- The current background screening requirements which permit "temporary" clearances at nuclear plants do not adequately protect the public.
- The current background screening requirements for long-term clearances at nuclear plants do not adequately protect the public.
- The NRC ended the public's ability to effectively challenge the NRC's decision not to require nuclear power plants to be able to withstand airborne assaults by changing its rules allowing nuclear plants to obtain new 40-year licenses without permitting citizens to challenge "generic" concerns, including risks from terrorist attack.

Based on the information provided by the Petitioner, the Office of Nuclear Reactor Regulation's Petition Review Board (PRB) determined that the Petitioner's request met the criteria for review under 10 C.F.R. § 2.206. This determination was communicated to the Petitioner in a letter dated December 20, 2001. In addition, the NRC Staff informed the Petitioner that because the October 24, 2001, letter raised sensitive security issues, the Commission was deferring application of certain public aspects of the process described in Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions," pending further developments related to the NRC's security review. Accordingly, the NRC Staff did not offer the Petitioner the opportunity to provide, in a public forum, additional information to support the October 24, 2001, letter before the NRC's PRB. By letter dated February 20, 2002, the NRC informed the Petitioner that on January 16, 2002, Mr. Nicholas Reynolds of Winston & Strawn submitted comments on the petition on behalf of several NRC licensees and that the NRC would consider these comments in preparing the Director's Decision.

By letter dated May 16, 2002, the NRC Staff sent the proposed Director's Decision to the Petitioner. The Petitioner's comments and the Staff's response are available for electronic viewing in the Agencywide Documents Access and Management System (ADAMS) at the Commission's Public Document Room located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and are accessible through the ADAMS Public Library on the NRC's Web site, http://www.nrc.gov/reading-rm.html (the Public Electronic Reading Room) at ADAMS Accession Nos. ML022530416 and ML022470355, respectively.

II. DISCUSSION

A. Physical Protection of Nuclear Power Plants

The Petitioner raised a number of issues associated with protecting U.S. nuclear power plants from terrorism. However, long before the tragic events of September 11, 2001, the Commission had recognized the need for strict safeguards and security measures at these facilities. When Congress first authorized the civilian use of atomic power through the Atomic Energy Act of 1954 (the Act), it recognized that public health and safety must be protected. The Act, as amended, gives the NRC the responsibility and authority to determine the requirements, including rules governing security, that are necessary to ensure that public health and safety are protected when commercial nuclear power plant licenses are issued.

The regulations for protecting nuclear power plants are provided in 10 C.F.R. Part 73, "Physical Protection of Plants and Materials." These regulations represent an important cornerstone of the NRC's regulatory oversight responsibilities and include detailed and specific requirements that are designed to protect nuclear power plants against acts of radiological sabotage, prevent the theft of special nuclear material, and protect safeguards and classified information against unauthorized release by:

- permitting only authorized activities and conditions within established protected areas, material access areas, and vital areas by using controls and procedures, defined boundaries, detection, communication and surveillance subsystems, and by establishing schedules of authorized operations;
- preventing unauthorized access of persons, vehicles, and materials into material access areas and vital areas by using detection and barrier systems;
- providing for authorized access, and assuring detection of and response to unauthorized penetrations of the protected area;
- providing access authorization and fitness-for-duty requirements for those persons with unescorted access;
- permitting only authorized control and movement of special nuclear material; and
- providing response capabilities to ensure that NRC requirements are achieved.

The performance capabilities for nuclear power plant physical protection systems are further defined in 10 C.F.R. § 73.55, "Requirements for physical

protection of licensed activities in nuclear power reactors against radiological sabotage," which requires licensees to:

- 1. maintain a well-equipped and highly trained security organization;
- 2. install physical barriers to protect vital equipment and material access areas;
- 3. install detection, surveillance, and alarm systems with the capability to sense unauthorized penetration of the isolation zone and to permit response action;
- 4. have access authorization programs and procedures;
- 5. ensure that all guards and armed response individuals can communicate with a continuously manned alarm station;
- establish an effective testing and maintenance program to verify that all physical barriers, and detection and alarm systems meet NRC requirements.

B. Security Organization

All operating nuclear power plant licensees are required to establish and maintain a site security organization. Such site security organizations include the designated managers, guard force, and personnel for checking worker backgrounds and issuing badging, as well as detailed access control and response procedures. To become a member of the security organization at a nuclear power plant, an individual must meet several stringent requirements. Specifically, prospective applicants must: (1) undergo a background investigation, including a criminal history check through the Federal Bureau of Investigation (FBI); (2) disclose past employment, education, credit history, and military service; (3) undergo a psychological evaluation; (4) be screened for drug and alcohol use; and (5) satisfactorily perform qualification and requalification training. In fact, 10 C.F.R. § 73.55(b)(4) expressly states that "licensee[s] may not permit an individual to act as a guard, watchman, armed response person, or other member of the security organization unless the individual has been trained, equipped, and qualified to perform each assigned security job duty" in accordance with NRC-established criteria for security personnel. Furthermore, each licensee shall establish, maintain, and follow an NRC-approved training and qualifications plan outlining the processes by which guards, watchmen, armed response persons, and other members of the security organization will be selected, trained, equipped, tested, and qualified to ensure that these individuals meet NRC requirements. These qualifications include specific requirements to demonstrate competence in the use of assigned weapons. In addition, guards, watchmen, armed response

persons, and other members of the security organization are subject to the NRC's medical examination, physical fitness, and fitness-for-duty requirements. These security organizational requirements contribute to implementing the defense-in-depth philosophy for safeguarding vital plant areas, and are designed to help provide an effective deterrence against potential terrorist activities directed at nuclear power plants.

C. Protection of Vital Equipment

Paragraph (a)(1) of 10 C.F.R. § 73.1 defines the design-basis threat from which vital areas must be protected. The regulation requires licensees to assume that potential terrorists have the following characteristics:

- are dedicated and well trained (including military training and skills);
- have inside assistance, which may include a knowledgeable individual
 who attempts to participate in a passive role (e.g., provide information),
 an active role (e.g., facilitate entrance and exit, disable alarms and
 communications, participate in violent attack), or both, possess suitable
 weapons, up to and including hand-held automatic weapons, equipped
 with silencers and having effective long-range accuracy;
- possess hand-carried equipment, including incapacitating agents and explosives for use as tools of entry or for otherwise destroying reactor, facility, transporter, or container integrity or features of the safeguards system;
- have a four-wheel-drive land vehicle available for transporting personnel and their hand-carried equipment to the proximity of vital areas.

In brief, Congress understood the inherent need for strict security measures at commercial nuclear power plants, and NRC regulations have ensured that these are among the most hardened and secure industrial facilities in the U.S. The many layers of protection offered by robust plant design features, sophisticated surveillance equipment, a professional security force, and regulatory oversight are an effective deterrent against potential terrorist activities targeting equipment vital to nuclear safety.

D. NRC Response to the September 11, 2001, Terrorist Attacks

When the events of September 11, 2001, unfolded, U.S. nuclear power plants already possessed a considerable capability to prevent and respond to many types of terrorist acts that could be directed at them. Consequently, the NRC determined that certain actions, such as ordering the immediate closure of all nuclear power

plants, were not necessary to provide adequate protection of public health and safety. However, the NRC did take other immediate actions and advised all nuclear power plants to go to the highest level of security. The NRC also issued more than thirty threat advisories to address specific concerns or vulnerabilities in the aftermath of September 11, 2001. In addition, NRC security specialists performed numerous onsite physical security vulnerability assessments at licensed facilities to evaluate the effectiveness of the enhanced security measures that were put into place. These assessments demonstrated that the industry responded promptly and appropriately to the NRC threat advisories. To this day, all nuclear power plant facilities remain at a heightened security level.

The events of September 11, 2001, were unprecedented, and since that time, the NRC has taken appropriate steps to protect public health and safety. For example, the NRC quickly recognized the need to reexamine basic assumptions underlying the current civilian nuclear facility security and safeguards programs. Chairman Richard A. Meserve, with the full support of the rest of the Commission, directed the Staff to undertake a comprehensive reevaluation of the NRC's security and safeguards programs. This is an ongoing review and as results become available, they will be evaluated and, if appropriate, incorporated into NRC's regulatory processes. The comprehensive review takes advantage of insights gained by the NRC in consultation with the Office of Homeland Security, FBI, Department of Defense (DOD), Department of Transportation (DOT), Department of Energy (DOE), and others. This cooperation further allows the NRC to keep abreast of the current threat environment, and communicate its actions to other federal agencies to ensure an appropriate response to security concerns throughout the nation's entire critical energy infrastructure.

In light of the current threat environment, the Commission concluded that specific security measures, including those outlined in threat advisories and voluntarily implemented by nuclear power plant licensees, should be embodied in an order consistent with the NRC's established regulatory framework. On February 25, 2002, the NRC issued orders to all operating power reactor licensees to require certain interim compensatory measures (ICMs) for security be taken beyond those called for by current regulations. These requirements will remain in effect pending notification from the Commission that a significant change in the threat environment has occurred, or until the Commission determines that other changes are needed following the comprehensive review of current safeguards and security programs. The orders were effective immediately upon issuance. For the most part, the orders formalized a series of steps that nuclear power plant licensees had been advised to take by the NRC in the aftermath of the terrorist attacks on September 11, 2001; however, the Commission included certain additional security enhancements in the orders. Details of certain new security requirements cannot be made public, but some of the specific measures implemented by the licensees in response to the advisories and ICMs included increased patrols, augmented security forces and capabilities, additional security posts, installation of additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities, and more restrictive site access controls for all personnel. The orders also required that licensees provide a schedule for their implementation of the ICMs, and that all ICMs be implemented by August 31, 2002. Based on the NRC Staff's review of the responses to the reporting requirements of the order, the Staff concludes that licensees have taken adequate measures to comply with the requirements of the order by the required date of August 31, 2002. The Staff is verifying that licensees are in compliance with the ICMs by conducting independent inspections at licensee sites.

If the NRC identifies a significant vulnerability during the ongoing reevaluation, the Staff will determine physical protection, material control, or other appropriate requirements. The NRC will continue to assist the Office of Homeland Security and other federal agencies to evaluate threats beyond the feasibility and capability of NRC licensees.

E. Evaluation of Specific Concerns

The Petitioner raised concerns about the ability of nuclear power plants to withstand the impact of a commercial airliner, the design and security measures of spent fuel pools, background screening requirements, and public participation in the license renewal process.

1. Airborne Attacks

a. Petitioner's Concerns

The Petitioner stated that no commercial nuclear power plant located in the United States can withstand the impact of a large commercial airliner. The Petitioner also stated that the NRC intentionally misled the public about its failure to adequately consider risks associated with an air assault on a nuclear facility.

b. NRC Response

In addition to the steps taken by the NRC to strengthen nuclear power plant security through the February 25, 2002, orders, previously discussed, other actions have been taken to address aviation security at nuclear power plants. For example, the Commission believes that the prompt response by Congress to strengthen aviation security under the Aviation and Transportation Security Act of 2001 provides improved protection against air attacks on all industrial facilities, both nuclear and nonnuclear. The Commission views that the nation's efforts associated with protecting against terrorist attacks by air should be directed

toward enhancing security at airports and on airplanes. The NRC supports the steps taken by the Federal Aviation Administration (FAA) to improve aircraft security, including enhanced passenger and baggage screening, strengthening of cockpit doors, and the Air Marshal program. The NRC has been in regular communication with other federal agencies, specifically the FAA and DOD, which have acted more than once to protect airspace above nuclear power plants. In addition, the U.S. intelligence community and federal law enforcement have increased efforts to identify potential terrorists and prevent potential attacks before they occur. Shortly after the September 11, 2001, attacks, representatives of the FAA and DOD determined that a Notice to Airmen (NOTAM), issued by the FAA, was the appropriate vehicle to protect the airspace above sensitive sites. This NOTAM strongly urges pilots "to not circle or loiter over the following sites: Nuclear/Electrical power plants, power distribution stations, dams, reservoirs, refineries, or military installations, unless otherwise authorized by air traffic control or as required to land or depart at towered/non-towered airports." This notice is still in effect. Should additional restrictions be deemed appropriate as a result of changing or more specific threats, our communication with the other federal agencies will allow prompt coordination.

The Petitioner requested that no-fly zones be immediately established at every nuclear power plant. The NRC has worked with the FAA to establish temporary no-fly zones at specific sites when circumstances warranted and considers this a significant enhancement to the protection of airspace around nuclear power plants. However, the NRC recognizes the limitations inherent in relying on no-fly zones, unless authority is provided to enforce them, and does not recommend a general application of this approach to all nuclear power plants.

There have been no specific credible threats against any NRC-licensed facility since September 11, 2001. The NRC continues to work with other federal agencies to assess intelligence information as it relates to potential threats to nuclear facilities. As we go forward, and in the interest of national security, steps have been taken to strengthen aviation security through the Aviation and Transportation Security Act of 2001. In view of the intelligence information at hand, enhancements to site security, and steps taken to improve aviation security, the NRC has concluded that it is appropriate to allow nuclear power plants to continue to operate.

The Staff also acknowledges that nuclear plants were not specifically designed to withstand the direct impact of a large commercial airliner fully loaded with fuel. Prior to September 11, 2001, such a scenario was not considered to be a credible threat. However, the NRC recognizes that nuclear power plant design could contribute to the survivability of the plant in the event of an aircraft impact. The NRC requires that these facilities be designed with a defense-in-depth philosophy to withstand events such as tornadoes (and missiles generated by tornadoes), hurricanes, fires, floods, and earthquakes. This has resulted in nuclear power

plant designs that inherently afford a measure of protection against deliberate aircraft impacts because the defense-in-depth philosophy requires plants to have redundant and separated systems in order to ensure safety. Ultimately, the capability of a plant to successfully cope with an aircraft crash will depend upon a number of factors, including the plant's specific design features, the design and flight characteristics of the aircraft, the point of impact, the ability of the licensees' staff to utilize remaining backup systems, and the response of onsite and offsite resources.

In its orders issued to all operating nuclear power plants on February 25, 2002, the Commission also directed licensees to develop specific guidance and strategies to respond to an event resulting in damage to large areas of the plant due to explosions or fire. These strategies are intended to assist in identifying and utilizing any remaining equipment and capabilities to maintain or restore reactor core, containment, and spent fuel cooling, including both onsite and offsite resources.

The Staff further notes that the NRC, in conjunction with the DOE laboratories, is continuing a major research and engineering effort to evaluate the vulnerabilities and potential effects of a large commercial aircraft impacting a nuclear power plant. This effort also includes a careful consideration of additional preventive or mitigative measures that may be necessary to further protect public health and safety in the event of a deliberate aircraft crash into a nuclear power plant or spent fuel storage facility. The final results from that analysis are not yet available. If the ongoing research and security review recommends any other security enhancements, the NRC will take appropriate action.

Regarding the assertions that the NRC intentionally misled the public about the design basis of the nation's nuclear plants and the NRC's failure to adequately consider risks associated with an air assault on a nuclear facility, the Petitioner's concerns have been referred to the NRC's Office of the Inspector General.

2. Spent Fuel Pool Concerns

a. Petitioner's Concerns

The Petitioner stated that the NRC knew or should have known that the current design of and security measures for the SFPs located at nuclear power plants are incapable of protecting the population from the catastrophic release of radiation from a potential terrorist attack and immediate and long-term compensatory measures are needed to protect the United States and its citizens. The Petitioner also stated that the radioactive material contained in the SFPs is extremely vulnerable to terrorist attack within 6 months of a refueling outage, and that immediate and long-term compensatory measures are needed to protect the United States and its citizens from an attack on an SFP within this 6-month window.

b. NRC Response

As previously stated, the NRC Staff concluded that, in view of the intelligence information at hand, enhancements to site security, and steps taken to improve aviation security, nuclear power plants should continue to be allowed to operate. The NRC Staff's determination considered SFPs, since the pools are located within the protected area and are afforded protection under the same physical security protection program as the nuclear power plant.

As stated in the proposed Director's Decision, the February 25, 2002, orders directed licensees to evaluate and address potential vulnerabilities to maintain or restore core cooling capabilities, and containment and SFP integrity, and to develop specific guidance and strategies to respond to an event resulting in damage to large areas of the plant due to explosions or fire. These requirements will remain in effect until the NRC notifies licensees that the threat environment has significantly changed or until the NRC determines, as a result of the ongoing comprehensive reevaluation of current safeguards and security programs, that other changes are needed.

The NRC acknowledges that nuclear power plants, including the SFP, were not specifically designed to withstand the impact of a large commercial airplane fully loaded with fuel. Nonetheless, the NRC recognizes that the design of the spent fuel storage system could contribute to mitigating the effects of a radiological sabotage event. Although the spent fuel storage buildings are not as hardened as the reactor containment structures, certain SFP design features could be assets as operators address a radiological sabotage event.

First, SFPs are small in size relative to the rest of the plant, making them difficult to target. In addition, the NRC's requirements that nuclear power plants be designed to withstand a variety of design-basis events such as tornadoes (and missiles generated by tornadoes), hurricanes, fires, floods, and earthquakes have resulted in nuclear plant designs that inherently afford a measure of protection against deliberate aircraft impacts and other acts of radiological sabotage. The SFPs are massive structures with thick walls constructed of reinforced concrete. Furthermore, the defense-in-depth design philosophy used at nuclear power plants means that critical systems have redundant and separated systems. That is, active components, such as pumps, have backup systems that are physically and electrically separated from each other as part of the basic design philosophy.

However, in the event of a serious accident or terrorist attack at a nuclear power plant, licensees would implement emergency preparedness program plans. These plans are routinely evaluated in biennial exercises. This provides a further capability to respond to various types of sabotage events involving the SFP.

The Staff recognizes that the continued evaluation of the current threat environment may identify additional requirements beyond those provided by existing regulations and the ICMs specified in the February 25, 2002, orders. The

comprehensive review of the NRC's safeguards and physical security programs initiated by Chairman Meserve following the September 11, 2001, terrorist attacks includes an evaluation of the potential consequences of terrorist attacks using various explosives or heat-producing devices on SFPs and spent nuclear fuel dry casks at spent nuclear fuel storage sites. The Staff will use the insights gained from these studies as it considers potential supplemental security measures.

3. Background Screening Requirements

a. Petitioner's Concerns

The Petitioner stated that the current background screening requirements, which permit "temporary" clearances and long-term clearances at nuclear plants, do not adequately protect the public.

b. NRC Response

To ensure that only specifically authorized individuals enter protected and vital areas of a nuclear plant without escort, licensees are required to implement and maintain access authorization and control programs. The objective of these programs is to provide a high level of assurance that individuals who are allowed unescorted access to protected and vital areas of a nuclear power plant are trustworthy and reliable, and do not constitute an undue risk to the health and safety of the public, including a potential to commit radiological sabotage. In order to achieve this objective, NRC regulations require licensees to: (1) limit unescorted access to individuals who require access in order to perform their duties; (2) perform background investigations on workers granted unescorted access; (3) implement a badging system to identify those persons authorized to enter specific plant areas; (4) conduct a management review at least once every 31 days to update the need for individuals to retain access to vital areas; (5) screen personnel, packages, and vehicles entering the protected area; (6) search for firearms and explosives; (7) monitor entry into certain areas of the plant; and (8) maintain a detection and alarm system.

Worker background investigations include verification of an individual's true identity and confirmation of the individual's employment history, education history, credit history, military service, character, and reputation. All prospective employees must undergo a psychological assessment to evaluate trustworthiness and reliability. The investigations also include a criminal history check conducted via fingerprint submissions to the FBI. These requirements are designed to ensure that only persons deemed trustworthy are allowed authorized unescorted access to plant protected areas and vital plant equipment on a continuing basis.

Unescorted access to the protected area for first-time nuclear plant workers is achieved through a process that allows for access in a temporary capacity, after the licensee's fulfillment of specific requirements. These requirements are: (1) establishing the true identify of the applicant; (2) completion of a background investigation covering the past year; (3) completion of suitable inquiries of all employers for the past year; (4) an interview with one developed reference; (5) completion of psychological assessment; (6) a credit check; (7) submission of the applicant's fingerprints to the FBI; and (8) confirmation that the individual is not under the influence of alcohol or drugs. Additional actions post-September 11 include the limitation of temporary unescorted access to persons required to conduct essential activities, directly related to plant operation and maintenance, while under the oversight of persons with full unescorted access rights.

Prior to September 11, 2001, this temporary unescorted access period could be authorized for 180 days pending completion of those checks required to fulfill the conditions of the unescorted access authorization program. Typically, a person in a "temporary" status will be working at a nuclear power facility for a few days to complete a specific craft assignment, and will generally fulfill an assignment lasting 60 days or less.

Once onsite, employees are subject to continuing behavioral monitoring as previously stated and are subject to fitness-for-duty requirements, which include random drug and alcohol testing. Further, those who enter the protected area pass through portal monitors that detect weapons or explosives, and all hand-carried items are x-rayed or hand searched.

Despite these safeguards, which were part of the NRC pre-September 11 requirements, the NRC took additional steps after September 11. The NRC, in coordination with the FBI, checked all NRC employees, licensee personnel, licensee contractors, and registered visitors to licensee sites, against the FBI Watch List established as part of the investigation of the events of September 11, 2001. As a result, NRC, in consultation with the FBI, determined that there were no positive matches between access authorization lists at the nuclear facilities and the FBI's Watch List. Since that time, the Office of Homeland Security has been coordinating an effort to facilitate information sharing among federal agencies. The NRC has also dialoged with the Immigration and Naturalization Service (INS) to make available to licensees an ability to validate the employment eligibility of employees at nuclear power plants to ensure that only persons authorized to work in the United States are employed at nuclear power plants. In addition, the INS reviewed a list of security guards with unescorted access to the plants to ensure that those persons were authorized to work in the United States. The NRC has determined, in consultation with INS, that there were no issues concerning employment eligibility of guards working at nuclear power plants.

The NRC is considering further enhancements to its requirements regarding access authorization. This effort is intended, in part, to address heightened

concerns pertaining to potential insider threats. Details of these enhancements may be considered Safeguards Information and would, as such, not be made available to the public.

4. License Renewal Evaluations

a. Petitioner's Concerns

The Petitioner stated that the NRC ended the public's ability to effectively challenge the NRC's decision not to require nuclear power plants to be able to withstand airborne assaults by changing its rules allowing nuclear plants to obtain new 40-year licenses without permitting citizens to challenge "generic" concerns, including risks from terrorist attack.

b. NRC Response

In 1995, the NRC amended the license renewal rule to establish a regulatory process that is more efficient, more stable, and more predictable than the previous license renewal rule. In particular, 10 C.F.R. Part 54 was clarified to focus on managing the adverse effects of aging. The rule changes were intended to ensure that important systems, structures, and components will continue to perform their intended function during the 20-year period of extended operation.

There are several opportunities for members of the public to question how aging will be managed during the period of extended operation. Concerns may be litigated in a formal adjudicatory hearing if any party that would be adversely affected is granted a hearing. Members of the public may petition the Commission pursuant to 10 C.F.R. § 2.206 for consideration of issues other than the management of the effects of aging during the period of extended plant operation.

In 2001, the NRC issued Regulatory Guide 1.188, "Standard Format and Content for Applications To Renew Nuclear Power Plant Operating License," which endorsed a method of implementing the license renewal rule. Security programs were not included in the items required to be addressed for renewal of an operating license. However, additional security requirements, such as those mandated by the February 25, 2002, orders, apply to all plants regardless of license renewal status. Additional security measures that may be identified by ongoing NRC reviews will be applied to all operating reactor licensees.

III. CONCLUSION

The Petitioner has raised the concern that no commercial nuclear power plant in the United States was designed to withstand the direct impact of a large commercial airliner. In addition, the Petitioner requested that compensatory measures, as set forth in the petition, be adopted to protect the public and environment from the catastrophic impact of a terrorist attack on a nuclear power plant or an SFP.

The petition raised concerns for public health and safety with respect to the possibility of terrorists' activities directed at nuclear power plants. The Staff concludes that these concerns have been reasonably addressed by actions of Congress and the FAA to enhance aviation security, actions taken by various federal agencies to deter terrorist activities, and the issuance of orders by the NRC to the operating nuclear power plants. The Staff believes that the compensatory measures, as set forth in the orders, are prudent, interim measures to adequately address the current threat environment in a consistent manner throughout the nuclear power industry.

The NRC Staff also concludes that the Petitioner's requests have been partially granted to the extent that Petitioner's concerns are addressed by the actions taken by the NRC on February 25, 2002, to issue orders to all operating nuclear power plant licensees to implement interim compensatory security measures for the current threat environment. The Staff considered the actions taken by other federal, state, and local agencies, which are discussed herein, in coming to this conclusion. The Staff further concludes that no additional regulatory actions to take compensatory measures or to make permanent rules, as discussed in the petition, are necessary to address the concerns raised in the petition. The NRC Staff recognizes that the continued evaluation of the current threat environment may identify additional requirements beyond those provided by existing regulations and the ICMs specified in the February 25, 2002, orders.

The specific actions required by the orders contain sensitive security information, but generally include requirements for increased patrols, augmented security forces and capabilities, additional security posts, installation of additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities, and more restrictive site access controls for all personnel.

These are interim measures and the basis for the orders is the need to take prudent actions to address security requirements in the present generalized high-level threat environment. These orders do not eliminate the need for licensees to continue to implement protective measures in response to changes in the threat environment as described in NRC Regulatory Issue Summary 2002-12A, "NRC Threat Advisory and Protective Measures System," and maintain the effectiveness of existing security measures taken in response to the September 11,

2001, attacks. The requirements will remain in effect pending notification from the Commission that a significant change in the threat environment has occurred, or until the Commission determines that other changes are needed following the completion of the comprehensive reevaluation of current safeguards and security programs.

Some of the requirements formalize a series of security measures that NRC licensees had taken in response to advisories issued by the NRC in the aftermath of the September 11 terrorist attacks. Additional security enhancements, which have emerged from the ongoing comprehensive security review, are also spelled out in the orders.

A copy of this Decision will be filed with the Secretary of the Commission so that the Commission may review it in accordance with 10 C.F.R. § 2.206(c). As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

Jon R. Johnson, Deputy Director Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland, this 1st day of November 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Martin J. Virgilio, Director

In the Matter of

Docket No. 50-400 (License No. NPF-63)

CAROLINA POWER & LIGHT
COMPANY
(Shearon Harris Nuclear Power Plant)

November 12, 2002

The Petitioner requested that, in light of the attacks on September 11, 2001, the U.S. Nuclear Regulatory Commission (NRC or the Commission) take immediate action to halt Carolina Power & Light Company (CP&L) rail shipments of spent nuclear fuel to the Shearon Harris Nuclear Power Plant due to continued terrorist threat. The bases for this request were described in the Petitioner's letters, which included: (1) statements that the U.S. Department of Energy (DOE) suspended a shipment of irradiated fuel assemblies and that, based on DOE's suspension, NRC should also halt shipments of irradiated fuel, especially those rail shipments performed by CP&L; (2) an NBC Dateline report dated February 12, 2002, that indicated mock terrorists working for the federal government were able to highjack Department of Energy shipments of high-level nuclear waste in five separate attempts; (3) a comment that "CP&L could revert to using zero armed guards at the company's discretion"; and (4) a comment seeking NRC consideration on the issue of increased indications that terrorists have targeted nuclear facilities in the United States.

The Director's Decision on this petition was issued on November 12, 2002. The NRC Staff has considered the issues raised by the Petitioner, and has denied the Petitioner's request to halt rail shipments of spent nuclear fuel by Carolina Power & Light Company. NRC continues to believe that the established system of regulations coupled with the added physical security measures found in recently issued transportation orders adequately protect the transportation of spent nuclear fuel.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated November 5, 2001, and supplemented on February 12, 2002, Jim Warren (Petitioner) of NC WARN filed a petition pursuant to Title 10 of the *Code of Federal Regulations*, section 2.206. The Petitioner requested that, in light of the attacks on September 11, 2001, the U.S. Nuclear Regulatory Commission (NRC or the Commission) take immediate action to halt Carolina Power & Light Company (CP&L) rail shipments of spent nuclear fuel to the Shearon Harris Nuclear Power Plant due to continued terrorist threat. The bases for this request were described in the Petitioner's letters, and included the following:

- 1. In the letter dated November 5, 2001, Mr. Warren states that the U.S. Department of Energy (DOE) suspended a shipment of irradiated fuel assemblies in mid-October 2001, due to possible terrorist attacks on the slow-moving transport train. He further adds that, based on DOE's suspension, NRC should also halt shipments of irradiated fuel, especially those rail shipments performed by CP&L. Additionally, he maintains that it would be inconsistent for one federal agency to contradict another's findings concerning public safety involving rail transport of irradiated fuel. Finally, Mr. Warren believes that due to continued terrorist threat, the NRC must order CP&L to permanently cease spent fuel transport, or as a minimum, stop shipments pending open public meetings to evaluate and understand the risk of transport of this material.
- 2. In the letter dated February 12, 2002, Mr. Warren further requested that NRC take actions to immediately halt CP&L's transport of spent nuclear fuel to the Shearon Harris Nuclear Power Plant. Mr. Warren refers to Federal Bureau of Investigation (FBI) and NRC warnings of attacks on nuclear plants. He also describes an NBC *Dateline* report that indicates mock terrorist groups working for the federal government were able to successfully highjack DOE shipments.
- 3. In the comment letter dated September 27, 2002, Mr. Warren discussed reports from the news media that a nuclear facility was almost chosen as the target for attack on September 11, 2001. Based on these revelations, Mr. Warren is seeking NRC consideration for this issue.

II. DISCUSSION

As the basis for his requested action, the Petitioner raised specific concerns related to the transport of spent nuclear fuel. These concerns, and the evaluations of these concerns by NRC Staff, follow.

Concern: Mr. Warren states in his letter dated November 5,2001, that the
DOE suspended a shipment of irradiated fuel assemblies in mid-October
2001, due to possible terrorist attacks on the slow-moving transport train.
He further adds that, based on DOE's suspension, NRC should also halt
shipments of irradiated fuel, especially those rail shipments performed by
Carolina Power & Light Company (CP&L). Additionally, he maintains
that it would be inconsistent for one federal agency to contradict another's
findings concerning public safety involving rail transport of irradiated
fuel.

Evaluation: In response to this comment, the NRC Staff spoke with DOE representatives and determined that the shipment in question was halted for reasons unrelated to the events of September 11, 2001. Separately, the NRC was aware that DOE temporarily halted all shipments of hazardous materials, not just radioactive materials, following September 11, 2001. Subsequent to the action by DOE, the NRC determined that shipment of spent nuclear fuel and other radioactive materials could continue under current NRC regulations provided additional security measures were implemented as described in advisories issued by the Commission to various classes of NRC licensees.

 Concern: Mr. Warren cites an NBC Dateline report in his letter dated February 12, 2002, that indicates mock terrorists working for the federal government were able to highjack Department of Energy shipments of high-level nuclear waste in five separate attempts.

Evaluation: NRC has physical protection regulations in 10 C.F.R. Part 73 that are used for protection of spent nuclear fuel. For spent nuclear fuel in transit, the regulations in 10 C.F.R. § 73.37 apply and include:

- preshipment coordination with law enforcement agencies,
- preshipment notice of states and NRC,
- in-transit shipment call-in to communications center,
- · shipment monitoring,
- armed escorts (in populated areas),
- immobilization devices.

Specific to rail transport, one armed escort is required to be on the train during transport within a heavily populated area to permit observation of the shipment car while in motion. As a result of the events of September 11, 2001, additional physical protection measures for the

transportation of spent fuel have been implemented, the details of which cannot be discussed here.

Included with the comment letter dated September 27, 2002, Mr. Warren also provided a transcript of the *Dateline* NBC report that he cited in his February 12, 2002 letter. NRC Staff has reviewed the transcript and has determined that there is no new information in the transcript that changes the NRC position in response to the petition.

Regarding Mr. Warren's comment that "CP&L could revert to using zero armed guards at the company's discretion," NRC has issued transportation orders that specifically address the issue of armed escorts for spent nuclear fuel shipments (67 Fed. Reg. 63,167 (Oct. 10, 2002)). The details of the escort requirements cannot be disclosed in this forum, since they contain safeguards information. As was the practice when the transportation advisories were issued in December 2001, NRC will inspect the licensees who received the transportation orders to confirm that these controls are in place. Thus, the security issue is not at CP&L's discretion, but is required by direct order from the Commission.

3. *Concern:* Mr. Warren is seeking NRC consideration on the issue of increased indications that terrorists have targeted nuclear facilities in the United States.

Evaluation: The NRC is aware of Mr. Warren's concern regarding terrorist attacks on nuclear facilities in the U.S. and, as mentioned in previous correspondence, the NRC increased security requirements for all nuclear facilities immediately after the attacks on September 11. Not only do these increased security measures remain in effect, but as a result of its consideration of current safeguards and security plan requirements, the Commission has determined that certain compensatory measures are required to be implemented by licensees as prudent, interim measures. Thus, to address the current threat environment, the Commission imposed orders for dry spent fuel storage facility licensees (67 Fed. Reg. 65,150, 65,152 (Oct. 23, 2002)). Additional orders have also been issued for operating power reactor licensees (67 Fed. Reg. 9792 (Mar. 4, 2002)), Honeywell International, Inc. (67 Fed. Reg. 16,128 (Apr. 4, 2002)), and decommissioning power reactors (67 Fed. Reg. 37,879 (May 30, 2002)). Collectively, these orders provide the Commission with reasonable assurance that the public health and safety and common defense and security continue to be adequately protected based on the current threat environment.

General Comments: Following the events of September 11, 2001, the NRC has taken additional measures to protect the public. A few of these include a heightened security posture at nuclear facilities and regulated activities, including spent fuel transportation, advisories and orders issued to our licensees, and a continuing comprehensive review of the agency's safeguards and physical security programs. Through our interaction with the Office of Homeland Security, the Federal Bureau of Investigation, the Federal Emergency Management Agency, the Federal Aviation Administration, the Department of Energy, the military, and many other agencies, the NRC continues to evaluate the threat environment for all nuclear facilities.

The previously mentioned review of the agency's safeguards and physical security programs will be a multitiered process. One of the first outcomes of this process has been the issuance of advisories to licensees, specifying additional security measures that they should take. Prior to September 11, 2001, the NRC had in place written guidance for licensees to follow in the event of any kind of threat. This guidance was implemented immediately after the terrorist attacks on September 11, and supplemented periodically thereafter by additional threat and safeguards advisories, providing direction for the licensees to enhance their security. NRC has inspected to make sure these measures are in place and that facilities and shipments are adequately protected. NRC issued transportation orders on October 3, 2002, to licensees who transport spent nuclear fuel (67 Fed. Reg. 63,167 (Oct. 10, 2002)). The orders are an enforceable requirement. NRC believes that these additional controls will further enhance the existing controls and protection for all nuclear materials.

III. CONCLUSION

NRC has denied the Petitioner's request to halt rail shipments of spent nuclear fuel by Carolina Power & Light Company. NRC continues to believe that the established system of regulations coupled with the added physical security measures found in the transportation orders adequately protect the transportation of spent nuclear fuel.

The proposed Director's Decision was sent to Mr. Warren and CP&L on August 29, 2002, for a 30-day comment period. The response letters are included at the end of this document (not published).

As provided in 10 C.F.R. § 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the Decision will constitute the final action of the

Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

Martin J. Virgilio, Director Office of Nuclear Material Safety and Safeguards

Dated at Rockville, Maryland, this 12th day of November 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of Docket Nos. 50-003

50-247

50-286

(License Nos. DPR-5

DPR-26

DPR-64)

ENTERGY NUCLEAR OPERATIONS, INC. (Indian Point, Units 1, 2, and 3)

November 18, 2002

The Petitioners requested that the NRC: (1) order the Licensee to suspend operations, revoke the operating license, or adopt other measures resulting in a temporary shutdown of the Indian Point Nuclear Generating Units 2 and 3 (IP2 and 3); (2) order the Licensee to conduct a full review of the facility's vulnerabilities, security measures, and evacuation plans; (3) require the Licensee to provide information documenting the existing and readily attainable security measures that protect the IP facility against land, water, and airborne terrorist attacks; (4) immediately modify the IP2 and 3 operating licenses to mandate certain specified security measures sufficient to protect the facility; and (5) order the revision of the Licensee's Emergency Response Plan and Westchester County's Radiological Emergency Response Plan (RERP) to account for possible terrorist attacks and prepare a comprehensive response to multiple, simultaneous attacks in the region that may impair the efficient evacuation of the area. In addition, the Petitioners stated that if, after conducting a full review of the facility's vulnerabilities, security measures, and evacuation plans, the NRC finds that it cannot sufficiently ensure the security of the IP facility against terrorist threats, the NRC should take prompt action to permanently retire the facility. Further, the Petitioners requested that the NRC order the Licensee to undertake the immediate conversion of the

current spent fuel storage technology from a water-cooled system to a dry-cask system.

The final Director's Decision on this petition was issued on November 18, 2002. In that Decision, the NRC Staff concluded that it had, in effect, partially granted the Petitioners' request for an immediate security upgrade at IP2 and 3. The NRC took action to enhance security at all nuclear facilities, including IP2 and 3, on September 11, 2001. Immediately after the attacks, the NRC advised all nuclear power plants to go to the highest level of security, which they promptly did. These facilities have remained at a heightened security level since that time. Additionally, the NRC issued orders to all operating commercial nuclear power plants on February 25, 2002, to implement interim compensatory security measures for the current threat environment. On the basis of these actions, the Petitioners' request that the Licensee conduct a full review of the facility's vulnerabilities, security measures, and evacuation plans has been, in effect, partially granted. Regarding the Petitioners' request for specific information about the security measures, the NRC's policy is to not release safeguards information to the public. Thus, this request was denied.

The NRC denied the Petitioners' request to mandate certain security measures, as specified by the Petitioners, for the protection of the facility, such as a system to defend a no-fly zone. As part of its ongoing comprehensive security review, the NRC is examining the threat environment in coordination with other federal agencies and the use of governmental assets to augment the Licensee's response. These organizations will define the appropriate boundary between the public and private sector in the defense of nuclear facilities. Further, the current security requirements, along with the enhancements in the February 25 orders, provide reasonable assurance of the protection of the facility.

The NRC finds that the existing emergency response plans are flexible enough to respond to a wide variety of adverse conditions, including a terrorist attack. The NRC advisories and the orders issued since September 11, 2001, directed licensees to take specific actions deemed appropriate to ensure continued improvements to existing emergency response plans. The Petitioners' concern that the emergency plans do not contemplate multiple attacks on the infrastructure is alleviated by the fact that the emergency plans are intended to be broad and flexible enough to respond to a wide spectrum of events. Thus, the Petitioners' request that the onsite and offsite emergency plans be revised to account for possible terrorist attacks has been, in part, granted.

The NRC found that the current spent fuel storage system and the security provisions at IP adequately protect the spent fuel. Thus, the Petitioners' request to order the installation of a dry-cask storage facility is denied.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated November 8, 2001, as supplemented on December 20, 2001, Riverkeeper, Inc., et al. filed a petition pursuant to Title 10 of the Code of Federal Regulations, section 2.206 (10 C.F.R. § 2.206). The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC) take the following actions: (1) order the Licensee to suspend operations, revoke the operating license, or adopt other measures resulting in a temporary shutdown of the Indian Point Nuclear Generating Units 2 and 3 (IP2 and 3); (2) order the Licensee to conduct a full review of the facility's vulnerabilities, security measures, and evacuation plans; (3) require the Licensee to provide information documenting the existing and readily attainable security measures that protect the IP facility against land, water, and airborne terrorist attacks; (4) immediately modify the IP2 and 3 operating licenses to mandate certain specified security measures sufficient to protect the facility; and (5) order the revision of the Licensee's emergency response plan and Westchester County's Radiological Emergency Response Plan (RERP) to account for possible terrorist attacks and prepare a comprehensive response to multiple, simultaneous attacks in the region, which could impair the efficient evacuation of the area. In addition, the Petitioners requested that the NRC take prompt action to permanently retire the facility if, after conducting a full review of the facility's vulnerabilities, security measures, and evacuation plans, the NRC finds that the IP facility cannot be adequately protected against terrorist threats. Further, separately from the above issues, the Petitioners requested that the NRC order the Licensee to undertake the immediate conversion of the current water-cooled spent fuel storage system to a dry cask system. The bases for the requests are that (1) the IP facility is a plausible target of future terrorist actions; (2) actual threats against nuclear power plants have been documented; (3) IP is currently vulnerable to a catastrophic terrorist attack; (4) a terrorist attack on IP2 and 3 would have significant public health, environmental, and economic impacts; and (5) the Westchester County's RERP is inadequate because it is based on erroneous assumptions.

In a letter dated December 20, 2001, the NRC informed the Petitioners that their request for a full review of the facility's vulnerabilities, security measures, and evacuation plans was, in effect, partially granted, because the NRC had already taken action to require licensees to enhance security and the Commission had directed the Staff to undertake a comprehensive review of plant security. In light of the defense-in-depth concept incorporated into the facility's design and the heightened security measures implemented in response to the events of

September 11, 2001, the NRC did not consider the immediate closure of IP2 and 3 to be necessary to provide adequate protection of the public health and safety.

In its December 20, 2001, letter, the NRC told the Petitioners that a public meeting or telephone conference with the NRR Petition Review Board was not necessary or appropriate at the time since the Petitioners' request was already being treated as a 2.206 petition and because of the possible sensitive nature of the information. Under normal circumstances, the NRC would follow Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions," when reviewing requests for enforcement action; however, since the petition involved possible sensitive information, the NRC deferred application of certain public aspects of the MD 8.11 process pending further developments of the NRC's security review.

On December 20, 2001, the Petitioners provided a declaration from Dr. Gordon Thompson dated December 20, 2001, and requested that the declaration be included as a supplement to their petition. The NRC treated the declaration as a supplement to the petition. Although the NRC had initially withheld the petition from public distribution pending Commission guidance about public dissemination of potential security information, the NRC has now determined that the petition can be made publicly available. Therefore, the documents are available in the NRC's Agencywide Documents Access and Management System (ADAMS) for inspection at the Commission's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records are also accessible from the ADAMS Public Electronic Reading Room on the NRC Web site http://www.nrc.gov/readingrm/adams.html. Persons who do not have access to ADAMS or have problems in accessing the documents located in ADAMS should contact the NRC PDR reference Staff by telephone at 1-800-397-4209 or 301-415-4737 or by e-mail to pdr@nrc.gov.

Entergy Nuclear Operations, Inc. (the Licensee), responded to the petition on February 11, 2002, and the Staff considered the information in reviewing the petition.

The NRC sent a copy of the proposed Director's Decision to the Petitioners and to the Licensee for comment on May 16, 2002. The Petitioners responded with comments on August 9, 2002. The Licensee did not provide comments. The comments and the NRC Staff's response to them are enclosed with the final Director's Decision (not published).

II. DISCUSSION

A. Full Review of Vulnerabilities and Security Measures

1. Petitioners' Concern

In the petition, as supplemented, the Petitioners requested that the NRC order the Licensee to conduct a full review of the facility's vulnerabilities and security measures. The Petitioners stated that the reactor, spent fuel, control rooms, and electrical switching were vulnerable to terrorist attack. The Petitioners' request was based on the following assertions: (1) IP2 and 3 are a plausible target because of the population density of the surrounding area and the proximity to New York City; (2) news releases have documented threats against nuclear facilities; (3) an operational plant is more vulnerable; (4) an attack could damage cooling to the spent fuel pools (SFPs) and/or drain the pools, leading to fuel cladding oxidation, fire, and release of radioactive materials; and (5) the design-basis threat did not consider a terrorist attack. The Petitioners also stated that the facility is not currently equipped to defend itself from terrorist attacks, the Licensee has a poor record in security and emergency preparedness, and nuclear industry security forces have repeatedly failed to repel mock attacks. The Petitioners also believe that an attack on an operating reactor would force plant operators to face competing interests between safe operations and physical security.

2. Staff's Response

The Petitioners' request for a review of vulnerabilities and security measures has been partially granted based on actions initiated by the NRC following the events of September 11, 2001. The NRC concludes that Indian Point has sufficient security measures in place to defend itself from a broad spectrum of potential terrorist attacks. The basis for these conclusions is discussed below.

The NRC and its licensees have dealt with the issue of protection of licensed facilities against sabotage or attack for a number of years. Security against sabotage has been an important part of the NRC's regulatory activities, with defense-in-depth as the guiding design and operating principle. NRC regulations ensure that nuclear power plants are among the most hardened and secure industrial facilities in our nation. The many layers of protection offered by robust plant design features, sophisticated surveillance equipment, physical security protective features, professional security forces, access authorization requirements, and NRC regulatory oversight provide an effective deterrence against potential terrorist activities that could target equipment vital to nuclear safety.

The NRC requirements for the defense of nuclear power plants are defined, in part, by the "design basis threat" (DBT). The DBT is specified in general terms in 10 C.F.R. § 73.1 and in greater detail in sensitive documents. The DBT was

prepared by safeguards experts on the basis of information from the Department of Energy and the intelligence community about terrorist-related information both abroad and in the United States. The DBT is a reasonable characterization of an adversary force against which nuclear power plant licensees must design their physical protection systems and response strategies.

In 10 C.F.R. Part 73, "Physical Protection of Plants and Materials," the NRC provides detailed requirements designed to protect nuclear power plants against acts of radiological sabotage, prevent the theft of special nuclear material, and protect safeguards information against unauthorized release. The requirements of Part 73 are summarized as follows:

- The licensee permits only authorized activities and conditions within established protected areas, material access areas, and vital areas by using controls and procedures, defined boundaries, detection, communication and surveillance subsystems, and by establishing schedules of authorized operations.
- The licensee prevents unauthorized access of persons, vehicles, and objects into protected and vital areas by using detection and barrier systems.
- 3. The licensee provides for authorized access and ensures detection of and response to unauthorized penetrations of the protected area.
- 4. The licensee permits only authorized control and movement of special nuclear material.
- 5. The licensee provides response capabilities to ensure that NRC requirements are achieved.
- 6. The licensee maintains a well-equipped and highly trained security organization.
- 7. The licensee installs physical barriers to protect vital equipment and material.
- 8. The licensee installs detection, surveillance, and alarm systems capable of sensing unauthorized penetrations of isolation zones and ensuring a prompt response action.
- 9. The licensee provides access authorization (e.g., background checks, routine worker screening, badging, etc.) programs and procedures.
- 10. The licensee ensures that all guards and armed response individuals have the ability to communicate with a continuously manned alarm station.

11. The licensee establishes an effective testing and maintenance program to verify that all physical barriers and detection and alarm systems are capable of meeting NRC requirements.

Licensees are also required to develop specific physical security plans (PSPs) and submit these plans to the NRC for approval before implementing them. The NRC conducts periodic inspections of the licensees' security programs. Performance testing of physical security has been conducted by the NRC Staff through Operational Safeguards Response Evaluations. In addition, the licensees are required to establish a liaison with local law enforcement organizations for added assistance in the event of an attack.

Shortly after September 11, 2001, the NRC recognized the need to reexamine the basic assumptions underlying the current nuclear facility security and safeguards programs. Chairman Richard A. Meserve, with the full support of the Commission, directed the Staff to undertake a comprehensive review of the NRC's security regulations and programs. This is an ongoing review and as results become available, they will be evaluated and, if appropriate, incorporated into NRC's regulatory processes. The review includes consultation with the Office of Homeland Security, the Federal Bureau of Investigation (FBI), the Departments of Transportation and Energy, and others. The NRC's participation with these agencies allows the NRC to communicate its actions to other federal agencies, ensuring an appropriate and balanced response throughout the nation's entire critical energy infrastructure.

The attacks of September 11, 2001, were unprecedented and required the NRC and its licensees to reevaluate the type of assault that might be mounted against a nuclear power plant. As a result, on February 25, 2002, the NRC issued orders to all operating power reactor facilities to require that certain interim compensatory security measures be taken beyond those called for by current regulations. Although licensee responses to the prior NRC Threat and Safeguards Advisories provided reasonable assurance of adequate protection of public health and safety, the NRC determined that certain compensatory measures were prudent to address the current threat environment in a consistent manner throughout the nuclear reactor industry. The orders formalized a series of steps that nuclear power plant licensees had been advised to take by the NRC in the aftermath of the terrorist attacks on September 11 and added certain security enhancements. For security reasons, the details of these interim compensatory measures cannot be made public. Some of the specific measures implemented by the licensees in response to the advisories and interim compensatory measures included increased patrols, augmented security forces and capabilities, additional security posts, installation of additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities and more restrictive site access controls for all personnel. The orders also directed

licensees to evaluate and address potential vulnerabilities to maintain or restore cooling to the core, containment, and spent fuel pool and to develop specific guidance and strategies to respond to an event resulting in damage to large areas of the plant due to explosions or fires. These strategies are intended to help identify and utilize any remaining equipment and capabilities to maintain or restore core, containment, and spent fuel pool cooling, including both onsite and offsite resources. These requirements will remain in effect until the NRC notifies licensees that the threat environment has significantly changed or until the NRC determines, as a result of the ongoing comprehensive reevaluation of current safeguards and security programs, that other changes are needed.

The Petitioners are correct that the DBT did not consider a terrorist attack such as occurred on September 11, 2001. As part of the comprehensive review of safeguards vulnerabilities, the NRC will reexamine the DBT and modify it as appropriate. As in the past, the NRC will coordinate its evaluation with various other government agencies and discuss resource commitments with the military, the states, and local law enforcement. If a credible vulnerability is identified that is not addressed by another federal agency, the NRC Staff will consider additional physical protection, material control, and other appropriate requirements.

Although the NRC cannot rule out the possibility of future terrorist activity directed at a licensee's site before implementing any further enhancements to its safeguards programs, the NRC believes that these facilities can continue to operate safely.

The Staff also recognizes that design and construction of commercial nuclear power plants could contribute to their survivability in the event of an attack not considered by the current design-basis threat, such as an aircraft impact. Nuclear power plant design is based on defense-in-depth principles, and includes many features to protect public health and safety. For example, reinforced containment buildings and redundant safety systems would help trained operators prevent or limit the release of radioactive material in the event of a terrorist attack. In addition, NRC requirements for coping with fires and station blackout (loss of offsite and onsite power) provide added capability to bring the plant to safe shutdown conditions, assuming such aspects as loss of the control room or failure of the emergency diesel generators.

The NRC requires careful background checks (to minimize the risk of insider assistance) and facility access controls, delay barriers, and intrusion detection systems (to detect potential attackers). The NRC also requires licensees to be able to respond with force to a group of armed attackers, using protective strategies involving layers of defense. Therefore, the NRC believes that the facilities are adequate to withstand many of the challenges from safety or safeguards events, such as armed assaults.

In summary, a robust security program existed at IP prior to the events of September 11, 2001. Since September 11, the NRC has initiated a review of

nuclear facility security and safeguards programs, and has taken action to enhance security in the interim.

B. Full Review of Radiological Emergency Preparedness and Evacuation Planning

1. Petitioners' Concern

In its December 20 supplement, the Petitioners cited a prior NRC study prepared by Sandia National Laboratory that discussed source terms and potential radiological consequences of an attack on IP. The Petitioners were concerned about the economic and environmental consequences of an attack causing a massive release of radioactive materials.

Regarding emergency preparedness planning, the Petitioners believe that the IP onsite and offsite emergency plans did not envision an act of terrorism of the magnitude seen on September 11, 2001. Additionally, the Petitioners stated that the Westchester County RERP is inadequate and does not consider the possibility of multiple simultaneous attacks on vital infrastructure relied on in the current plan.

2. Staff's Response

The NRC finds that the emergency preparedness plans and evacuation planning at IP2 and 3 are appropriate to use in response to a radiological emergency, including a release caused by a terrorist attack. The basis for this conclusion is discussed below.

The overall objective of emergency response planning is to minimize the dose to the public for a spectrum of accidents that could produce offsite doses in excess of protective action guidelines. No single accident sequence should be isolated as the one for which to plan because each accident could have different consequences, both in nature and degree. Emergency plans are intended to be broad and flexible enough to respond to a wide spectrum of situations, including various initiating events; sources of release; types of nuclides released; and magnitude, timing, or duration of release.

The NRC and the Federal Emergency Management Agency (FEMA) are the two federal agencies responsible for evaluating emergency preparedness at and around nuclear power plants. The NRC is responsible for evaluating the adequacy of onsite emergency plans developed by the utility, while FEMA is responsible for assessing the adequacy of offsite (state and local) radiological emergency planning and preparedness activities. The NRC requires licensees to have detailed procedures for responding to events, making timely notifications to appropriate authorities, and providing accurate radiological information. For the offsite plans,

the NRC relies on FEMA's findings in determining whether there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The Licensee, local and county emergency response officials, and state emergency management officials discuss and agree on the facility's emergency response plan.

NRC regulations require the establishment of a plume exposure pathway emergency planning zone (EPZ) about 10 miles in radius and an ingestion exposure pathway EPZ about 50 miles in radius around each nuclear power plant site.

In the unlikely event of a severe reactor accident with offsite consequences, NRC guidance calls for the prompt evacuation of the population within a 2-mile radius of the plant and about 5 miles in the downwind direction. The guidance states that these protective actions would be expanded, as necessary, based on further assessment of plant conditions, dose assessment, and field monitoring information. At longer distances, shelter is usually the appropriate protective action, followed by relocation of segments of the population, if warranted by the results and analysis of radiological measurements taken in the field. The main protective action planned for the 50-mile EPZ is protection of the public from the ingestion of contaminated food and water. It is considered extremely unlikely that evacuation would be required at a distance of 50 miles even after the most severe accident. The planning established for the 10-mile and 50-mile EPZs, the decreasing consequences and increasing time available for taking protective actions as the distance from the plant increases, and the availability of monitoring data on which to base protective action decisions provide assurance that appropriate protective actions would be taken to protect the population within 50 miles of a site.

NRC regulations also require that the applicant for a nuclear power reactor operating license provide an analysis of the time required to evacuate and take other protective actions within the plume exposure pathway EPZ. This analysis is referred to as the "evacuation time estimate" (ETE). There are no preset minimum evacuation times that a nuclear power plant site must meet. However, the NRC expects that the ETEs for a site are a reasonably accurate reflection of the time it would take to evacuate the site environs under normal and adverse conditions. ETEs are mostly used to identify potential traffic bottlenecks so that appropriate traffic control plans can be developed. Nuclear power reactor licensees are expected to review and revise their ETEs for their sites. The revisions must take into account changes in population, road capacities, potential traffic impediments, and other factors affecting the ETEs. The ETEs are assessment tools used by decisionmakers for determining whether evacuation is the preferred protective action option for the general public under specific accident and offsite conditions.

On August 1, 2001, the NRC issued Regulatory Issues Summary (RIS) 2001-16, "Update of Evacuation Time Estimates," to all holders of operating licenses for nuclear power plants. In this RIS, the NRC alerted licensees of the possible need to update ETEs as a result of the 2000 Census. The Licensee is currently preparing a new ETE report for IP2 and 3.

FEMA has established the Radiological Emergency Preparedness Program to (1) ensure that the health and safety of citizens living around commercial nuclear power plants can be adequately protected in the event of a nuclear power plant accident, (2) inform and educate the public about radiological emergency preparedness, and (3) make findings and determinations as to the adequacy of state and local plans and the capability of state and local governments to effectively implement these plans and preparedness measures. Federal agencies also have plans in place to coordinate their response activities and share their resources in support of state and local officials during an emergency. Coordination of activities includes joint planning and training sessions and exercise participation. Emergency plans are continually improved based on experience gained through plan implementation and as a result of exercises, drills, and actual events.

In late January 2002, the State of New York issued its annual letter of certification to FEMA. By this letter, the State informed FEMA that specific preparedness activities have been completed, including training and the updating of State and local plans. However, the updating of State and local plans is an ongoing activity. The NRC Staff understands that the State and counties have addressed the adequacy of evacuation plans through their required review process in preparation for the exercise conducted in September 2002 and, in doing so, continue to review evacuation-related procedures in light of changes in demographics and conditions. FEMA's specific findings on the exercise will be issued later this year, but the preliminary assessment indicates that the offsite emergency plans are adequate to protect public health and safety.

The Petitioners refer to the 1982 Sandia National Laboratory (SNL) Report, "Calculation of Reactor Accident Consequences" (CRAC-2 Report), and cite this report as a basis for concern that a terrorist attack could result in a massive release of radioactive materials. The reactor siting studies in the CRAC-2 Report were performed as part of research on the sensitivity of various plant siting parameters. The studies used generic postulated releases of radioactivity from a spectrum of severe (core melt) accidents, independent of the probabilities of the event occurring or the impact of mitigation mechanisms. The studies were never intended to be realistic assessments of accident consequences. The estimated deaths and injuries resulted from assuming the most adverse condition for each parameter in the analytical code. In the cited studies, the number of resulting deaths and injuries also reflected the assumption that no protective actions were taken for the first 24 hours. The studies did not, and were never intended to, reflect reality or serve as a basis for emergency planning. The CRAC-2 Report

analyses used more simplistic models than current technologies. The two basic conclusions from the SNL siting studies were that the mean estimated number of health effects from the assumed releases for all reactor sites varied by up to more than four orders of magnitude and that the financial costs of the releases were dominated by cleanup costs and replacement power costs. The SNL studies provided a useful measure to compare sites, not to analyze plant-specific accident consequences.

Regarding the Petitioners' assertion that the emergency plans do not contemplate multiple attacks on the infrastructure (i.e., roads, bridges, transportation, communications, etc.), the NRC finds that the existing emergency response plans allow considerable flexibility to respond to a wide variety of adverse conditions, including the results of a terrorist attack. As previously discussed in this Director's Decision, the NRC considers that commercial nuclear power plants have sufficient security measures in place to defend against a broad spectrum of potential terrorist threats, thereby precluding the release of radioactive material to the environment. If a terrorist attack inflicted damage on a nuclear plant, the redundant design features inherent in the plant, and the high level of training accorded the plant staff, would likely result in actions being taken by the plant staff to prevent or minimize the release of radioactive material. In the unlikely event of a significant release of radioactive material, for whatever reason, the emergency response plans provide for protective actions for the surrounding population. While the emergency response plans provide alternative actions in the event of some failures of the local infrastructure, there are limits to the degree to which it is reasonable to assume that infrastructure components are unavailable. The responsibility to preclude the large-scale and resource-intensive effort that would be required for a successful terrorist attack on multiple targets rests with agencies of the federal government. The NRC considers the actions of various intelligence and law enforcement agencies, combined with the actions of the Department of Defense, to provide assurance that a successful large-scale terrorist attack is unlikely. Additionally, the NRC advisories and the orders issued since September 11, 2001, directed licensees to take specific actions to improve existing emergency response plans, including heightened coordination with local, state, and federal authorities. In summary, the NRC concludes that emergency preparedness plans and evacuation planning are routinely revised and updated, and are appropriate to use in response to a radiological emergency, including a release caused by a terrorist attack.

C. Information About Security Measures To Protect Against Terrorist Attacks

1. Petitioners' Concern

The Petitioners requested that the NRC require the Licensee to provide information documenting the existing and readily attainable security measures which provide IP with protection against land, water, and airborne terrorist attacks. This information should provide sufficient basis for the NRC to determine that physical barriers, intrusion alarms, and other measures are in place or constructed and are sufficient to meet realistically expected threats.

2. Staff's Response

As previously discussed, the NRC and its licensees have taken a number of steps since September 11, 2001, to increase security at NRC-licensed facilities, including safeguards advisories. At IP, the Licensee's security force was augmented by the New York State Police and the National Guard (including Hudson River patrols) and local law enforcement personnel.

The NRC issued orders on February 25, 2002, to all commercial nuclear power plants to implement interim compensatory security measures for the current threat environment. Some of the requirements made mandatory by the orders formalized the security measures that NRC licensees had taken in response to advisories issued by the NRC in the aftermath of the September 11 terrorist attacks. The orders also imposed additional security enhancements, which have emerged based on the NRC's assessment of the current threat environment and its ongoing security review. The requirements will remain in effect until the NRC determines that the level of threat has diminished, or that other security changes are needed. The specific actions are sensitive, but include increased patrols, augmented security forces and capabilities, additional security posts, installation of additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities and more restrictive site access controls for all personnel. The orders also require additional security measures pertaining to the owner-controlled land outside of the plants' protected areas. Currently, the New York State Naval Militia provides security measures to detect and deter watercraft access from entering the exclusion area around the IP plants.

In its report on security, the State of New York Office of Public Security (OPS) provided recommendations to enhance security at IP. Many of the measures suggested have been implemented by the Licensee and others are currently under advisement. The measures are recommendations by OPS to further enhance security and are not requirements in current NRC regulations. In response to the NRC orders of February 25, 2002, the Licensee provided information that,

taken in conjunction with other sources of security information, resulted in the NRC finding the Licensee's security posture to be appropriate under the current circumstances.

The Petitioners additionally seek specific details of security measures in place to respond to the potential for terrorist attacks. The NRC's policy is to withhold safeguards information from the public. Therefore, this request is denied.

D. Mandate Security Measures Sufficient To Protect the Facility

1. Petitioners' Concern

The Petitioners requested the NRC to mandate, at a minimum, the following security measures sufficient to protect the facility:

- 1. obtainment of a permanent no-fly zone from the Federal Aviation Administration (FAA) in the airspace within 10 nautical miles of the IP facility;
- a defense and security system sufficient to protect and defend the no-fly zone;
- 3. a defense and security system sufficient to protect the entire facility, including the containment and spent fuel storage buildings, control room, and electrical equipment.

2. Staff's Response

In the aftermath of September 11, 2001, the federal government took a number of steps to improve aviation security and minimize the threat of terrorists using airplanes to damage facilities critical to our nation's infrastructure. The Commission views that the efforts associated with protecting our nation from terrorist attacks by air should be directed toward enhancing security at airports and on airplanes. Thus, the Commission endorses the prompt response by Congress to strengthen aviation security under the Aviation and Transportation Security Act of 2001, because this legislation provides for improved protection against air attacks on all industrial facilities, both nuclear and nonnuclear. The NRC further supports the steps taken by the FAA to improve aircraft security, including enhanced passenger and baggage screening, strengthening of cockpit doors, and the Air Marshal program. The U.S. intelligence community and various federal law enforcement agencies have also increased efforts to identify potential terrorists and prevent potential attacks before they occur. For example, the FAA and Department of Defense have acted more than once to protect airspace above

nuclear power plants from what were thought to be credible threats against certain specific sites. These potential threats were later judged to be noncredible.

The NRC is also reviewing measures to bolster defenses and to establish new antiterrorism strategies in a thorough and systematic manner. The NRC is taking a realistic and prudent approach toward assessing the magnitude of the potential threat and the strength of Licensee defenses.

NRC licensees must defend nuclear power plants against the DBT. September 11 showed that the NRC and its licensees must reevaluate the scope of potential assaults of all types. However, there are limits to what can be expected from a private guard force, even assisted by local law enforcement. Even if it is determined that nuclear power plants should be defended against aircraft attack, the NRC cannot expect licensees to acquire and operate antiaircraft weaponry. Protection against this type of threat may be provided by other means within the federal government.

In summary, the Petitioners' request is denied because the NRC considers that the collective measures taken since September 11, 2001, provide adequate protection of public health and safety.

E. Dry-Cask Spent Fuel Storage System

1. Petitioners' Concern

The Petitioners requested that the NRC order the Licensee to immediately convert the current spent fuel storage from water-cooled SFPs to a dry-cask storage system in a bunkered structure. As the basis for the request, the Petitioners state that this action would reduce the long-term risk of potential exothermic oxidation in the existing fuel storage facility. The Petitioners state that the NRC has never established that the spent fuel storage facility at IP is secure against foreseeable attacks nor can the NRC be certain that the spent fuel storage facility is sufficiently sound to preclude the possibility of a spent fuel fire in the event of an airborne, land, or water-based assault. The Petitioners' concerns were based, in part, on information in an NRC report, "Final Technical Study of Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants," dated October 2000, and on the Petitioners' evaluation of the consequences of a terrorist attack on the spent fuel pool buildings. In their December 20, 2001, supplement, the Petitioners state that the NRC has not performed an environmental impact statement or probabilistic risk analysis assuming all modes of water loss from the SFPs, including terrorist attack, and the Petitioners further discuss the probability and consequences of exothermic oxidation of the spent fuel cladding.

2. Staff's Response

The NRC Staff presently concludes that spent fuel can be safely stored at the IP reactor site in the current system of SFPs and, therefore, the Petitioners' requests are denied. Although the spent fuel storage buildings at IP are not as hardened as the reactor containment structures, the SFPs themselves are robust, and relatively small structures, which are partially below ground level. The spent fuel is stored in racks resting on the floor of the pools and is covered by more than 20 feet of water. The pools are designed to prevent a rapid loss of water with the structure intact, and the pool water level and cooling system are monitored and alarmed in the control rooms. Thus, the response time for events involving the SFP is significantly longer than for other event scenarios. It is also easier to add water to the SFP from various sources because it is an open pool. The robust design and small size of the pools minimize the likelihood that a terrorist attack would cause damage of a magnitude sufficient to result in an offsite release of radioactive material. Further, offsite resources can be brought onsite to assist the response to an event.

When the NRC Staff completes its reevaluation of the physical security requirements, the NRC will be able to judge whether modifications to the SFP structures and enclosures are warranted and whether additional safeguards measures should be established. If so, the NRC will act accordingly. In the meantime, the NRC has issued orders to all nuclear power plants requiring certain interim compensatory measures to augment security and strengthen mitigation strategies. The SFPs are within the protected area of the facility and therefore protected from certain external threats under the security provisions identified in the PSPs.

During the NRC review of the transfer of the licenses for IP1 and 2, the Licensee indicated that it was evaluating the possible construction of an independent spent fuel storage facility. In a public meeting on March 14, 2002, the Licensee stated that it was expediting its engineering review for this facility.

III. CONCLUSION

As stated in its letter to the Petitioners on December 20, 2001, the NRC has, in effect, partially granted the Petitioners' request for an immediate security upgrade at IP2 and 3. On September 11, 2001, the NRC took action to enhance security at all nuclear facilities, including IP2 and 3. Immediately after the attacks, the NRC advised all nuclear power plants to go to the highest level of security, which they promptly did. These facilities have remained at a heightened security level since. The NRC continues to work with other federal agencies and is monitoring relevant information it receives on security matters at nuclear facilities. The

NRC is prepared to make immediate adjustments as necessary to ensure adequate protection of the public.

On February 25, 2002, the NRC issued orders to IP2 and 3 and all other operating commercial nuclear power plants to implement interim compensatory security measures for the high-level threat environment. Some of the requirements formalized a series of security measures that NRC licensees had taken in response to advisories issued by the NRC, and others are security enhancements that have emerged from the Commission's ongoing comprehensive security review. The Commission issued the orders, which incorporated the threat advisories and added additional requirements, to formalize the security enhancements at commercial nuclear power plants. Because the threat environment had persisted longer than expected, it is appropriate to maintain these security measures within the established regulatory framework. The details of these security requirements are sensitive and will not be provided to the public. Some of the specific measures implemented by the licensees in response to the advisories and interim compensatory measures included increased patrols, augmented security forces and capabilities, additional security posts, installation of additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities and more restrictive site access controls for all personnel. Therefore, the Petitioners' request that the Licensee conduct a full review of the facility's vulnerabilities, security measures, and evacuation plans has been, in effect, partially granted. Regarding the Petitioners' request for specific information about the security measures, the NRC believes that it is inappropriate to discuss perceived vulnerabilities and current or planned security measures in the public domain. Thus, this request is denied.

The NRC in its February 25, 2002, orders also directed licensees to evaluate and address potential vulnerabilities to maintain or restore cooling to the core, containment, and SFP and to develop specific guidance and strategies to respond to an event that damages large areas of the plant due to explosions or fires. These strategies are intended to help licensees to identify and utilize any remaining onsite or offsite equipment and capabilities. If NRC's ongoing security review recommends any other security measures, the NRC will take appropriate action.

The NRC denies the Petitioners' request to mandate certain security measures, as specified by the Petitioners, for the protection of the facility, such as systems to defend a no-fly zone. As part of its ongoing comprehensive security review, the NRC is examining the threat environment in coordination with the new Office of Homeland Security, the FBI, FEMA, the FAA, the military, the intelligence community, and the Department of Energy, among others. The NRC will take appropriate action based on the results of this review. The NRC considers that the current security requirements, along with the enhancements in the February 25 orders, provide reasonable assurance of the protection of the facility.

The NRC finds that the existing emergency response plans are flexible enough to respond to a wide variety of adverse conditions, including a terrorist attack. The NRC advisories and the orders issued since September 11, 2001, directed licensees to take specific actions deemed appropriate to ensure continued improvements to existing emergency response plans. The Petitioners' concern that the emergency plans do not contemplate multiple attacks on the infrastructure is alleviated by the fact that the emergency plans are intended to be broad and flexible enough to respond to a wide spectrum of events. Thus, the Petitioners' request that the onsite and offsite emergency plans be revised to account for possible terrorist attacks has been, in part, granted.

The NRC finds that the current spent fuel storage system and the security provisions at IP adequately protect the spent fuel. However, the Licensee has stated its intention to install an independent spent fuel storage installation. The Petitioners' request to order the installation is denied.

As provided in 10 C.F.R. § 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Collins, Director Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland, this 18th day of November 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of

ALL NUCLEAR POWER REACTOR LICENSEES

November 15, 2002

The Petitioners requested that the Nuclear Regulatory Commission issue orders to the owners of all operating nuclear power plants to take two measures that would reduce the risk from sabotage of irradiated fuel:

- 1. The NRC should "impose a 72-hour limit for operation when the number of operable onsite alternating current power sources (i.e., emergency diesel generators) is one less than the number in the Technical Specification limiting condition for operation. This 72-hour limit would be applicable when the nuclear plant is in any mode of operation other than hot shutdown, cold shutdown, refueling, or defueled." Oconee Nuclear Station (Oconee) does not rely on emergency diesel generators (EDGs), but "equivalent protection for its emergency power supply" should be provided. The NRC should also "cease and desist issuing NOEDs [Notices of Enforcement Discretion] that allow nuclear reactors to operate for longer periods of time with broken emergency diesel generators." This requested action would apply to the facilities listed in Attachment 1 to the March 11, 2002, petition.
- 2. The NRC should "impose a minimum 24-hour time-to-boil for the spent fuel pool water. This limit would be applicable at all times." This requested action would apply to the facilities listed in Attachment 1 to the March 11, 2002, petition.

The final Director's Decision on this petition was issued on November 15, 2002. In that decision, the NRC Staff concluded that the information contained in the petition did not warrant NRC Staff action to restrict allowed outage times

for EDGs to 72 hours or desist issuing NOEDs to extend the allowed outage time of EDGs. This conclusion was reached in response to item (1) above, which addresses concerns related to EDG out-of-service times. If, during an EDG outage during plant operation, sabotage to offsite power should occur, the availability of the remaining power sources is adequate to ensure that the plant can be safely shut down and maintained in a safe shutdown condition, even if a station blackout should occur.

The NRC has partially granted the Petitioners' request that action be taken to reduce the risk from sabotage of irradiated fuel as it relates to item (2) above, which addresses concerns raised by the Petitioners regarding potential vulnerabilities associated with sabotage of the spent fuel pool (SFP) cooling capability. In this regard, additional measures are being implemented by the licensees in response to the February 25, 2002, orders issued by the NRC concerning onsite security. In addition, the NRC Staff has concluded that there is no need to restrict the heat load in the SFP by establishing a minimum time-to-boil of 24 hours from loss of forced SFP cooling. Should sabotage of the primary SFP cooling capability occur when there is a high heat load in the SFP, the availability of alternate SFP cooling assures protection of irradiated fuel stored in the SFP.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated March 11, 2002, as supplemented by letters dated March 21, March 22, and March 27, 2002 (the petition), the Union of Concerned Scientists, and others listed in the petition (the Petitioners), requested that the U.S. Nuclear Regulatory Commission (the Commission or NRC) issue orders to take immediate action to the owners of all operating nuclear power plants with regard to the following:

1. The NRC should "impose a 72-hour limit for operation when the number of operable onsite alternating current power sources (i.e., emergency diesel generators) is one less than the number in the Technical Specification limiting condition for operation. This 72-hour limit would be applicable when the nuclear plant is in any mode of operation other than hot shutdown, cold shutdown, refueling, or defueled." Oconee Nuclear Station (Oconee) does not rely on emergency diesel generators (EDGs) but "equivalent protection for its emergency power supply" should be provided. Note that whenever EDGs are referred to in this Director's Decision, the reference is also applicable to Oconee's onsite emergency power supply. The NRC should also "cease and desist issuing NOEDs [Notices of Enforcement

Discretion] that allow nuclear reactors to operate for longer periods of time with broken emergency diesel generators." This requested action would apply to the facilities listed in Attachment 1 to the March 11, 2002, petition.

2. The NRC should "impose a minimum 24-hour time-to-boil for the spent fuel pool water. This limit would be applicable at all times." This requested action would apply to the facilities listed in Attachment 1 to the March 11, 2002, petition.

As a basis for the requests described above, the Petitioners cite the need to reduce the risk from sabotage of irradiated fuel.

The Petitioners also requested that the NRC hold a public meeting "to precede the Petition Review Board (PRB) non-public meeting regarding this petition."

On March 26, 2002, in lieu of a public meeting, the Petitioners accepted and participated in a telephone conference (teleconference) with the NRC's PRB to discuss the petition. The transcript of the teleconference is being treated as a supplement to the petition. After the teleconference, the PRB discussed the petition. The PRB considered the contributions of the Petitioners to the teleconference in deciding whether to grant the requests for immediate action and in setting the schedule for the review of the petition. The PRB concluded that the petition satisfied the criteria for review under Title 10 of the *Code of Federal Regulations* (10 C.F.R.), section 2.206.

By an acknowledgment letter dated May 8, 2002, the NRC Staff formally notified the Petitioners that the petition met the criteria for review under 10 C.F.R. § 2.206, and that the NRC Staff would act on the request within a reasonable time. The acknowledgment letter further provided the bases for the NRC's denial of the Petitioners' request for immediate action.

The Staff provided the Petitioners with a copy of the proposed Director's Decision by letter dated September 4, 2002. The Petitioners responded with comments by letter dated September 23, 2002. The comments on the proposed Director's Decision and the Staff's response to them are addressed in Enclosures No. 2 and No. 3 to the November 15, 2002, letter to Mr. David A. Lochbaum, Union of Concerned Scientists.

The petition is available for inspection in the NRC's Agencywide Documents Access and Management System (ADAMS) at the Commission's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records are also accessible from the ADAMS Public Electronic Reading Room on the NRC Web site (http://www.nrc.gov/reading-rm/adams.html). The transcript of the March 26, 2002, teleconference has been assigned Accession Number ML022670353. Persons who do not have access to ADAMS or have problems in accessing

the documents located in ADAMS should contact the NRC PDR reference staff at 1-800-397-4209 or 301-415-4737 or by e-mail to pdr@nrc.gov.

II. DISCUSSION

The Petitioners' request that the NRC take specific measures to reduce the risk from sabotage of irradiated fuel is part of the larger issue of protecting our nation's nuclear power plants from terrorism. In this regard, long before the tragic events of September 11, 2001, the Commission had recognized the need for strict safeguards and security measures at these facilities. When Congress first authorized the civilian use of atomic power through the Atomic Energy Act of 1954 (the Act), it recognized that public health and safety must be protected. The Act gave the Atomic Energy Commission (predecessor of the NRC) the responsibility and authority to determine the requirements, including rules governing security, that are necessary to promote common defense and security and to protect the health and safety of the public when commercial nuclear power plant licenses are issued.

The regulations for protecting all nuclear power plants are provided in 10 C.F.R. Part 73, "Physical Protection of Plants and Materials." These rules represent an important cornerstone of the NRC's regulatory oversight responsibilities. In particular, the regulations include detailed, specific requirements designed to protect nuclear power plants against acts of radiological sabotage, and protect safeguards and classified information against unauthorized release.

To provide high assurance that the operation of a nuclear power plant does not constitute an unreasonable risk to public health and safety, licensees are required to implement the NRC's safeguards and security regulations described in 10 C.F.R. § 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." Specifically, licensees are to design a physical protection system to provide the following means of protection against the design-basis threat (DBT) of radiological sabotage:

- Maintain a well-equipped and highly trained physical security organization.
- 2. Install physical barriers to protect vital equipment.
- Implement access requirements to control all points of personnel and vehicle access into a protected area. These requirements include the identification and search of individuals and vehicles for firearms, explosives, and incendiary devices.
- 4. Install detection, surveillance, and alarm systems with the capability to detect unauthorized penetrations into protected areas.

- 5. Ensure that all guards and armed response individuals have the ability to communicate with a continuously manned alarm station.
- Establish effective testing and maintenance programs to verify that all
 physical barriers, detection, and alarm systems are capable of meeting
 NRC requirements.
- 7. Provide a safeguards contingency plan to respond to threats, thefts, and radiological sabotage related to the nuclear facility.

A. Security Organization

All operating nuclear power plant licensees are required to establish and maintain a site security organization. Such site security organizations include the designated managers, guard force, and personnel for checking worker backgrounds and issuing badges, as well as detailed access control and response procedures. To become a member of the security organization at a nuclear power plant, an individual must meet several stringent requirements, including satisfactory performance of qualification and requalification training. Specifically, 10 C.F.R. § 73.55(b)(4)(i) expressly states that "licensee[s] may not permit an individual to act as a guard, watchman, armed response person, or other member of the security organization unless the individual has been trained, equipped, and qualified to perform each assigned security job duty" in accordance with NRCestablished criteria for security personnel. Furthermore, each licensee shall establish, maintain, and follow an NRC-approved training and qualifications plan outlining the processes by which guards, watchmen, armed response persons, and other members of the security organization will be selected, trained, equipped, tested, and qualified to ensure that these individuals meet NRC requirements. These qualifications include specific requirements to demonstrate competence in the use of assigned weapons. In addition, guards, watchmen, armed response persons, and other members of the security organization are subject to the NRC's medical examination, physical fitness, and fitness-for-duty requirements. These security organizational requirements exist to implement the defense-in-depth philosophy for safeguarding vital plant areas, and are designed to help provide an effective deterrence against potential terrorist activities directed at nuclear power plants.

B. Access Authorization and Control

To ensure that only authorized individuals are able to enter vital and other protected areas of a nuclear plant, licensees are required to implement and maintain access authorization and control programs. The objective of these programs is

to provide high assurance that individuals who are allowed unescorted access to a nuclear power plant are trustworthy and reliable, and do not constitute an unreasonable risk to public health and safety including the potential to commit radiological sabotage. To achieve this objective, NRC regulations require licensees to: (1) perform background checks on workers who are granted unescorted access to the plant; (2) implement a picture badge identification system to identify those persons who are authorized to enter specific plant areas; (3) search personnel, packages, and vehicles entering the protected area; (4) search for firearms and explosives; (5) monitor entry into identified areas of the plant; and (6) maintain a detection and alarm system.

Worker background checks include an investigation to verify an individual's true identity and to develop information concerning the individual's employment, education, and credit history; military service; and character and reputation, including a psychological assessment, to evaluate trustworthiness and reliability. The checks also include a criminal history check conducted via fingerprint cards submitted to the Federal Bureau of Investigation (FBI). These requirements are designed to prevent unauthorized access of persons, vehicles, and materials into protected areas, and to ensure that only persons who are deemed trustworthy are authorized to have unescorted access to vital plant equipment.

C. Protection of Vital Equipment

Paragraph (a)(1) of 10 C.F.R. § 73.1 defines the DBT from which vital areas must be protected. The regulation requires licensees to assume that potential terrorists have the following characteristics:

- 1. are dedicated and well trained (including military training and skills);
- 2. have inside assistance, which may include a knowledgeable individual who attempts to participate in a passive role (e.g., provide information), an active role (e.g., facilitate entrance and exit, disable alarms and communications, participate in violent attack), or both;
- possess suitable weapons, up to and including hand-held automatic weapons, equipped with silencers and having effective long-range accuracy;
- possess hand-carried equipment, including incapacitating agents and explosives for use as tools of entry or for otherwise destroying reactor, facility, transporter, or container integrity, or features of the safeguards system;
- 5. have a four-wheel-drive land vehicle available for transporting personnel and their hand-carried equipment to the proximity of vital areas.

NRC regulations in 10 C.F.R. § 73.1(a)(1)(iii) also require licensees to protect against a four-wheel-drive land-vehicle bomb. To safeguard a nuclear plant against this threat, 10 C.F.R. § 73.55 requires all licensees to: (1) establish vehicle control measures, including vehicle barriers, to protect against the use of a land vehicle as a means of transportation to gain unauthorized proximity to vital areas; and (2) develop a process to use alternative measures for protection against a land-vehicle bomb (i.e., for those licensees with a particularly difficult site configuration). The alternative measures must provide substantial protection against a land-vehicle bomb and must be supported by a licensee analysis.

In summary, Congress understood the inherent need for strict security measures at commercial nuclear power plants, and NRC regulations have ensured that these are among the most hardened and secure industrial facilities in our nation. The many layers of protection offered by robust plant design features, including sophisticated surveillance equipment, a professional security force, and regulatory oversight, are effective deterrents against potential terrorist activities that would target equipment vital to nuclear safety.

D. NRC Response to the September 11, 2001, Terrorist Attacks

When the events of September 11, 2001, unfolded, U.S. nuclear power plants already possessed a strong capability to prevent and respond to many types of terrorist acts that could be directed at them. In addition, the NRC took other immediate actions and advised all nuclear power plants to go to the highest level of security, which they promptly did. The NRC also issued more than thirty threat advisories to address specific concerns or vulnerabilities in the aftermath of September 11. In addition, NRC security specialists performed numerous onsite physical security vulnerability assessments at licensed facilities to evaluate the effectiveness of the enhanced security measures that were put into place. To this day, all nuclear power plant facilities remain at a heightened security level.

The NRC has taken appropriate steps to promote common defense and security, and to protect the health and safety of the public, since the unprecedented events of September 11, 2001. For example, the NRC quickly recognized the need to reexamine basic assumptions underlying the current civilian nuclear facility security and safeguards programs. Chairman Richard A. Meserve, with the full support of the rest of the Commission, directed the Staff to undertake a comprehensive review of the NRC's safeguards and security programs. The comprehensive review takes advantage of insights gained by the NRC in consultation with the Office of Homeland Security, FBI, Department of Transportation, Department of Energy, and others. This cooperation further allows the NRC to keep abreast of the current threat environment, and communicate its actions to other federal agencies to ensure an appropriate response to security concerns throughout the nation's entire critical energy infrastructure.

In light of the current threat environment, the Commission concluded that specific security measures, including those outlined in threat advisories and voluntarily implemented by nuclear power plant licensees, should be embodied in an order consistent with the NRC's established regulatory framework. On February 25, 2002, the NRC issued orders to all operating power reactor licensees to require certain interim compensatory measures (ICMs) for security be taken beyond that called for by current regulations. These requirements will remain in effect pending notification from the Commission that a significant change in the threat environment has occurred, or until the Commission determines that other changes are needed following the comprehensive review of current safeguards and security programs. The orders were effective immediately upon issuance. For the most part, the orders formalized a series of steps that nuclear power plant licensees had been advised to take by the NRC in the aftermath of the terrorist attacks on September 11, 2001; however, the Commission included certain additional security enhancements in the orders. Details of certain new security requirements cannot be made public, but some of the specific measures implemented by the licensees in response to the advisories and ICMs included increased patrols, augmented security forces and capabilities, additional security posts, installation of additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities, and more restrictive site access controls for all personnel. The orders also required that licensees provide a schedule for their implementation of the ICMs, and that all ICMs be implemented by August 31, 2002. Based on the NRC Staff's review of the responses to the reporting requirements of the order, the Staff believes that licensees have taken adequate measures to comply with the requirements of the order by the required date of August 31, 2002. The Staff is currently verifying that licensees are in compliance with the ICMs by conducting independent inspections at all licensee sites. These independent inspections consist of an audit that will be completed by December 2002, and a more detailed inspection that will be conducted through 2003.

If the NRC identifies a significant vulnerability during the ongoing review, the Staff will impose additional physical protection, material control, or other requirements, as appropriate. The NRC will continue to assist the Office of Homeland Security and other federal agencies to evaluate threats beyond the response capabilities of NRC licensees. As part of this effort, on April 7, 2002, the Office of Nuclear Security and Incident Response (NSIR) was established to improve the timeliness and consistency of communications among NRC's employees and with NRC's external stakeholders. The new office also integrates NRC management of classified and sensitive safeguards information and secure communication facilities.

The Petitioners' concerns also extend beyond the limits of the protected areas of individual nuclear power sites. The electric power grid, as the Petitioners note,

is virtually unprotected. However, although the electric power grid has in the past been disrupted by natural and man-made events, the grid has proven to be a reliable source of offsite power for safety functions associated with nuclear power facilities.

With regard to the Petitioners' request to impose a 72-hour limit for operation with less than the limiting condition for operation (LCO)-required EDGs, General Design Criterion (GDC) 17, "Electric power systems," of Appendix A to 10 C.F.R. Part 50 states, in part, that nuclear power plants have onsite and offsite electric power systems to permit the functioning of structures, systems, and components that are important to safety. The onsite system is required to have sufficient independence, redundancy, and testability to perform its safety function, assuming a single failure. The offsite power system is required to be supplied by two physically independent circuits that are designed and located so as to minimize, to the extent practical, the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions. In addition, GDC 17 requires provisions to minimize the probability of losing electric power from the remaining electric power supplies as a result of a loss of power from the unit, the offsite transmission network, or the onsite power supplies.

GDC 18, "Inspection and testing of electric power systems," requires that electric power systems that are important to safety be designed to permit appropriate, periodic inspection and testing. Pursuant to 10 C.F.R. § 50.36, "Technical specifications," a licensee's technical specifications (TSs) must establish LCOs, which include remedial actions to be taken when the LCO is not met. The remedial action is typically to shut down the reactor within some period of time; historically known as the allowed outage time (AOT), but currently called the completion time (CT) in the TSs at most plants. In addition, 10 C.F.R. § 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," requires that preventive maintenance activities not reduce the overall availability of the systems, structures, and components. Regulatory Guide (RG) 1.93, "Availability of Electric Power Sources," provides guidance with respect to operating restrictions (i.e., AOTs) if the number of available alternating current (ac) sources is less than that required by the TS LCOs. This guide prescribes a maximum AOT of 72 hours for an inoperable ac source. In the case of EDGs, these AOTs have been extended to up to 14 days for some licensees by considering the impact on overall plant risk and determining that the change in risk due to the extended AOT is acceptable (these AOT extensions are examples of "risk-informed" licensing actions).

During the teleconference of March 26, 2002, with the Petitioners, but prior to the decision of the PRB to accept the petition, the Petitioners clarified that the first measure, limiting the EDG AOT to 72 hours, was intended to minimize the threat to reactor safety by sabotage or terrorist activities by limiting how long

the EDGs could be out of service (OOS) when the reactor was operating. The Petitioners also clarified during the teleconference that, in their opinion, the NRC Office of Nuclear Regulatory Research's (RES's) final report on the regulatory effectiveness of 10 C.F.R. § 50.63,¹ "Loss of all alternating current power" (the station blackout (SBO) rule), seemed to refute the industry statement that it was safer at many plants to perform the EDG extended maintenance during power operations rather than during an outage, and the Petitioners stated that they had considered this finding when they developed the petition.

The Petitioners cited the September 11, 2001, terrorist attacks as demonstrating the capability of terrorists to carry out coordinated attacks on American soil and stated that the transmission lines and substations that constitute the electrical grid for a nuclear power plant are virtually unprotected targets for terrorists. The Petitioners also stated that the switchyard at a nuclear power plant is a relatively softer target than the nuclear plant itself and concluded that there is no reason to consider the normal supply of ac power to nuclear power plants (i.e., the normal offsite ac power sources) resistant to or immune from terrorist attacks.

If a terrorist attack succeeds in disabling these normal offsite power sources, the emergency ac power sources (e.g., onsite EDGs) must function to prevent an SBO event. The Petitioners recognized that these EDGs are located behind security fences and protected by armed security guards so that it would be hard for terrorists to attack these sources of emergency ac power. However, the Petitioners raised a concern about the potential for the EDGs to not be functional (i.e., unavailable due to maintenance) if the normal offsite power sources are disabled by a terrorist attack. The Petitioners stated that the longer an EDG is OOS, the higher the likelihood a successful terrorist attack against the electrical grid could cascade to an SBO and eventually result in reactor core damage. The Petitioners stated that reimposing a maximum AOT of 72 hours for EDGs would reduce risk by preventing the removal of EDGs for long periods of maintenance.

The Petitioners concluded that, since little can be done quickly to provide better protection of the electrical grid, the NRC should swiftly reimpose the 72-hour LCO on all onsite emergency power supplies to increase the likelihood that they will be available to provide power to safety equipment in the event of a successful terrorist attack against the electrical grid and, thus, reduce the risk of SBO and reactor core damage. The Petitioners recognized that this issue did not apply to those operating reactors that already have a TS containing the 72-hour CT or AOT for an inoperable EDG.

The Petitioners identified the following facts as their bases for the requested actions:

¹ William S. Raughley, Office of Nuclear Reactor Research, U.S. Nuclear Regulatory Commission, "Final Report: Regulatory Effectiveness of the Station Blackout Rule," August 15, 2000, referred to herein as the "NRC RES Report."

- Removing EDGs from service would increase the risk from SBO events.
 Citing the NRC RES Report, the Petitioners stated that plants that committed to a 0.975 minimum individual target reliability for their EDGs were having difficulty achieving their goal when maintenance OOS (MOOS) was incorporated into the reliability calculation.
- 2. The Petitioners, citing the NRC RES Report, asserted that a decrease in EDG reliability of 0.025 could increase the SBO core damage frequency (CDF) by 1.0E-5/reactor-year or more for some plants. The Petitioners further asserted that the EDG reliability reduction is a function of the plant's capacity factor because the LCO only applies when the plant is running, and that the EDG reliability reduction could be even larger when plants have a lower annual capacity factor. These assertions were used to support the conclusion that allowing EDG extended AOTs increased SBO CDF and reduced EDG reliability to a level where the safety benefits of the SBO rule are negated.
- 3. NOEDs that allow nuclear reactors to operate for longer times undermine the increase in safety gained by reimposing the 72-hour limit.
- 4. The Petitioners requested that NRC provide an equivalent protection for Oconee since this plant does not rely on EDGs for its emergency ac power supply.

With regard to the Petitioners' request to establish a minimum time-to-boil to 24 hours for spent fuel pools (SFPs), the primary mode of storage at this time is in the spent fuel storage pools located at the sites of nuclear power reactors. GDC 61, "Fuel storage and handling and radioactivity control," requires the following:

The fuel storage and handling, radioactive waste, and other systems which may contain radioactivity shall be designed to assure adequate safety under normal and postulated accident conditions. These systems shall be designed (1) with a capability to permit appropriate periodic inspection and testing of components important to safety, (2) with suitable shielding for radiation protection, (3) with appropriate containment, confinement, and filtering systems, (4) with a residual heat removal capability having reliability and testability that reflects the importance to safety of decay heat and other residual heat removal, and (5) to prevent significant reduction in fuel storage coolant inventory under accident conditions.

The requirements of GDC 61 are reflected in the design of SFPs, which are substantial concrete structures typically lined with welded steel plates, and the design of the associated auxiliary systems. SFPs have dedicated cooling systems that remove the spent fuel decay heat and maintain the water level in the pool to provide adequate radiation shielding. Heat exchangers, which remove the decay heat from the SFP, utilize cooling water whose source may be outside the plant. In addition to these dedicated systems, SFPs typically are designed to use auxiliary

sources of cooling, such as residual heat removal systems, and may be capable of utilizing one or more water sources for cooling (e.g., fire water system) in the event of an emergency. SFPs are typically instrumented to alert plant operators to low pool level or high pool temperature conditions. In the event that SFP cooling is lost, boiling in the SFP would be expected to occur, absent corrective measures,² within hours or days, depending upon the heat load in the SFP.

III. EVALUATION

A. Petitioners' First Concern

The Petitioners are concerned that a terrorist attack on the electric power grid will result in a loss of offsite power (LOOP), resulting in the need for the EDGs to function to prevent an SBO event. The Petitioners are concerned that the longer the EDGs are OOS, the greater the risk there will be of an SBO, resulting in reactor core damage.

NRC Response

Because transmission lines, substations, and switchyards are vulnerable to weather-related events, each nuclear power plant is designed to have an emergency power system to enable the plant to withstand a LOOP, as specified by either GDC 17 or equivalent requirements in the plant licensing basis. These specifications recognize that offsite power systems are not designed as safety-related (Class 1E) systems. Consequently, most licensees rely on onsite redundant Class 1E EDGs to provide this emergency ac power source.

GDC 17 requires, in part, that the onsite power supplies and electric distribution systems have sufficient independence, redundancy, and testability to perform their safety functions, assuming a single failure. The redundant Class 1E EDGs, switchgear, load centers, and motor control centers must also be located in separate rooms of seismic Category I buildings to protect them against the effects of natural phenomena and missiles. In addition, 10 C.F.R. § 50.63 requires that all nuclear power plants have the capability to withstand a loss of all ac power for an established period. As a result of the SBO rule, all licensees have established SBO coping and recovery procedures, implemented any necessary modifications to cope with an SBO, and ensured they have the capability to cope with an SBO for 4 or 8 hours, depending on a number of site-specific parameters. One of the factors used to arrive at coping capability is EDG reliability. To provide

²Reactor operators utilizing established procedures can respond to a wide range of potential failures to prevent or mitigate SFP boiling.

additional SBO coping capability, some licensees installed an alternate ac (Aac) power source, such as a non-Class 1E diesel generator.

Although the NRC has granted some licensees AOT extensions (typically ranging from 7 to 14 days for the total AOT) for their EDGs, the licensees use the extensions primarily to perform infrequent (i.e., once every 18 or 24 months), manufacturer-recommended inspections and preventive or corrective maintenance activities that cannot be accomplished during the 72-hour AOT; only half of this AOT is used in most cases. These recommended inspections and maintenance activities are intended to improve EDG reliability (i.e., increase the likelihood that the EDG will function throughout its required operational period). Performing tests and maintenance at power also improves EDG availability during shutdown (i.e., increases the likelihood that the EDG will be available to operate when required).

The NRC Staff reviews each risk-informed EDG AOT extension request from both deterministic and probabilistic risk assessment (PRA) perspectives in accordance with the following guidance:

- 1. RG 1.177, "An Approach for Plant-Specific, Risk-Informed Decision-making: Technical Specifications," and Standard Review Plan (SRP) § 16.1;
- 2. RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," and SRP Chapter 19.

From a deterministic perspective, the Staff considers whether (1) the current regulations and applicable requirements will continue to be met, (2) the extended EDG AOT will reduce entries into the LCO and thereby reduce the number of EDG starts required for major EDG maintenance activities, (3) an available Aac source (i.e., an extra power source such as a diesel generator) or excess power capacity from the existing EDGs supplied through bus cross-ties could be temporarily used to compensate for an EDG in an extended AOT, and (4) the licensee will take compensatory measures during an extended EDG AOT to ensure the likelihood that the remaining sources of power will be available and will minimize the potential for creating an SBO. In addition, the Staff verifies that the plant's TSs allow only one EDG to be tested or taken OOS at a time and that the current TSs establish controls to ensure that, in the event an EDG is inoperable, the redundant systems that rely on the remaining EDG are verified to be operable. These required compensatory actions are intended to minimize the probability that a LOOP event will result in a complete loss of safety function of critical systems for the period during which one of the EDGs is inoperable.

From a PRA perspective, each request to extend an EDG AOT is reviewed on a plant-specific basis and approved only if the licensee can provide acceptable justification in terms of risk (i.e., CDF and large early release frequency (LERF)), as described in RG 1.177 and RG 1.174. In conducting this review, the Staff considers the capability and availability of all ac power sources (including non-safety-related equipment), the plant-specific performance history of the EDGs, and the impact of implementing the proposed extended EDG AOT. In addition, the NRC Staff expects that licensees have implemented a risk management program in accordance with the requirements of the maintenance rule (specifically, 10 C.F.R. § 50.65(a)(4)) to ensure that, during the extended EDG outage, a proceduralized risk-informed process is in place to assess and manage the overall impact on plant risk of entering the LCO action statement for planned maintenance activities. This expectation is to ensure that the design assumptions and margins in the original design basis are not unacceptably degraded.

The Staff's response to the facts identified by the Petitioners as their bases for the requested action is presented below:

1. Primarily based on the NRC RES Report, the Petitioners stated that removing the EDGs from service for extended maintenance during atpower conditions would increase the risk from SBO events. The Staff notes that the NRC RES Report did not explicitly address EDG extended maintenance during shutdown operations or the risk tradeoffs between shutdown and full-power operations associated with performing this maintenance. With the extended AOTs, the EDG extended maintenance outages will occur during full-power operations, which may lower the overall plant risk profile as compared to performing this maintenance during shutdown operations. This will clearly be the case for licensees that have an additional available source (i.e., Aac or temporary diesel generator) during the extended EDG maintenance outage, since the fullpower operational risk profile for these licensees would be essentially unaffected by the outage, as well as eliminating this risk contributor during shutdown operations. Based on the above, there may be a small increase in risk from SBO events during at-power conditions due to the EDG extended maintenance (depending on the specific measures taken by the licensee). However, there will be a reduction in risk from SBO events during shutdown, and this may reduce the overall plant risk profile.

The Petitioners also stated that the NRC RES Report indicated that plants that had committed to a 0.975 minimum individual target reliability for their EDGs were having difficulty achieving a 0.975 goal when MOOS was factored into the reliability calculation. However, the Staff notes that the EDG reliability values for determining the coping duration for an SBO event did not include the contribution from MOOS. The

selected target EDG reliability values for each nuclear power plant were established for plant-specific coping analysis in accordance with the requirements of the SBO rule. The EDG reliability performance criteria or goals selected for implementing the requirements of the SBO rule are tracked by each licensee in accordance with the requirements of 10 C.F.R. § 50.65. In addition, the maintenance rule requires licensees to monitor the unavailability of the EDGs due to maintenance against established goals to ensure that acceptable EDG unavailability is maintained. If the EDGs do not meet their preestablished reliability and unavailability performance criteria for a plant, the licensee must take the appropriate actions specified by 10 C.F.R. § 50.65(a)(1), including increased management attention and goal setting, to restore EDG performance to an acceptable level. The maintenance rule requires licensees to evaluate these goals at least once per refueling cycle. In addition, the NRC monitors EDG unavailabilities of all plants through its Reactor Oversight Process to ensure that all licensees take appropriate actions if these goals are not met. Also, during the review of AOT extensions, the Staff ensures that the licensees who request an EDG AOT extension meet their individual EDG target reliability goals in accordance with the SBO rule. Thus, existing requirements and regulations ensure that the EDG-established reliability and unavailability are maintained.

The Staff agrees with the Petitioners that if MOOS is included in the EDG reliability calculations, the calculated EDG reliability will decrease when an EDG is taken OOS for maintenance, and this reliability reduction could be even larger when plants have a lower annual capacity factor. However, the purpose of licensee requests for EDG AOTs is to perform the infrequent maintenance needed to improve the overall reliability of the EDGs and increase the availability of the EDGs during shutdown operations. Extending the EDG AOT for infrequently performed maintenance during plant operation also decreases the time pressure to complete the maintenance and, thus, may reduce the likelihood of human error during maintenance, further increasing EDG reliability. As stated above, the Staff agrees that EDG reliability calculations performed to determine the coping duration for an SBO did not include the contribution from MOOS; however, the Staff expects that the maintenance rule implementation will ensure that the reliability of EDGs is maintained as expected. Therefore, the maintenance rule will ensure that coping capabilities for SBO remain the same.

Licensee requests for extended EDG AOTs are reviewed and approved on a plant-specific basis only if they can be shown to be acceptable, as described in RG 1.177 and RG 1.174. In conducting this review, the

Staff may consider the capability and availability of all ac power sources (including non-safety-related equipment), the plant-specific performance of the EDGs, and the impact of implementing the proposed extended EDG AOT. The increase in CDF due to the implementation of a 14-day AOT for EDGs is typically estimated to be less than 1.0E-6/year based upon plant-specific models. This represents a very small increase in CDF, well within the RG 1.174 acceptance guidelines, and is an order of magnitude less than the value, based upon a generic model, the Petitioners cited from the NRC RES Report. Thus, these very small increases in CDF and/or LERF during plant operation, which do not include the benefits achieved by removing this maintenance activity from shutdown operations, are not eroding the safety benefits achieved by the SBO rule. Further, based on the quarterly data reported by licensees in accordance with the Reactor Oversight Process, the industry average EDG unavailability is about 1.5% (90 hours/year), which indicates that the EDG unavailability during plant operation is reasonably well controlled by the licensees. Also, the Staff notes that Nuclear Energy Institute (NEI) Report 99-02, Revision 2, "Regulatory Assessment Performance Indicator Guideline," which was endorsed by the NRC in Regulatory Issue Summary 2001-25, "NEI 99-02, Revision 2, Voluntary Submission of Performance Indicator Data," allows licensees to exclude unavailability hours for planned EDG overhauls, provided the licensees demonstrate, using the criteria of RG 1.177, that the increased risk to the plant due to the EDG AOT extension is small. The Staff recognizes that planned maintenance activities carried out during extended AOTs can have a net benefit by reducing unplanned unavailable hours to ensure that the EDGs are available when required.

3. The Petitioners requested that the NRC cease and desist issuing NOEDs that allow nuclear reactors to operate for longer times, and to reimpose the 72-hour LCO with an EDG unavailable. Accepting the Petitioners' request to limit EDG AOTs to 72 hours would potentially increase the likelihood of an SBO by requiring a nuclear power plant to undergo a transition to shutdown with an EDG unavailable whenever there is insufficient time to complete the required maintenance or repair of an EDG. The Staff notes that the NRC RES Report cited by the Petitioners also states that "plant shutdown with one or more offsite or onsite power supplies unavailable could exacerbate the grid condition or remove redundant sources to operate decay heat removal systems, increasing the likelihood of an SBO." The NRC RES Report further suggests that, instead of potentially increasing the likelihood of an SBO event by requiring a transition to shutdown for the extended unavailability of one or more offsite or onsite power supplies, licensees take "an alternate approach,

such as assuring the immediate availability of coping systems, reducing power, or assuring availability of adequate electric grid reserves." The potential for creating an SBO event by requiring a plant to transition to shutdown with an EDG unavailable is one factor considered, along with the plant conditions and the implications of allowing the plant to remain at power, in determining the appropriateness of issuing an NOED. As part of the NOED process, the NRC requires that licensees provide the safety basis for the request, including an evaluation of the safety significance and potential consequences of the proposed course of action. This evaluation should include at least a qualitative risk assessment using both risk insights and informed judgments, as appropriate. Therefore, it is prudent and appropriate for the Staff to continue to follow the existing guidance (i.e., NRC Inspection Manual, Part 9900, "Technical Guidance") for determining when it is appropriate to issue an NOED on a case-by-case basis.

4. The Staff has reviewed the TSs for Oconee and has determined that the time limitations in the Oconee TSs related to the emergency ac power sources are equivalent to the TSs of other plants having the 72-hour EDG AOT. Therefore, consistent with the Petitioners' statement that those operating reactors that already have a 72-hour EDG AOT do not need to address this issue, the Staff has determined that this issue also does not apply to Oconee.

Based on the above rationale, the Staff denies the Petitioners' request. Thus, the Staff will not reduce previously approved requests to extend EDG AOTs and will continue to follow the existing regulatory guidance (i.e., RG 1.177 and RG 1.174) in evaluating future licensee risk-informed requests to extend EDG AOTs. In addition, the Staff will continue to perform deterministic assessments and follow the guidance (i.e., NRC Inspection Manual, Part 9900) for determining, on a case-by-case basis, when it is appropriate to issue an NOED.

B. Petitioners' Second Concern

The Petitioners seek to reduce the risk of damage to irradiated fuel in the SFP due to sabotage. The Petitioners are concerned that terrorist actions outside a nuclear power plant fence could disrupt offsite power and/or the water intake system for cooling water, resulting in a loss of SFP cooling. Restricting the time-to-boil to a minimum of 24 hours reduces the likelihood that terrorist actions will result in damage to irradiated fuel in the SFP and release of radioactivity to the environment.

NRC Response

The basis of the Petitioners' request is that a longer time-to-boil would provide additional time for plant workers to restore forced cooling to the SFP or provide makeup water to maintain adequate coolant inventory. When forced cooling systems have been running, the minimum time-to-boil is usually several hours after a loss of forced cooling. The unambiguous nature of sabotage that results in a loss of cooling ensures the prompt identification of the problem. Additionally, operating experience indicates that even hidden initiators of a loss of cooling would most likely be identified before the onset of pool boiling. If cooling cannot be promptly restored, the remaining time would likely be adequate to align one of the diverse makeup water sources to maintain normal coolant inventory.

Existing design features and capabilities already provide sufficient time for plant workers to restore forced cooling and/or provide makeup water. All plants have makeup sources independent of the intake structure (e.g., the primary makeup water) and power (e.g., the diesel fire pump), and sites with spray ponds or air-cooled diesel generators have makeup (and often forced cooling) capability independent of facilities outside the protected area. The normal coolant inventory provides at least an additional 20 hours before evaporative loss of the coolant would result in radiation levels that would preclude access to the areas adjacent to the SFP.³ Short-term evaporative cooling can generally be accommodated with no adverse effects on essential systems. Furthermore, given the large water inventory in the SFP and the relatively straightforward and multiple means of providing makeup to the SFP, there would be only modest safety benefit from keeping the fuel in the reactor pressure vessel instead of in the SFP while waiting for the 24-hour minimum time-to-boil point to pass.

The safety of the stored fuel is also considered by each licensee from a security perspective. Security contingency measures to address radiological sabotage events during a radiological sabotage attack are documented by each licensee in its site security plan. The NRC inspects the capability of licensees to carry out these contingency measures. The NRC's comprehensive safeguards and security program reevaluation includes the consideration of potential consequences of terrorist attacks on SFPs. The Commission continues to evaluate the need for additional interim compensatory measures to augment the enhanced security put in place after September 11, 2001.

To the extent that additional measures are being implemented by the licensees in response to the February 25, 2002, orders, the NRC has partially granted

³ In cases where direct operator access to the SFP area is required for remedial actions, habitability concerns due to elevated temperature, humidity, and radiation levels could occur sooner than 20 hours, depending upon the heatup rate of the SFP. Specialized protective equipment such as heat-resistant suits and respirators can effectively extend the time during which direct access to the SFP can be maintained.

the Petitioners' request that action be taken to reduce the risk from sabotage of irradiated fuel.

IV. CONCLUSION

The Petitioners' first request is to "impose a 72-hour limit for operation when the number of operable onsite alternating current power sources (i.e., emergency diesel generators) is one less than the number in the Technical Specification limiting condition for operation. This 72-hour limit would be applicable when the nuclear plant is in any mode of operation other than hot shutdown, cold shutdown, refueling, or defueled." Oconee does not rely on EDGs, but "equivalent protection for its emergency power supply" should be provided. The NRC should also "cease and desist issuing NOEDs that allow nuclear reactors to operate for longer periods of time with broken emergency diesel generators." These requests are denied. For the reasons discussed above, the NRC Staff concludes that the actions requested are not necessary. Specifically, the Staff concludes that the NRC's reviews performed for plant-specific license amendments to extend AOTs for EDGs are appropriate and are consistent with existing Staff guidance (i.e., RG 1.174 and RG 1.177, and SRP § 16.1 and Chapter 19) in considering deterministic, traditional engineering factors, and probabilistic risk factors. Thus, the denial of the Petitioners' request is based upon the robustness of the plants' electrical design and improvements in plant security noted previously. Further, the Staff concludes that the existing Staff guidance (i.e., NRC Inspection Manual, Part 9900) for determining, on a case-by-case basis, when an NOED should be issued, is appropriate and the Staff will continue to consider the potential benefit and risk of unnecessary shutdowns that could result in an SBO event by requiring a plant to transition to shutdown with an EDG unavailable, as well as the plant conditions and the implications of allowing the plant to remain at power.

The Petitioners' second request is that the NRC "impose a minimum 24-hour time-to-boil for the spent fuel pool water. This limit would be applicable at all times." This request is partially granted by Staff actions already taken. However, for the reasons discussed above, the NRC Staff concludes that the actions specifically requested by the Petitioners are not necessary. Specifically, SFPs have adequate alternate sources of cooling such that spent fuel cooling and radiation shielding can be maintained during interruption of normal, forced SFP cooling. To the extent that additional measures are being implemented by the licensees, however, in response to the February 25, 2002, orders, the NRC has partially granted the Petitioners' request that action be taken to reduce the risk from sabotage of irradiated fuel.

As provided in 10 C.F.R. § 2.206(c), a Director's Decision will be filed with the Secretary of the Commission for the Commission to review. As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Collins, Director Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland, this 15th day of November 2002.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 70-3098-ML

DUKE COGEMA STONE &
WEBSTER
(Savannah River Mixed Oxide Fuel
Fabrication Facility)

December 18, 2002

In this proceeding to authorize construction of a mixed oxide ("MOX") fuel fabrication facility, the Commission reverses the Licensing Board's decision to admit the Intervenor's contention that, under the National Environmental Policy Act ("NEPA"), the NRC must evaluate the impacts of terrorism at the proposed MOX facility.

TERRORISM

NEPA

For the reasons we stated today in detail in *Private Fuel Storage*, we hold that the NRC has no obligation under NEPA to consider intentional malevolent acts, such as those directed against the United States on September 11, 2001, in conjunction with licensing of the MOX fuel fabrication facility. *See Private Fuel Storage*, *L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002); *accord Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-02-27, 56 NRC 367 (2002); and *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358 (2002).

TERRORISM

NEPA

We recognize that we cannot rule out the possibility of a terrorist threat to nuclear facilities, but find that "the possibility of a terrorist attack... is speculative and simply too far removed from the natural or expected consequences of agency action to require a study under NEPA." *Private Fuel Storage*, CLI-02-25, 56 NRC at 349. As a practical matter, attempts to evaluate that threat even in qualitative terms are likely to be meaningless and consequently of no use in the agency's decisionmaking. *See id.* at 347, 350-51, 353-54, 356-57.

TERRORISM

NEPA

SAFEGUARDS AND SECURITY INFORMATION

Although one of the purposes of NEPA is to inform the public of the environmental impacts of a major federal action, the results of any attempted analysis of terrorism could not be made available to the public, for reasons associated with safeguards and physical security. *See Private Fuel Storage*, CLI-02-25, 56 NRC at 347, 348, 354-57.

MEMORANDUM AND ORDER

This proceeding arises out of a construction authorization request for a mixed oxide (''MOX'') fuel fabrication facility. The Licensing Board admitted five contentions.¹ It later denied a request by the license applicant, Duke Cogema Stone & Webster (''DCS''), to reconsider the admissibility ruling.² DCS petitioned for interlocutory review of the Board's decision. We agreed to review the Board decision insofar as it admitted a contention based on the risk of terrorist attacks.³ Intervenor, Georgians Against Nuclear Energy (''GANE''), filed the contested terrorism contention. The contention asserted that under the National Environmental Policy Act (''NEPA''), DCS and the NRC must evaluate the impacts of terrorism at the proposed MOX fuel facility.

For the reasons stated below, we reverse the Board's admission of GANE's terrorism contention.

¹ See LBP-01-35, 54 NRC 403 (2001).

² See unpublished Memorandum and Order (Ruling on Motion To Reconsider) (Jan. 16, 2002).

³ See CLI-02-4, 55 NRC 158 (2002). We subsequently declined to review the Board's admission of the other four challenged contentions. See CLI-02-9, 55 NRC 245 (2002).

I. BACKGROUND

On February 28, 2001, the DCS consortium submitted an application for authorization to construct a MOX fuel fabrication facility at the U.S. Department of Energy's Savannah River, South Carolina, site. The MOX facility, if approved and constructed, will convert surplus weapons-grade plutonium to MOX fuel, a blend of uranium and plutonium oxides, that commercial nuclear power stations can use to generate electricity. Upon a request for a hearing by several individuals and groups, the Licensing Board found that GANE and two other Intervenors, Donald Moniak and the Blue Ridge Environmental Defense League (BREDL), had standing, and had proffered admissible contentions.⁴ Among them was GANE's contention 12, demanding a NEPA review of terrorism's impacts.⁵

DCS and the NRC Staff had opposed admission of GANE's terrorist contention on the ground that the terrorist risk is not "reasonably foreseeable"; i.e., it is so "remote and speculative" that it need not be analyzed under NEPA.⁶ The Board disagreed, holding that the September 11th terrorist attacks foreclosed finding the threat of terrorism "remote and speculative":

GANE's contention was filed on August 13, 2001. Regardless of how foreseeable terrorist acts that could cause a beyond-design-basis accident were prior to the terrorist attacks of September 11, 2001, involving the deliberate crash of hijacked jumbo jets into the twin towers of the World Trade Center in New York City and the Pentagon in the Nation's capital, killing thousands of people, it can no longer be argued that terrorist attacks of heretofore unimagined scope and sophistication against previously unimaginable targets are not reasonably foreseeable. Indeed, the very fact that these terrorist attacks occurred demonstrates that massive and destructive terrorist attacks can and do occur and closes the door, at least for the immediate future, on qualitative arguments that such terrorist attacks are always remote and speculative and not reasonably foreseeable.

The Board also rejected DCS's remaining argument — that NEPA reviews are precluded by an agency rule, 10 C.F.R. § 50.13, that "obviates the need for design features in reactors to protect against attacks by foreign enemy governments or individuals." The Board declined to extend section 50.13 beyond the power reactor context.

The terrorism issue then moved to the Commission, where we turned down GANE's petition to suspend the hearing process pending completion of the

⁴ See LBP-01-35, 54 NRC at 472.

⁵ See id. at 444-47.

⁶ See id. at 446.

⁷ *Id*.

⁸ Id. at 445.

⁹ *Id*.

NRC's ongoing comprehensive review of security and safeguards policies.¹⁰ We later granted DCS's petition for interlocutory review of the NEPA-terrorism question.¹¹ We asked the parties to address all issues that they "determine are relevant" to admissibility of the terrorism contention and specifically to answer the question, "What is an agency's responsibility under NEPA to consider intentional malevolent acts, such as those directed at the United States on September 11, 2001?" The Commission simultaneously agreed to review terrorism contentions in three other cases.¹²

DNC and the NRC Staff filed briefs maintaining that the NRC has no responsibility to consider intentional malevolent acts under NEPA. Both GANE and BREDL filed briefs taking the opposite view.¹³

II. DISCUSSION AND CONCLUSION

We now turn to the substantive legal and practical issue of whether, pursuant to NEPA, the NRC Staff must evaluate the impacts of intentional malevolent acts against the proposed MOX fuel facility. For the reasons we stated today in detail in *Private Fuel Storage*, we hold that the NRC has no obligation under NEPA to consider intentional malevolent acts, such as those directed against the United States on September 11, 2001, in conjunction with licensing of the MOX fuel fabrication facility.¹⁴

In short, we recognize that we cannot rule out the possibility of a terrorist threat to nuclear facilities, but find that "the possibility of a terrorist attack . . . is speculative and simply too far removed from the natural or expected consequences of agency action to require a study under NEPA." As a practical matter, attempts to evaluate that threat even in qualitative terms are likely to be meaningless and consequently of no use in the agency's decisionmaking. Moreover, although one of the purposes of NEPA is to inform the public of the environmental impacts of a major federal action, the results of any attempted analysis of terrorism could

¹⁰CLI-01-28, 54 NRC 393 (2001). The Commission later rejected GANE's request for reconsideration. *See* CLI-02-2, 55 NRC 5 (2002).

¹¹ See CLI-02-4, 55 NRC at 159.

¹² See Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-6, 55 NRC 164 (2002) (accepting certified question); Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-02-5, 55 NRC 161 (2002) (accepting referred ruling); see Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage installation), CLI-02-3, 55 NRC 155 (2002) (accepting referred ruling).

¹³ The Nuclear Energy Institute, stating that its interests were aligned with those of the Applicant, filed a brief, along with a request that we consider it as an *amicus curiae*. We grant the request.

¹⁴ See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002); accord Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-02-27, 56 NRC 367 (2002); and Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358 (2002).

¹⁵ Private Fuel Storage, CLI-02-25, 56 NRC at 349.

¹⁶ See id. at 347, 350-51, 353-54, 356-57.

not be made available to the public, for reasons associated with safeguards and physical security.¹⁷

The Commission is devoting substantial time and agency resources to combating the potential for terrorism involving nuclear facilities and materials. In response to the September 11th attacks, the NRC Staff is conducting a comprehensive review of our security and safeguards measures, and we have instituted interim upgrades in security requirements for our licensees. We are also working with numerous other government agencies to meet and minimize the threat of terrorism. Thus, although we decline to consider terrorism in the context of NEPA, the Commission is devoting significant attention to terrorism-related matters.

Accordingly, we *reverse* the Board's decision to admit GANE's terrorism contention.

IT IS SO ORDERED.

For the Commission¹⁹

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 18th day of December 2002.

¹⁷ See id. at 347, 348, 354-57.

¹⁸ See id. at 343-45. We note that the MOX fuel fabrication facility is unique among NRC-regulated facilities, for its purpose is to reduce the threat of nuclear proliferation through constructive disposition of the inventory of plutonium remaining from defense activities. Specifically, "the Applicant is seeking authorization to build a facility that would implement a significant objective of national security and policy" in accordance with an agreement between the United States and Russia. See CLI-01-28, 54 NRC at 401 (quoting CLI-01-13, 53 NRC 478, 484 (2001)).

^{(2001)).} 19 Commissioner Dicus was not present for the affirmation of this Order. If she had been present, she would have approved it.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 72-22-ISFSI

PRIVATE FUEL STORAGE, L.L.C. (Independent Spent Fuel Storage Installation)

December 18, 2002

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) SCOPE OF EIS: REMOTE AND SPECULATIVE EVENTS (TERRORISM)

An EIS is not an appropriate format to address the challenges of terrorism. The purpose of an EIS is to inform the decisionmaking agency and the public of a broad range of environmental impacts that will result, with a fair degree of likelihood, from a proposed project, rather than to speculate about "worst-case" scenarios and how to prevent them.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

SCOPE OF EIS: REMOTE AND SPECULATIVE EVENTS (TERRORISM)

The possibility of a terrorist attack on the PFS facility is speculative and simply too far removed from the natural or expected consequences of agency action to require a study under NEPA.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

SCOPE OF EIS: REMOTE AND SPECULATIVE EVENTS (TERRORISM)

Agencies have discretion to exclude high-consequence, low-probability events from a NEPA analysis. *City of New York v. U.S. Department of Transportation*, 715 F.2d 732, 750 (2d Cir. 1982), *appeal dismissed and cert. denied*, 465 U.S. 1055 (1984).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

SCOPE OF EIS: REMOTE AND SPECULATIVE EVENTS (TERRORISM)

The NEPA process is governed by a "rule of reason," which does not extend to all conceivable consequences of agency decisions, no matter how far down the causal chain from a nuclear licensing decision and no matter how unpredictable. *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 295 n.41 (2002).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

SCOPE OF EIS: PUBLIC PARTICIPATION

Using the NEPA process to consider terrorism would be incompatible with NEPA's (and the NRC's) public participation process. In the wake of the terrorist attacks on the Pentagon and World Trade Center that took place September 11, 2001, an overriding government priority is to avoid disclosing to terrorists themselves precisely where and how nuclear facilities might be most vulnerable and what steps are being taken to lessen terrorists' chance of success.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

SCOPE OF EIS: "WORST-CASE SCENARIOS"

NEPA does not call for a "worst-case" inquiry, which, it is now recognized, simply creates a distorted picture of a project's impacts and wastes agency resources. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 354-55 (1989). A theoretical possibility that a terrorist attack will occur is not the same as a "reasonably foreseeable" impact, the usual trigger point for NEPA reviews. Substituting theoretical possibility for probability analysis amounts to a worst-case approach, exaggerating a project's risks and unduly alarming the public.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

SCOPE OF EIS: SAFEGUARDS INFORMATION

Because NRC is required by law to protect key security-related information ("safeguards information") from unauthorized disclosures, it cannot make publicly available the kind of information necessary for a more than superficial NEPA review. *See* Atomic Energy Act, § 147, 42 U.S.C. § 2167. This limitation on information availability supports our decision not to use NEPA, in part a public information statute, as our vehicle to analyze terrorism. *Cf. Public Citizen v. Federal Aviation Administration*, 988 F.2d 186 (D.C. Cir. 1993) (FAA's statutory mandate to protect airport security overrides Administrative Procedure Act's notice-and-comment and publication requirements for rulemakings).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

SCOPE OF EIS: SECURITY REQUIREMENTS

We have in place substantial security requirements for our facilities and are studying whether additional action is necessary. Thus, even if terrorism were a matter cognizable under NEPA — and for the reasons given above we believe it is not — it would elevate form over substance to insist that we supplement our ongoing comprehensive review with a duplicative or formalistic NEPA study. See Friends of the River v. Federal Energy Regulatory Comission, 720 F.2d 93, 106-08 (D.C. Cir. 1983).

MEMORANDUM AND ORDER

On December 13, 2001, the Atomic Safety and Licensing Board referred to the Commission its decision denying admission of a late-filed contention of the State of Utah. Utah's contention related to the threat of a terrorist attack on Private Fuel Storage, L.L.C.'s (PFS) proposed independent spent fuel storage installation (ISFSI). We subsequently accepted review, 2 and also agreed to review three

¹LBP-01-37, 54 NRC 476 (2001).

²CLI-02-3, 55 NRC 155 (2002). The Commission accepted review of the question whether either the Atomic Energy Act (AEA) or the National Environmental Policy Act (NEPA) requires the NRC to consider the risk of terrorism in a licensing proceeding. The Commission declined to review the Board's ruling that Utah's proffered contention met our late-filing criteria. Utah subsequently dropped its AEA claim, leaving only its NEPA claim for our review.

other cases raising terrorism-related issues.³ The primary question in these cases is whether NEPA requires the NRC, in rendering licensing decisions, to consider the impacts of terrorism. We hold today that NEPA does not require a terrorism review.⁴

I. BACKGROUND

A. Overview

Below we consider in some detail the legal question whether NEPA requires an inquiry into the threat of terrorism at nuclear facilities. At the outset, however, we stress our determination, in the wake of the horrific September 11th terrorist attacks, to strengthen security at facilities we regulate. We currently are engaged in a comprehensive review of our security regulations and programs, acting under our AEA-rooted duty to protect "public health and safety" and the "common defense and security." We are reexamining, and in many cases have already improved, security and safeguards matters such as guard force size, physical barriers, access control, detection systems, alarm stations, response strategies, security exercises, clearance requirements and background investigations for key employees, and fitness-for-duty requirements. More broadly, we are rethinking the NRC's threat assessment framework and design basis threat. We also are reviewing our own infrastructure, resources, and communications.

Our comprehensive review may also yield permanent rule or policy changes that will apply to the proposed PFS facility and to other NRC-regulated facilities. The review process is ongoing and cumulative. It already has resulted in a number of security-related actions to address terrorism threats at both active and defunct nuclear facilities.

For instance, just after the September 11th terrorist attacks, we issued Threat Advisories to all licensees of nuclear power plants, nonpower reactors, nuclear fuel facilities, gaseous diffusion plants, and decommissioning reactors. The

³ Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-4, 55 NRC 158 (2002) (granting petition for review); Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-6, 55 NRC 164 (2002) (accepting certified question); Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-02-5, 55 NRC 161 (2002) (accepting referred ruling).

⁴ We reach the same conclusion in the other three companion cases. *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358 (2002); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-02-27, 56 NRC 367 (2002); and *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-24, 56 NRC 335 (2002).

⁵ See, e.g., AEA §§ 103(b) & (d), 104(d), 161(b), 182a, 189a(1)(B)(ii) & (iii), 42 U.S.C. §§ 2133(b) & (d), 2134(d), 2201(b), 2232(a), 2239(a)(1)(B)(ii) & (iii). See also Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), 4 AEC 9, 12 (Commission 1967) (these two statutory phrases "are fundamental to a delineation of the Commission's licensing authority and responsibility for [nuclear power plant] facilities"), aff'd sub nom. Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968).

Advisories indicated that these facilities should go to the highest level of security. As a result of our initial Advisories, nuclear power plant licensees increased patrols, augmented security forces and capabilities, added security posts, installed additional physical barriers, increased the standoff distance for vehicle checks, enhanced coordination with law enforcement and military authorities, and imposed more restrictive site access controls for all personnel. We continue to provide updates to the licensees regarding our original Threat Advisories, having so far issued more than thirty such updates. NRC security specialists have performed numerous onsite physical security vulnerability assessments at licensed facilities to evaluate the effectiveness of our licensees' enhanced security measures.

On February 25, 2002, after further security reviews, we took the additional step of issuing orders to all 104 power reactor licensees requiring them to take interim compensatory security measures over and above those required by our regulations. The orders formalized steps that those licensees had voluntarily taken in response to our Threat Advisories, and also included additional measures to further protect nuclear power plants. The newly required safeguards measures (whose details are not available to the public) include more patrols, more security personnel, and physical and vehicle barrier modifications. The orders also require additional security measures pertaining to waterways and owner-controlled land outside the plants' protected areas. The NRC Staff has confirmed that, as of August 31st, all nuclear power plant licensees are in compliance with the requirements set forth in these orders. In addition, the Staff is conducting independent inspections at licensee sites.

We have subsequently issued similar security-driven orders to Honeywell International, Inc., for its uranium conversion facility in Metropolis, Illinois, on March 25th; to General Electric Company for its wet storage facility in Morris, Illinois, on May 23d; to twelve nuclear plants that are being decommissioned also May 23d; to two enriched uranium fuel fabricators (BWX Technologies, Inc. and Nuclear Fuel Services) on August 22d; and to independent spent fuel storage facilities using dry cask storage on October 23d.

This set of orders will remain in effect until either the threat environment changes or we determine that additional orders or rules are needed.

In a related action, in January we increased the full-time staffing at the NRC Headquarters Operations Center, which takes in fast-breaking security and safety information. In April, we established a new Office of Nuclear Security and Incident Response. The new office is responsible for immediate operational security and safeguards issues as well as for long-term policy development. It works closely with law enforcement agencies and the Office of Homeland Security. It also coordinates the NRC's ongoing comprehensive security review,

⁶The standoff distance between a barrier and the nuclear plant is the distance between vital plant equipment and the closest exterior point of the vehicle barrier system.

including (for example) a major research effort to evaluate the vulnerabilities and potential effects of a large commercial aircraft crashing into a nuclear facility or into storage and transportation casks — issues raised in this proceeding.

B. Facts and Procedural Posture of This Case

PFS seeks a license to operate an ISFSI on the Skull Valley Goshute Indian Reservation in Utah. During the course of this litigation and prior to September 11, 2001, the Licensing Board admitted numerous issues for hearing, many of which await final merits resolution. But the Board rejected various contentions relating to the risks of terrorism or sabotage at the proposed facility, finding each to be inadmissible.⁷

In response to the terrorist attacks of September 11, 2001, Intervenor Utah asked the Board to admit its late-filed contention Utah RR, Suicide Mission Terrorism and Sabotage, which claimed violations of both the AEA and NEPA. Utah contended that the events of September 11 had materially changed the circumstances under which the Board had rejected previously proffered terrorism-related contentions by showing that a terrorist attack is both more likely and potentially more dangerous than previously thought.

Utah's new AEA "terrorism" claim argued that PFS's Safety Analysis Report and the Staff's Safety Evaluation Report failed to identify and adequately evaluate external man-induced events such as suicide mission terrorism and sabotage, "based on the current state of knowledge about such events," as required by an NRC rule. The Board found this argument an impermissible attack on NRC rules because, in promulgating security rules applicable to ISFSIs, the Commission had specifically considered and rejected requiring protection against the malevolent use of an airborne vehicle.

Utah's new NEPA "terrorism" claim argued that PFS's Environmental Report and the NRC Staff's draft Environmental Impact Statement (EIS)¹⁰ were deficient in failing to consider the environmental consequences of terrorists flying a fully loaded commercial jumbo jet into the PFS facility. Relying on a 1973 Appeal Board decision in the *Shoreham* proceeding,¹¹ the Board found that the rationale for excluding acts of war in our safety analysis — that this is the responsibility of the national defense establishment — applies equally to a NEPA analysis.

⁷ See LBP-98-13, 47 NRC 360, 372 (1998); LBP-98-10, 47 NRC 288, 296 (1998); LBP-98-7, 47 NRC 142, 186, 199, 216, 226, 233-34, aff'd on other grounds, CLI-98-13, 48 NRC 26 (1998).

⁸ See 10 C.F.R. § 72.94.

⁹LBP-01-37, 54 NRC at 485-86. See Final Rule, "Physical Protection for Spent Nuclear Fuel and High-Level Radioactive Waste," 63 Fed. Reg. 26,955-56 (May 15, 1998).

¹⁰The Final Environmental Impact Statement, dated December 2001, was not yet available at the time Utah submitted its contention and the Board made its ruling.

¹¹Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 851 (1973).

Therefore, the Board held that the NRC's NEPA responsibilities did not include considering the effects of terrorism. ¹² The Board also cited a 1989 Third Circuit decision, *Limerick Ecology Action v. NRC*, ¹³ which found that NRC had no duty to perform a "probabilistic risk assessment" of the risk of sabotage in an EIS because the petitioners had failed to show that such an assessment was possible. ¹⁴ Noting, however, that the extraordinary events of September 11 may have changed what can be said to be "reasonably foreseeable," the Board referred its terrorism ruling for immediate Commission review. ¹⁵

We accepted review, asking parties to address all issues "the parties determine are relevant," and in addition the question: "What is an agency's responsibility under NEPA to consider intentional malevolent acts, such as those directed at the United States on September 11, 2001?" ¹⁶

On review, Utah has abandoned its AEA-terrorism claim and focused on its NEPA-terrorism claim.¹⁷ Its NEPA claim does not ask that the NRC Staff inquire into or predict the likelihood of a September 11-style terrorist attack on the proposed ISFSI, but argues that the mere fact that these attacks occurred at other U.S. targets makes such an attack a reasonably foreseeable environmental impact of erecting this facility, requiring a NEPA review. Utah asks the Commission simply to assume an attack and go straight to analyzing its consequences. Both PFS and the NRC Staff, citing the *Shoreham* and *Limerick Ecology Action* decisions, maintain that terrorism and other intervening malevolent acts lie outside NEPA and need not be considered under that statute.

II. ANALYSIS

A. Introduction

The issue here is whether an unquantifiable threat of terrorism, in this case a suicidal air crash of a jumbo jetliner into an ISFSI, raises the kinds of environmental concerns that call for a NEPA review in an EIS. That is, does it serve the purposes of NEPA to include in an EIS a discussion of the impact of a catastrophic event that is not directly linked to an NRC licensing decision and the likelihood of which is impossible to quantify?

¹²LBP-01-37, 54 NRC at 487. See 10 C.F.R. § 50.13, "Attacks and destructive acts by enemies of the United States; and defense activities." This provision relieves reactor license applicants from providing for design features that protect against "enemies of the United States." By its terms, section 50.13 applies to production and utilization facilities only. It therefore does not apply directly to ISFSIs such as the one at issue in this proceeding.

¹³ 869 F.2d 719, 743-44 (3d Cir. 1989).

¹⁴LBP-01-37, 54 NRC at 487.

¹⁵ See id. at 487-88.

¹⁶CLI-02-3, 55 NRC at 162.

¹⁷ See State of Utah's Brief in Response to CLI-02-03 and in Support of Utah's Request for Admission of Late-Filed Contention Utah RR (Suicide Mission Terrorism and Sabotage), dated Feb. 27, 2002, at 3 n.2.

Terrorism differs from matters ordinarily considered in an EIS. The proposed PFS facility's EIS, for example, considers such matters as likely effects on local water, air quality, vegetation, wildlife, culture, and lifestyle. These effects are reasonably certain; an EIS can quantify them to a fair degree of precision. Terrorism, by contrast, comes in innumerable forms and at unexpected times and places. It is decidedly not predictable. And it is not a natural or inevitable byproduct of licensing the PFS facility. In our view, an EIS is not an appropriate format to address the challenges of terrorism. The purpose of an EIS is to inform the decisionmaking agency and the public of a broad range of environmental impacts that will result, with a fair degree of likelihood, from a proposed project, rather than to speculate about "worst-case" scenarios and how to prevent them.

By its own terms, NEPA is not absolute. It directs federal agencies "to use all practicable means, consistent with other considerations of national policy," in environmental reviews. ¹⁹ The NEPA process is governed by a "rule of reason." ²⁰ It does not extend to all conceivable consequences of agency decisions, no matter how far down the causal chain from a nuclear licensing decision and no matter how unpredictable. Using the NEPA process to consider terrorism also would be incompatible with NEPA's (and the NRC's) public participation process. In the wake of September 11, an overriding government priority is to avoid disclosing to terrorists themselves precisely where and how nuclear facilities might be most vulnerable and what steps are being taken to lessen terrorists' chance of success. Yet it would not be possible to embark upon a meaningful NEPA review of any type without engaging such subjects. NEPA does not override our concern for making sure that sensitive security-related information ends up in as few hands as practicable.

We hasten to add that our decision against including terrorism within our NEPA reviews does not mean that we plan to rule out the possibility of a terrorist attack against NRC-regulated facilities. On the contrary, as we outlined above, the Commission and its Staff have taken steps to strengthen security and are in the midst of an intense study of the effects of postulated terrorist attacks and of our relevant security and safeguards rules and policies. These activities are rooted in the NRC's ongoing responsibilities under the AEA to protect public health and safety and the common defense and security. But we see no practical benefit in conducting that review, case-by-case, under the rubric of NEPA, nor

¹⁸ The Commission evaluates the impacts of accidents precipitated by natural events such as earthquakes, hurricanes, and other severe storms. Unlike acts of terrorism, such events are closely linked to the natural environment of the area within which a facility will be located, and are reasonably predictable by examining weather patterns and geological data for that region. We do not know of similar principles that would permit reasonable prediction of an act of terrorism against a particular facility. Terrorism is a global issue, involving stochastic criminal behavior, independent of the planned facility.

¹⁹ See 42 U.S.C. § 4331(b).

²⁰ See Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 295 n.41 (2002).

any legal duty to do so. Below we set out a series of factors cutting against using the NEPA framework to conduct a terrorism review and against admitting Utah's NEPA-terrorism contention for hearing. These factors stand singly, and cumulatively, as justification against invoking NEPA as the basis for our terrorism review in nuclear licensing cases.

B. NEPA's Goals and the Rule of Reason

We begin with general NEPA requirements. NEPA demands that federal agencies prepare a "detailed statement . . . on the environmental impact" of any proposed major federal action "significantly affecting the quality of the human environment." Council on Environmental Quality (CEQ) regulations, which offer agencies guidance on NEPA compliance, provide that the EIS must discuss direct and indirect effects of the action. Direct effects are "caused by the action and occur at the same time and place." Indirect effects are "caused by the action and are later in time or farther removed in distance, but are still *reasonably foreseeable*," such as growth-inducing effects. CEQ regulations also caution that the EIS should not be overbroad.

NEPA's "dual purpose" is to ensure that federal officials fully take into account the environmental consequences of a federal action before reaching major decisions, and to inform the public, Congress, and other agencies of those consequences. These purposes inform our determination whether the potential impact of a terrorist attack is the type of information Congress intended for agencies to include in an EIS.

It is well established that NEPA requires only a discussion of "reasonably foreseeable" impacts. ²⁷ Grappling with this concept, various courts have described it as a "rule of reason," ²⁸ or "rule of reasonableness," ²⁹ which excludes "remote

²¹ See 42 U.S.C. § 4332(2)(C)(i).

²²40 C.F.R. § 1502.16. Although the Commission is not bound by CEQ regulations that it has not expressly adopted (*see Limerick Ecology Action*, 869 F.2d at 743), the Commission gives those regulations "substantial deference." *See Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-91-2, 33 NRC 61, 72 n.2 (1991).

^{23 40} C.F.R. § 1508.8(a).

²⁴ 40 C.F.R. § 1508.8(b) (emphasis added).

²⁵ Environmental impact statements should be "analytic rather than encyclopedic," and "shall be kept concise and shall be no longer than absolutely necessary to comply with NEPA and these regulations." 40 C.F.R. 8.1502 (2a) (b)

²⁶ See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989); Baltimore Gas and Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 97 (1983); Dubois v. U.S. Department of Agriculture, 102 F.3d 1273, 1291 (1st Cir. 1996).

²⁷ See, e.g., Wyoming Outdoor Council, Inc. v. U.S. Forest Service, 165 F.3d 43, 49 (D.C. Cir. 1999); Dubois v. U.S. Dept. of Agric., 102 F.3d at 1286; Sierra Club v. Marsh, 976 F.2d 763, 767 (1st Cir. 1992).

²⁸ See Davis v. Latschar, 202 F.3d 359, 368 (D.C. Cir. 2000); San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287, 1300-01 (D.C. Cir. 1984), vacated on other grounds, 760 F.2d 1320 (D.C. Cir. 1985).

²⁹ See Limerick Ecology Action, 869 F.2d at 745; Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827, 837 (D.C. Cir. 1972).

and speculative"³⁰ impacts or "worst-case" scenarios.³¹ Courts have excluded impacts with either a low probability of occurrence,³² or where the link between the agency action and the claimed impact is too attenuated to find the proposed federal action to be the "proximate cause" of that impact.³³ NEPA does not call for "examination of every conceivable aspect of federally licensed projects."³⁴ Here, the possibility of a terrorist attack on the PFS facility is speculative and simply too far removed from the natural or expected consequences of agency action to require a study under NEPA.

Two federal court of appeals decisions have addressed the issue of terrorism and NEPA in the area of nuclear regulation. Both decisions upheld, as reasonable, an agency refusal to consider terrorism under NEPA. In *Limerick Ecology Action v. NRC*, the Third Circuit determined that in licensing a nuclear power reactor the NRC could decline to consider the effects of terrorism in an EIS because the intervenors had not shown any way to predict or analyze the risk meaningfully. Similarly, in *City of New York v. U.S. Department of Transportation*, the Second Circuit held that, in permitting the transport of nuclear materials, the Department of Transportation need not perform a NEPA analysis of the effects of sabotage — because agencies had discretion to exclude such high-consequence, low-probability events:

DOT simply concluded that the risks of sabotage were too far afield for consideration. To a large degree this judgment was justified by the record. Substantial evidence indicated that sabotage added nothing to the risk of high-consequence accidents. Even the least sanguine commentators could say only that sabotage added an unascertainable risk. In light of these conflicting points of view, it was within DOT's discretion not to discuss the matter further beyond adopting the NRC security requirements.³⁶

³⁰ See Limerick Ecology Action, 869 F.2d at 739; Trout Unlimited v. Morton, 509 F.2d 1276, 1283 (9th Cir. 1974).
³¹ See Robertson v. Methow Valley Citizens Council, 490 U.S. at 354; Edwardsen v. U.S. Department of the Interior, 268 F.3d 781, 785 (9th Cir. 2001).

³² San Luis Obispo Mothers for Peace v. NRC, 751 F.2d at 1300-01 (NRC's exclusion from EIS of consequences of Class 9 accidents upheld in light of agency's finding that there was an extremely low probability of occurrence).

³³ See Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 760, 772-75 (1983). See also Presidio Golf Club v. National Park Service, 155 F.3d 1153, 1163 (9th Cir. 1998); No GWEN Alliance of Lane County v. Aldridge, 855 F.2d 380, 1385-86 (9th Cir. 1988). "At bottom the notion of proximate cause reflects ideas of what justice demands, or of what is administratively possible and convenient." Holmes v. SIPC, 503 U.S. 258, 268 (1992) (internal quotations omitted). The concept confines NEPA to "manageable" inquiries. Metropolitan Edison, 460 U.S. at 776.

³⁴Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 102-03 (1998). See also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, 155-56 (2002).

^{35 869} F.2d at 744.

³⁶715 F.2d 732, 750 (2d Cir. 1982), appeal dismissed and cert. denied, 465 U.S. 1055 (1984).

In short, the only two directly pertinent court of appeals decisions, *Limerick Ecology Action* and *City of New York*, give us no reason to include terrorism within our NEPA review.³⁷

It is sensible to draw a distinction between the likely impacts of the PFS facility and the impacts of a terrorist attack on the facility. Absent such a line, the NEPA process becomes truly bottomless, subject only to the ingenuity of those claiming that the agency must evaluate this or that potential adverse effect, no matter how indirect its connection to agency action. In our view, the causal relationship between approving the PFS facility and a third party deliberately flying a plane into it is too attenuated to require a NEPA review, particularly where the terrorist threat is entirely independent of the facility. Nonetheless, we examine below the broad scope of NEPA law to determine if there is any reason to view terrorism differently today, in the wake of the notorious September 11 attacks on the World Trade Center and the Pentagon.

C. The Risk of a Terrorist Attack Cannot Be Adequately Determined

The horrors of September 11 notwithstanding, it remains true that the likelihood of a terrorist attack being directed at a particular nuclear facility is not quantifiable. Any attempt at quantification or even qualitative assessment would be highly speculative. In fact, the likelihood of attack cannot be ascertained with confidence by any state-of-the-art methodology. That being the case, we have no means to assess, usefully, the risks of terrorism at the PFS facility. Risk, of course, is generally thought of as "the product of the probability of occurrence [and] the consequences." Here, though, we have no way to calculate the probability portion of the equation, except in such general terms as to be nearly meaningless.

Utah has presented no evidence of a system or technique for assessing accurately the probability of a terrorist attack in general or a September 11-type attack specifically. It argues, however, that qualitative factors could show that a terrorist threat is "reasonably foreseeable." It gives as an example a situation where a terrorist group, with the apparent wherewithal to mount such an attack, makes a specific threat against a facility or class of facilities. Although the probability of such attacks would still not be measurable, the threats would make attacks reasonably foreseeable and thus subject to NEPA, according to Utah. We note that there has been no such threat, however, against the proposed PFS facility.

³⁷ See also No GWEN Alliance of Lane County v. Aldridge, 855 F.2d at 1385-86 (speculation that a foreign nation might target military radio towers in a nuclear war does not trigger a NEPA duty to study the effects of such an attack).

attack).

38 Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-22, 54 NRC 255, 262 (2001).

If we were to speculate on the probability of the scenario in Utah's contention — a hijacked jumbo jet hitting the PFS facility and causing catastrophic effects — our guess is that the probability is actually minuscule. For one thing, Congress and the Federal Aviation Administration (FAA) have put in place enhanced anti-hijacking measures at airports and on commercial airplanes (e.g., enhanced passenger and baggage screening, strengthening of cockpit doors, the Air Marshall program). Moreover, the United States intelligence community and various law enforcement agencies have increased their efforts to identify potential terrorists and prevent potential attacks before they occur. For instance, the FAA and Department of Defense have acted more than once to protect the airspace above nuclear power plants from what were thought at the time to be credible threats.³⁹

In addition, terrorists seeking to cause havoc and destruction would find many targets far more inviting than the proposed PFS facility. That facility would be located in a remote, desert location far from population centers. And it would use NRC-approved strong storage casks, which are designed to minimize the effects of off-normal events and accidents.⁴⁰ Given this setting, a terrorist attack seemingly would be quite unlikely to result in a high-consequence release of radioactivity.

Because we have seen no evidence to the contrary, in this proceeding or elsewhere, we conclude that the risk of a terrorist attack on the proposed PFS facility (and other nuclear facilities) is beyond this agency's ability to determine meaningfully. Utah has not proposed other means to evaluate terrorism, besides suggesting that the NRC simply assume, on the basis of the September 11 terrorist attacks, that the PFS facility is at risk. This we decline to do, as it would transform NEPA analysis into a form of guesswork and distort NEPA's cost-benefit calculus. As in *Limerick Ecology Action, Inc. v. NRC*, therefore, the contention here fails to provide 'some method or theory by which the NRC could . . . enter[] into a meaningful analysis of the risk of sabotage despite its asserted inability to quantify the risks.' '41

D. NEPA Does Not Require a "Worst-Case" Analysis

Utah's proposed approach — that the NRC assume the likelihood of a suicidal air crash into the PFS facility and calculate the consequences — amounts to a form of "worst-case" analysis. While that approach at one time found favor in

³⁹ See PSEG Nuclear LLC (Salem Nuclear Generating Station, Units 1 and 2; Hope Creek Generating Station), DD-02-3, 56 NRC 243, 255-57 (2002).

⁴⁰ See generally NUREG-1714, "Final Environmental Impact Statement for the PFS Facility," Vol. 1, at 4-49 through 4-53 (December 2001).

^{41 869} F.2d at 744.

NEPA case law, today it stands discredited. Both the Supreme Court and CEQ have concluded that NEPA does not call for a "worst-case" inquiry, which, it is now recognized, simply creates a distorted picture of a project's impacts and wastes agency resources.⁴²

In theory, as the NRC Staff brief acknowledges, the NRC could attempt to perform a "worst-case" analysis on the basis of much conjecture and numerous assumptions. But is it useful or legally necessary to do so? For instance, with no meaningful way to determine the probability that terrorists will attack the PFS facility, the most that can be said is that a repeat of the September 11 scenario, this time directed at PFS rather than an office building, is a theoretical possibility. A theoretical possibility, though, is not the same as a "reasonably foreseeable" impact, the usual trigger-point for NEPA reviews. Substituting theoretical possibility for probability analysis amounts to a worst-case approach. It exaggerates a project's risks and might unduly alarm the public.

In Robertson v. Methow Valley Citizens Council, the Supreme Court held that NEPA's "twin functions - requiring agencies to take a 'hard look' at the consequences of the proposed action and providing important information to other groups and individuals" — do not call for an inquiry into worst-case possibilities.⁴³ The Court pointed with approval to CEQ's 1986 abandonment of a regulation that had required EISs to include worst-case analyses.⁴⁴ The Court stated that CEQ's original rule had led agencies to devote substantial effort to "limitless" analyses — "that is, one can always conjure up a worse 'worst case' by adding an additional variable to a hypothetical scenario." 45 CEQ's new focus on "reasonably foreseeable impacts," the Court said, "will generate information of greatest concern to the public and of greatest relevance to the agency's decision, rather than distorting the decisionmaking process by overemphasizing highly speculative harms."46

Under Robertson, an analysis of a hypothetical terrorist attack has no place in the EIS for the PFS facility. NEPA's mandate to federal agencies, as we see it, is to consider a broad range of environmental effects that are reasonably likely to ensue as a result of a major agency action, not to engage in speculation about what might happen as a result of criminal terrorist activities. The PFS EIS discusses a range of likely impacts, including radiological impacts on workers and the public, air quality impacts, impacts on plant life, visual impacts, impacts on wildlife, and socioeconomic and cultural impacts on the local community. While not all these effects can be "measured" or "determined" in a concrete fashion — for

⁴² Robertson v. Methow Valley Citizens Council, 490 U.S. at 354-55.

⁴³ Id. at 356.

⁴⁴ *Id.* at 354-56; *see* 40 C.F.R. § 1502.22 (1985) (requiring worst-case analysis).

^{45 490} U.S. at 356 n.17, quoting CEQ Proposed Rule, "National Environmental Policy Act Regulations," 50 Fed. Reg. 32,234, 32,236 (Aug. 9, 1985). ⁴⁶ See 490 U.S. at 356.

example, the facility's impact on scenic values — the Staff can say with some degree of certainty that the impacts studied will take place.

This is in striking contrast to the impacts of an airborne terrorist attack at the PFS site using a commercial aircraft, an event that could possibly happen but is hardly a natural or expected consequence of licensing the facility. Utah says that we should take guidance from *Sierra Club v. Marsh*, a First Circuit decision concluding that "reasonable foreseeability" under NEPA means that "the impact is sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision." Distinguishing "reasonably foreseeable" effects from those that are "highly speculative," the court asked: "With what confidence can one say that the impacts are likely to occur?" Utah, in turn, asks its own question under the *Sierra Club v. Marsh* formulation, "What person of ordinary prudence would not want to know, before deciding to license a facility that might some day house the nation's entire current inventory of spent nuclear fuel, what the reasonably foreseeable environmental impacts would be of an airborne assault on the facility?" 49

Utah asks the wrong question. The "reasonably foreseeable" effects of a successful attack with a jumbo jet against the PFS facility are not the same as the "reasonably foreseeable" impacts of simply licensing the facility. Utah's attempt to conflate the probability of the initiating event (terrorism) with its consequences simply skips over the question whether the impacts are "likely to occur," a key element of *Sierra Club v. Marsh's* "ordinary prudence" test.

With Utah having provided no reason to believe that an airborne terrorist attack on the PFS facility is "likely to occur"—indeed, Utah asks us simply to assume that it will—we cannot conclude that such an attack is a "reasonably foreseeable" impact of building the proposed ISFSI. To hold otherwise would mean that we would have to consider such attacks foreseeable at any facility under our jurisdiction. And Utah's view of foreseeability does not seem confined to airborne terrorist attacks. On Utah's approach, presumably all other kinds of terrorism, if conceivable, would require NEPA review as well, both in EISs and at NRC hearings. Such an open-ended approach to NEPA is unworkable because

⁴⁹ See Utah's Brief at 8.

⁴⁷ 976 F.2d at 767. See also Dubois v. U.S. Dept. of Agric., 102 F.3d at 1286.

⁴⁸ 976 F.2d at 768, quoting Sierra Club v. Marsh, 769 F.2d 868, 878 (1st Cir. 1985).

it has no stopping point.⁵⁰ As the Supreme Court noted in *Robertson*, it is always possible to "conjure up" progressively more disastrous scenarios.⁵¹

The Court's rejection of worst-case NEPA reviews in *Robertson* relieves agencies of the arduous and unproductive task of analyzing conceivable, but very speculative, catastrophes. It also enables agencies to use their limited resources more effectively.⁵²

E. NEPA's Public Process Is Not a Forum for Sensitive Security Issues

Although we conclude in the previous discussion that there is no basis on which to provide a reasonable measure of the risk of terrorism and that the risk of terrorism is far afield from issues involving the natural environment of the facility, the Commission is presently engaged in analyzing how to keep such risk at a minimum. Part of this effort is to protect sensitive information from falling into the hands of those with malevolent intentions. The public aspect of NEPA processes conflicts with the need to protect certain sensitive information. NEPA requires agencies to include the public in NEPA reviews.⁵³ Indeed, public information and public participation form a large part of NEPA's *raison d'etre*.⁵⁴ At the NRC, public input includes not just an opportunity to comment on draft EISs, but also an opportunity to contest environmental findings at agency hearings on the licensing action in question.

In our view, the public interest would not be served by inquiries at NRC hearings and public meetings into where and how nuclear facilities are vulnerable, how they are protected and secured, and what consequences would ensue if

⁵⁰To put the burden of considering threats of terrorism into perspective, it is useful to consider the cumulative burden on the federal government as a whole that would result from such free-ranging inquiries. Because there are no limits or natural boundaries to the possibility of a terrorist strike, if one were to conclude that NEPA requires an agency to consider such threats, then the environmental reviews for thousands of federal actions throughout the nation would be required to consider terrorism, including those for individual highways, dams, bridges, etc.

This is not to suggest that an environmental review should never consider the threat of terrorism. We address today only whether NEPA requires such a study. In fact, the NRC has briefly considered, as a matter of discretion, the issue of terrorism in generic environmental reviews for certain broad categories of activities. See, e.g., NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Vol. 1, § 5.3.3.1, at p. 5-18 (May 1996); NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Vol. 1, Addendum 1, Appendix 1 at p. A1-17 (August 1999).

⁵¹ See 490 U.S. at 356 n.17.

⁵² See Kansas Gas and Electric Co. (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441, 463 (1999); General Public Utilities Nuclear Corp. (Three Mile Island Nuclear Station, Units 1 and 2; Oyster Creek Nuclear Generating Station), CLI-85-4, 21 NRC 561, 563-64 (1985), quoting Rockford League of Women Voters v. NRC, 679 F.2d 1218, 1222 (7th Cir. 1982); Westinghouse Electric Corp. (Exports to the Philippines), CLI-80-14, 11 NRC 631, 649 (1980). See generally Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827, 837 (D.C. Cir. 1972) (NEPA "must be construed in the light of reason if it is not to demand what is, fairly speaking, not meaningfully possible, given . . . that the resources of energy and research — and time — available to meet the Nation's needs are not infinite").

⁵³ See 42 U.S.C. § 4332.

⁵⁴ See Robertson v. Methow Valley Citizens Council, 490 U.S. at 356.

security measures failed at a particular facility. Such NEPA reviews may well have the perverse effect of assisting terrorists seeking effective means to cause a release of radioactivity with potential health and safety consequences.

Years ago, before NEPA's enactment, the Atomic Energy Commission (AEC) considered the question whether it should use its hearing process to assess the risk of "enemy attack or sabotage" against a particular facility (the Turkey Point reactor in Florida). 55 The AEC rejected the idea, holding that "examination into the above matters, apart from their extremely speculative nature, would involve information singularly sensitive from the standpoint of . . . our national defense."56 Such matters, according to the AEC, are "clearly not amenable to board consideration and determination."57 The AEC commented that it "would not propose to make them cognizable issues in the absence of a clear Congressional direction to that end."58 Congress has enacted no such directive.

NEPA does not override the AEC's (and our) concern for making sure that sensitive security-related information ends up in as few hands as practicable. NEPA itself includes limiting provisions. Section 101(b) of NEPA requires agencies to implement the statute's policies using "all practicable means, consistent with other essential considerations of national policy."59 Another passage in the same section provides that the federal government's efforts to "attain the widest range of beneficial uses of the environment" are subject to restraints based on "risk to health and safety, or other undesirable and unintended consequences."60 These provisions caution against using the NEPA process for a terrorism review. A full-scale NEPA process inevitably would require examination not only of how terrorists could cause maximum damage but also of how they might best be thwarted. But keeping those kinds of information secret is vital. To use NEPA's own terms, confidentiality in this area is an "essential consideration of national policy," protects against "risks to health and safety," and avoids "undesirable and unintended consequences."

For the NRC, protecting safeguards information is not simply a policy choice. It is required by law. Section 147 of the AEA provides that the NRC "shall" prohibit unauthorized disclosures of key security-related information. Consequently, the NRC cannot make publicly available the kind of information necessary for a

⁵⁵ Turkey Point, 4 AEC at 13-14, aff'd sub nom. Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968).

⁵⁶ *Id.* at 14.

⁵⁷ *Id*.

⁵⁸ Id.

⁵⁹42 U.S.C. § 4331(b) (emphases added). See also NEPA § 101(a), 42 U.S.C. § 4331(a) ("it is the continuing policy of the Federal Government . . . to use all practicable means and measures. . . . [t]o create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans' (emphasis added)). ⁶⁰ 42 U.S.C. § 4331(b)(3).

more than superficial NEPA review.⁶¹ This limitation on information availability supports our decision not to use NEPA, in part a public information statute, as our vehicle to analyze terrorism.⁶²

We recognize that in *Weinberger v. Catholic Action of Hawaii*, 454 U.S. 139 (1981) (which did not involve issues of terrorism), the Court indicated that the Navy should perform a NEPA review in the given circumstances, and factor it into its decisionmaking, even if the NEPA results could not be publicized or adjudicated.⁶³ Such a review would be useful to an agency that otherwise might not consider an issue relevant to licensing. But here, a formal NEPA review, secret or otherwise, would not add meaningfully to our understanding of the terrorism issue, in light of our ongoing studies and existing requirements and directives. And widespread NEPA-terrorism reviews, even if we attempted to keep EISs and hearings confidential, increase the risk of dangerous security breaches.

As we explained above in detail,⁶⁴ our refusal to assess terrorism's risks under the ritualized NEPA process — EISs, public comment, adjudicatory hearings — hardly means that the NRC is ignoring those risks, either at individual facilities or in general. Working closely with the Office of Homeland Security and with other agencies, the NRC after September 11 has shifted substantial resources and personnel to a study of the terrorism threat. We already have upgraded security requirements, with more improvements in the pipeline. Our agency is engaged in intensive research on facility vulnerabilities; it is considering additional or alternate means of protection; and it is looking in particular at the effects of suicidal crashes of large commercial airplanes,⁶⁵ the focus of Utah's contention here.

Given our existing efforts, it is not obvious what additional information or insights a formal NEPA review might bring into play. ⁶⁶ We already are reviewing

⁶¹ See Warm Springs Dam Task Force v. Gribble, 621 F.2d 1017, 1027 (9th Cir. 1988) ("[e]veryone recognizes the catastrophic results of the failure of the dam; to detail these results would serve no useful purpose").

⁶² Cf. Public Citizen v. Federal Aviation Administration, 988 F.2d 186 (D.C. Cir. 1993) (FAA's statutory mandate to protect airport security overrides Administrative Procedure Act's notice-and-comment and publication requirements for rulemakings).

⁶³ 454 U.S. 139, 143 (1981).

⁶⁴ See Section I.A, supra, entitled "Overview."

⁶⁵ See PSEG Nuclear LLC (Salem Nuclear Generating Station, Units 1 and 2; Hope Creek Generating Station), DD-02-3, 56 NRC 243, 262 (2002), review declined, unpublished letter of NRC Secretary (Dec. 6, 2002):

[[]T]he NRC, in conjunction with DOE laboratories, is continuing a major research and engineering effort to evaluate the vulnerabilities and potential effects of a large commercial aircraft impacting a nuclear power plant. This effort also includes consideration of possible additional preventive or mitigative measures to further protect public health and safety in the event of a deliberate aircraft crash into a nuclear power plant or spent fuel storage facility. The final results from that analysis are not yet available. If the ongoing research and security review recommends any other security enhancements, the NRC will take the appropriate action.

⁶⁶ Although the Commission concludes that NEPA does not call for a formalistic NEPA study on the impacts of terrorism, the FEIS for the PFS project will include the Commission's comprehensive discussion here of the terrorism issue. *See Claiborne*, CLI-98-3, 47 NRC at 89 ("The adjudicatory record and the Board decision (and, of course, any Commission appellate decisions) become, in effect, part of the FEIS. *See*, e.g., *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 705-07 [1985].").

terrorism from nearly every conceivable angle. We have in place substantial security requirements for our facilities and are studying whether additional action is necessary. Thus, even if terrorism were a matter cognizable under NEPA — and for the reasons given above we believe it is not — it would elevate form over substance to insist that we supplement our ongoing comprehensive review with a duplicative or formalistic NEPA study.⁶⁷

III. CONCLUSION

For the foregoing reasons, we decline to require a NEPA review of the impact of terrorism at the proposed PFS facility. We therefore *affirm* the Licensing Board decision rejecting Utah's late-filed terrorism contention (Late-Filed Contention Utah RR).

IT IS SO ORDERED.

For the Commission⁶⁸

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 18th day of December 2002.

⁶⁷ See Friends of the River v. Federal Energy Regulatory Comission, 720 F.2d 93, 106-08 (D.C. Cir. 1983).

⁶⁸ Commissioner Dicus was not present for the affirmation of this Order. If she had been present, she would have approved it.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of Docket Nos. 50-369-LR

50-370-LR 50-413-LR 50-414-LR (consolidated)

DUKE ENERGY CORPORATION
(McGuire Nuclear Station, Units 1 and 2;
Catawba Nuclear Station, Units 1
and 2)

December 18, 2002

The Commission declines to consider terrorism-related issues in this license renewal proceeding, pursuant to either the AEA or NEPA.

LICENSE RENEWAL PROCEEDING: SCOPE ADJUDICATORY PROCEEDING: SCOPE

AEA: SCOPE

NRC: RESPONSIBILITIES UNDER THE AEA

A license renewal review is narrow in scope, confined to aging analyses of the plant's structures, systems, and components. Thus, contentions related to terrorism are beyond the scope of the NRC Staff's safety review under the Atomic Energy Act and this proceeding.

NEPA: NEED FOR ENVIRONMENTAL REVIEW; NRC RESPONSIBILITIES; SCOPE OF ENVIRONMENTAL ANALYSIS

NRC: ENVIRONMENTAL RESPONSIBILITIES

The NRC has no responsibility under NEPA to consider intentional malevolent acts in conjunction with Duke's license renewal applications.

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY); ADMISSIBILITY OF CONTENTIONS; INTERVENTION

The Commission's rules governing licensing proceedings require that a petitioner to intervene raise at least one admissible contention. To be admissible, a contention must be supported by "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." *See* 10 C.F.R. § 2.714(b)(2)(i), (ii), (iii); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 361-62 (2001). For a contention to satisfy this requirement, it must fall within the scope of the proceeding, as that scope is defined by the Commission in its Referral Order and the relevant regulatory provisions. This is because the referral order and relevant regulations determine what contentions are "material" to a proceeding.

LICENSE RENEWAL PROCEEDINGS: SCOPE; ADMISSIBILITY ADJUDICATORY PROCEEDING: SCOPE

AEA: SCOPE

NRC: RESPONSIBILITIES UNDER THE AEA

The scope of the AEA portion of a license renewal proceeding is narrow. Final Rule, "Nuclear Power Plant License Renewal; Revisions," 60 Fed. Reg. 22,461, 22,465, 22,481 (May 8, 1995) (1995 Final Rule). In our order referring this proceeding to the Licensing Board, we specifically limited the case's scope under the AEA to "a review of the plant structures and components that will require an aging management review for the period of extended operation and the plant's systems, structures, and components that are subject to an evaluation of time-limited aging analyses." Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-20, 54 NRC 211, 212-13 (2001), citing 1995 Final Rule and 10 C.F.R. §§ 54.4, 54.21(a), (c). See also Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 391 (2001), citing Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 6-13 (2001). This scope limitation derives from our rules governing

license renewal applications. In developing those rules, we concluded that the AEA issues to be addressed in determining whether to renew a reactor operating license for 20 additional years should be far more limited than the AEA issues that we address when reviewing an initial operating license application. This agency's ongoing regulatory oversight programs routinely address many safety issues and will continue to address them in years 41 through 60 of a plant's life (assuming a grant of the renewal application). *Turkey Point*, CLI-01-17, 54 NRC at 7-9. *See also* 1995 Final Rule, 60 Fed. Reg. at 22,464. Therefore, consideration of those issues in a license renewal proceeding would be unnecessary and wasteful. *Turkey Point*, CLI-01-17, 54 NRC at 8.

The proffered terrorism contentions are not sufficiently related to the effects of plant aging to fall within the scope of the AEA portion of this proceeding. They are therefore inadmissible in the AEA portion of the proceeding.

Terrorism contentions are, by their very nature, directly related to security and are therefore, under our rules, unrelated to "the detrimental effects of aging." Consequently, they are beyond the scope of, not "material" to, and inadmissible in a license renewal proceeding.

NEPA: SCOPE; ENVIRONMENTAL IMPACT STATEMENT; HEARINGS; NEED FOR ENVIRONMENTAL REVIEW; NRC RESPONSIBILITIES; SCOPE OF ENVIRONMENTAL ANALYSIS

NRC: ENVIRONMENTAL RESPONSIBILITIES

NEPA imposes no legal duty on the NRC to consider intentional malevolent acts, such as the recent attacks on New York City and the Pentagon, on a case-by-case basis in conjunction with commercial power reactor license renewal applications. The "environmental" effect caused by third-party miscreants "is . . . simply too far removed from the natural or expected consequences of agency action to require a study under NEPA." See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002)

An environmental impact statement is not the appropriate format in which to address the challenges of terrorism. We reached this conclusion for a number of interlocking reasons: (1) the likelihood and nature of postulated terrorist attack are speculative and not "proximately caused" by an NRC licensing decision (*id.* at 347, 348-50); (2) the risk of a terrorist attack cannot be meaningfully determined (*id.* at 350-51); (3) NEPA does not require a "worst-case" analysis and such an analysis would not enhance the agency's decisionmaking process (*id.* at 347, 351-54; and (4) a terrorism review is incompatible with the public character of the NEPA process (*id.* at 354-57).

Particularly in the case of a license renewal application, where reactor operation will continue for many years regardless of the Commission's ultimate decision, it is sensible not to devote resources to the likely impact of terrorism during the license renewal period, but instead to concentrate on how to prevent a terrorist attack in the near term at the already licensed facilities. As there appears to be little practical benefit in conducting a license renewal terrorism review, the Commission has no duty under NEPA to do so.

Because the McGuire and Catawba plants are already licensed to operate until the 2020s, an immediate site-specific analysis of the potential for terrorist attacks would not alleviate the Intervenor's articulated concerns.

Even if we were required by law to consider terrorism under NEPA, the NRC has already issued a Generic Environmental Impact Statement ("GEIS") that considers sabotage in connection with license renewal. The GEIS concluded that, if such an event were to occur, the resultant core damage and radiological releases would be no worse than those expected from internally initiated events. *See* NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (May 1996), Vol. 1 at p. 5-18.

MEMORANDUM AND ORDER

This Order addresses fourteen security- and terrorism-related contentions that the Nuclear Information and Resource Service (NIRS) submitted to the Atomic Safety and Licensing Board and which the Board subsequently certified to the Commission. In submitting these contentions for litigation, NIRS (with supporting briefs from its fellow Intervenor, the Blue Ridge Environmental Defense League (BREDL)) asserts that Commission approval of the proposed license renewals would increase the risks of terrorist attacks on the McGuire and Catawba plants. Duke Energy Corporation (Duke) and the NRC Staff disagree. For the legal and policy reasons set forth below, we decline to consider these contentions and we instruct the Board to do the same.

¹LBP-02-4, 55 NRC 49, certification accepted, CLI-02-6, 55 NRC 164 (2002). These contentions raise issues involving possible terrorist attacks using airplanes, boats, and truck bombs; the destruction of dams that hold the water used to cool the reactors; attacks on spent fuel or the facilities outside the containment structure; attacks using multiple teams and multiple insiders; the increased attractiveness of the plants as terrorist targets if they use mixed-oxide (MOX) fuel; the vulnerability of the electrical grid systems and station switchyards to sabotage; the impacts of fire as well as direct physical destruction on combustible fire penetration seals; and the loss of major pieces of infrastructure such as drinking water and access to emergency telephone numbers (911).

I. PROCEDURAL BACKGROUND²

This proceeding stems from Duke's application of June 13, 2001, to renew the operating licenses for four nuclear power plants for an additional 20 years of operation, effective at their licenses' respective expiration dates in the 2020s. On October 23, 2001, BREDL filed a petition asking the Commission to dismiss Duke's application or hold this adjudication in abeyance pending major anticipated changes in the plants' current licensing bases, including changes to address increased terrorism-related security threats. On December 28, 2001, we issued CLI-01-27, denying BREDL's petition on the grounds that the instant adjudication would address many contentions entirely unconnected to terrorism, would result in no immediate licensing action, and would cause BREDL no injury other than litigation costs.³

On January 24, 2002, the Board issued LBP-02-4 in which it concluded that Petitioners had demonstrated standing and had offered admissible contentions concerning risks associated with the plants' anticipated use of MOX fuel, the plants' ice condensers, and the likelihood of station blackouts. However, the Board declined to rule on the admissibility of NIRS's contentions relating to terrorism risks, and instead certified those contentions to the Commission. On February 6, 2002, the Commission issued CLI-02-6, accepting certification of the terrorism contentions and setting a briefing schedule.⁴ On February 25 and March 12, 2002, the parties filed the requested briefs. The Nuclear Energy Institute (NEI), stating that its interests were aligned with those of the applicant, also requested permission to file a brief *amicus curiae* regarding terrorism issues.⁵

II. DISCUSSION

The Commission recognizes that it cannot rule out the possibility of a terrorist threat to NRC-regulated facilities. Indeed, the NRC Staff is conducting a

²For a more detailed procedural background, we refer the reader to our recent order rejecting Petitioners' MOX fuel contentions. *See* CLI-02-14, 55 NRC 278 (2002).

³ 54 NRC 385, 389-91.

⁴55 NRC 164. The Commission simultaneously issued similar orders agreeing to address terrorism contentions in three other proceedings: See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-3, 55 NRC 155 (2002), accepting referral of LBP-01-37, 54 NRC 476 (2001) (denying admission of terrorism contention and referring contention to the Commission); Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-02-5, 55 NRC 161 (2002), accepting referral of LBP-02-5, 55 NRC 131 (2002) (denying admission of terrorism contention and referring contention to the Commission); and Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-4, 55 NRC 158 (2002), granting in part petition for interlocutory review of unpublished Memorandum and Order (Ruling on Motion To Reconsider) (Jan. 16, 2002) (denying reconsideration of admission of terrorism contention). Today, we likewise issue orders on the admissibility of the terrorism contentions in those same three proceedings.

⁵We grant NEI's request.

comprehensive review of the potential effects of terrorist attacks and of our security and safeguards rules and procedures. In addition, we continue to work with other responsible agencies to combat the terrorism threat, and we have already upgraded security requirements, with additional adjustments in the offing.⁶

As detailed below, a license renewal review is narrow in scope, confined to aging analyses of the plant's structures, systems, and components. Thus, contentions related to terrorism are beyond the scope of the NRC Staff's safety review under the Atomic Energy Act and this proceeding. We also find that the NRC has no responsibility under NEPA to consider intentional malevolent acts in conjunction with Duke's license renewal applications.

A. AEA Contentions

The Commission's rules governing licensing proceedings require that a petitioner to intervene raise at least one admissible contention. To be admissible, a contention must be supported by "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." For a contention to satisfy this requirement, it must fall within the scope of the proceeding, as that scope is defined by the Commission in its Referral Order and the relevant regulatory provisions (here, 10 C.F.R. §§ 51.71(d), 51.95(c), 54.4, 54.21(a) & (c), 54.29, and 54.30). This is because the referral order and relevant regulations determine what contentions are "material" to a proceeding.

The scope of the AEA portion of a license renewal proceeding is narrow.¹¹ In our order referring this proceeding to the Licensing Board, we specifically limited the case's scope under the AEA to "a review of the plant structures and components that will require an *aging* management review for the period of extended operation and the plant's systems, structures, and components that are

⁶ See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 343-45 (2002).

⁷ 10 C.F.R. § 2.714(b)(1).

⁸ Regarding other admissibility requirements, see 10 C.F.R. § 2.714(b)(2)(i), (ii), (iii); Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 361-62 (2001).

⁹Regarding referral orders, see Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-20, 54 NRC 211, 212-13 (2001). Regarding pertinent regulations, see Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000). Regarding both, see Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 22 (1998).

¹⁰ 10 C.F.R. § 2.714(d)(2)(ii). In addition, a factual or legal issue is material to a proceeding only if it would entitle petitioner to relief.

¹¹ Final Rule, "Nuclear Power Plant License Renewal; Revisions," 60 Fed. Reg. 22,461, 22,465, 22,481 (May 8, 1995) (1995 Final Rule).

subject to an evaluation of time-limited *aging* analyses." ¹² This scope limitation derives from our rules governing license renewal applications. In developing those rules, we concluded that the AEA issues to be addressed in determining whether to renew a reactor operating license for 20 additional years should be far more limited than the AEA issues that we address when reviewing an initial operating license application. This agency's ongoing regulatory oversight programs routinely address many safety issues and will continue to address them in years 41 through 60 of a plant's life (assuming a grant of the renewal application). ¹³ Therefore, consideration of those issues in a license renewal proceeding would be unnecessary and wasteful. ¹⁴

The threshold AEA-related question before us is whether NIRS's terrorism contentions are sufficiently related to the effects of plant aging to fall within the scope of the AEA portion of this proceeding. They are not, and we therefore conclude that they are inadmissible in the AEA portion of the proceeding. As we stated in the Statement of Consideration for our 1995 License Renewal Final Rule:

[T]he portion of the [current licensing basis] that can be impacted by the detrimental effects of aging is limited to the design-bases aspects of the [current licensing basis]. All other aspects of the [current licensing basis], e.g., . . . physical protection (security). . . , are not subject to physical aging processes. . . . "15

and similarly in the Statement of Consideration for our earlier 1991 License Renewal Final Rule:

[T]he Commission concludes that a review of the adequacy of existing security plans is not necessary as part of the license renewal review process. ¹⁶

Terrorism contentions are, by their very nature, directly related to security and are therefore, under our rules, unrelated to "the detrimental effects of aging." Consequently, they are beyond the scope of, not "material" to, and inadmissible in, a license renewal proceeding.

¹² McGuire, CLI-01-20, 54 NRC at 212-13 (emphasis added), citing 1995 Final Rule and 10 C.F.R. §§ 54.4, 54.21(a), (c). See also Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 391 (2001) ('License renewal, by its very nature, contemplates a limited inquiry — i.e., the safety and environmental consequences of an additional 20-year operating period. License renewal focuses on aging issues, not on everyday operating issues'' (emphasis in original; footnotes omitted)), citing Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 6-13 (2001).

¹³ CLI-01-17, 54 NRC at 7-9. *See also* 1995 Final Rule, 60 Fed. Reg. at 22,464.

¹⁴CLI-01-17, 54 NRC at 8.

^{15 1995} Final Rule, 60 Fed. Reg. at 22,475 (emphasis added).

¹⁶ Final Rule, ''Nuclear Power Plant License Renewal,'' 56 Fed. Reg. 64,943, 64,967 (Dec. 13, 1991) (1991 Final Rule) (emphasis added).

B. NEPA Contentions

For the reasons we set out today in *Private Fuel Storage*, we find that NEPA imposes no legal duty on the NRC to consider intentional malevolent acts, such as the recent attacks on New York City and the Pentagon, on a case-by-case basis in conjunction with commercial power reactor license renewal applications.¹⁷ The "environmental" effect caused by third-party miscreants "is . . . simply too far removed from the natural or expected consequences of agency action to require a study under NEPA."¹⁸

An environmental impact statement is not the appropriate format in which to address the challenges of terrorism. We reached this conclusion for a number of interlocking reasons: (1) the likelihood and nature of postulated terrorist attack are speculative and not "proximately caused" by an NRC licensing decision;¹⁹ (2) the risk of a terrorist attack cannot be meaningfully determined;²⁰ (3) NEPA does not require a "worst-case" analysis and such an analysis would not enhance the agency's decisionmaking process;²¹ and (4) a terrorism review is incompatible with the public character of the NEPA process.²² Particularly in the case of a license renewal application, where reactor operation will continue for many years regardless of the Commission's ultimate decision, it is sensible not to devote resources to the likely impact of terrorism during the license renewal period, but instead to concentrate on how to prevent a terrorist attack in the near term at the already licensed facilities.²³ As there appears to be little practical benefit in conducting a license renewal terrorism review, the Commission has no duty under NEPA to do so.²⁴

Moreover, our decision today not to use NEPA as a vehicle for a terrorism review hardly means that we are ignoring the issue. As detailed in today's *Private Fuel Storage* decision, we are closely examining our current security and protective framework and already have ordered interim improvements at licensed

¹⁷ See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002); accord Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), CLI-02-27, 56 NRC 367 (2002); and Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-24, 56 NRC 335 (2002).

¹⁸ See Private Fuel Storage, CLI-02-25, 56 NRC at 349.

¹⁹ See id. at 347, 348-50.

²⁰ See id. at 350-51.

²¹ See id. at 347, 351-54.

²² See id. at 354-57.

²³ Cf. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 343 (2002) (terrorist attacks are neither caused by nor result from the proposed license transfers).

²⁴Because the McGuire and Catawba plants are already licensed to operate until the 2020s, an immediate site-specific analysis of the potential for terrorist attacks would not alleviate the Intervenor's articulated concerns.

Even if we were required by law to consider terrorism under NEPA, the NRC has already issued a Generic Environmental Impact Statement ("GEIS") that considers sabotage in connection with license renewal. See NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (May 1996) ("GEIS"). The GEIS concluded that, if such an event were to occur, the resultant core damage and radiological releases would be no worse than those expected from internally initiated events. See id., Vol. 1 at p. 5-18.

nuclear facilities, including reactors.²⁵ We expect further improvements as our internal comprehensive review moves forward.

III. CONCLUSION

We decline in this proceeding to consider NIRS's AEA- and NEPA-related contentions regarding terrorist threats to the McGuire and Catawba plants, and we therefore direct the Board to reject those contentions.

IT IS SO ORDERED.

For the Commission²⁶

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 18th day of December 2002.

²⁵ See Private Fuel Storage, CLI-02-25, 56 NRC at 343-45.

²⁶ Commissioner Dicus was not present for the affirmation of this Order. If she had been present, she would have approved it.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 50-423-LA-3

DOMINION NUCLEAR CONNECTICUT, INC. (Millstone Power Station, Unit 3)

December 18, 2002

In this license amendment proceeding to increase the storage capacity of the spent fuel pool at the Millstone Unit No. 3 reactor through the use of high-density storage racks, the Commission affirms the Board's decision to reject the Intervenors' contention that the NRC needs to prepare an environmental impact statement discussing the risks and consequences of terrorism affecting the Millstone spent fuel pool.

TERRORISM

NEPA

NEPA imposes no legal duty on the NRC to consider intentional malevolent acts, such as those directed at the United States on September 11, 2001, in conjunction with the license amendment to expand spent fuel pool storage capacity at Millstone Unit 3. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002); accord Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358 (2002); and Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-24, 56 NRC 335 (2002). "[T]he possibility of a terrorist attack . . . is speculative and simply

too far removed from the natural or expected consequences of agency action to require a study under NEPA." *Private Fuel Storage*, CLI-02-25, 56 NRC at 349.

SAFEGUARDS AND SECURITY INFORMATION

NEPA

The NRC cannot make publicly available the kind of information necessary for a more than superficial NEPA review of the possible impacts of terrorism on a licensee's facility. *See Private Fuel Storage*, CLI-02-25, 56 NRC at 354-57.

NUCLEAR WASTE POLICY ACT

Congress has recognized the need for and encouraged high-density spent fuel storage at reactor sites. See Nuclear Waste Policy Act, 42 U.S.C. §§ 10131 et seq.

TERRORISM

NEPA

NEPA is not the right vehicle for considering the impact of terrorism. Our post-September 11th generic analysis of safeguards and security issues already includes reevaluation of interim spent fuel storage at power reactor sites. The Millstone 3 license amendment does not entail any technological challenges that warrant immediate site-specific treatment before our Staff concludes its assessment of security at all nuclear facilities we license or completes any generic rulemaking proceeding precipitated by the recent terrorist attacks.

MEMORANDUM AND ORDER

This proceeding arises from an application by Dominion Nuclear Connecticut, Inc. ("DNC" or "Licensee") for a license amendment to increase the storage capacity of Millstone Unit No. 3 spent fuel pool. On November 1, 2002, the Intervenors, the Connecticut Coalition Against Millstone ("CCAM") and the Long Island Coalition Against Millstone ("CAM") (collectively, "CCAM/CAM"), filed a proposed new contention that maintained that, in light of the September 11, 2001 terrorist attacks, the NRC now needs to prepare an environmental impact statement discussing the risks and consequences of terrorism affecting the Millstone spent fuel pool and specifically weighing

the costs of an "accident" against the cost of alternatives such as dry cask storage. The Licensing Board found the contention procedurally valid, but found it inadmissible, pursuant to 10 C.F.R. § 50.13.2 The Board referred to the Commission its ruling on the question of section 50.13's applicability.3 We accepted the Board's referral, pursuant to 10 C.F.R. § 2.730(f) and established a briefing schedule.4 We asked the parties to address all issues, except the procedural issue, that they determine are relevant to admissibility of the terrorism contention and specifically to answer the question, "What is an agency's responsibility under NEPA [the National Environmental Policy Act, 42 U.S.C. §§ 4321 *et seq.*] to consider intentional malevolent acts, such as those directed at the United States on September 11, 2001?"

DNC and the NRC Staff filed briefs that maintained that the NRC has no responsibility to consider intentional malevolent acts under NEPA, and CCAM/CAM filed a brief stating the opposite view.⁶ For the reasons stated below, we affirm the Board's rejection of CCAM/CAM's terrorism contention, though for reasons different from those offered by the Board.⁷

I. BACKGROUND

On March 19, 1999, the Licensee filed an application for a license amendment to increase the storage capacity of its spent fuel pool from 756 assemblies to 1860

¹ See Connecticut Coalition Against Millstone and Long Island Coalition Against Millstone's Motion To Reopen the Record and Request for Admission of Late-Filed Environmental Contention, dated Nov. 1, 2001, at 7.

² See LBP-02-5, 55 NRC 131 (2002). Section 50.13 provides, in effect, that nuclear power reactor licensees need not defend against attacks by "enemies of the United States."

³ *Id.* at 145.

⁴ See CLI-02-5, 55 NRC 161 (2002).

⁵ The Commission simultaneously agreed to review terrorism contentions and posed this same question in three other cases. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-37, 54 NRC 476 (2001) (denying admission of terrorism contention and referring issue to the Commission), referral accepted, CLI-02-3, 55 NRC 155 (2002); Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2); Catawba Nuclear Station, Units 1 and 2), LBP-02-4, 55 NRC 49 (2002) (certifying terrorism issue to the Commission), certification accepted, CLI-02-6, 55 NRC 164 (2002); and Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403 (2001), reconsideration denied, unpublished Memorandum and Order (Jan. 16, 2002), petition for Commission review granted in part, CLI-02-4, 55 NRC 158 (2002). We decide these cases today.

⁶The Nuclear Energy Institute, stating that its interests were aligned with those of the Applicant, filed a brief, along with a request that we consider it as an *amicus curiae*. We grant the request.

⁷This and several other recent Board decisions have relied on 10 C.F.R. § 50.13 to reject terrorism contentions. See LBP-02-5, 55 NRC at 142-45; Private Fuel Storage, LBP-01-37, 54 NRC at 486; Tennessee Valley Authority (Sequoyah Nuclear Plant, Units 1 and 2; Watts Bar Nuclear Plant, Unit 1), LBP-02-14, 56 NRC 15, 33, 34 (2002). The provision grew out of a policy judgment by the Atomic Energy Commission that it was our nation's "settled tradition" to "look[] to the military" for defense against enemy attacks, and that it was "impracticable" to expect a "civilian industry" to provide the necessary defense. See Siegel v. AEC, 400 F.2d 778, 782 (D.C. Cir. 1968). Since our decisions today rest on general principles regarding the scope of NEPA, we do not reach the application of section 50.13 as applied to the terrorism contentions that are raised in these cases. In our view, as we have explained, NEPA does not require a terrorism review.

assemblies.⁸ The original design basis of the spent fuel pool at Millstone Unit 3 was 2169 assemblies; however, the current licensing basis for the plant is 756 assemblies.

Of the contentions CCAM/CAM originally raised in this proceeding, the Board admitted three: Contention 4, relating to the risk of criticality accidents because of the Licensee's alleged history of not being able to adhere to administrative controls (i.e., human oversight or monitoring of physical systems); Contention 5, contesting a technical specification amendment regarding surveillance of boron concentration in the spent fuel pool; and Contention 6, relating to the legal question whether General Design Criterion 62 allows the use of administrative controls to prevent criticality in the spent fuel pool. To resolve Contention 5, the Board adopted an agreed-upon license condition. The Board denied an evidentiary hearing as to Contentions 4 and 6,9 and CCAM/CAM petitioned the Commission for review of the decision. On the original record, we denied review of the factual issues surrounding Contention 4, accepted review of the legal question involved in Contention 6,10 and ultimately denied CCAM/CAM the relief they requested.

During the pendency of the appeal, CCAM/CAM filed a motion for reconsideration of the Board's decision regarding Contention 4. We remanded the motion to the Board, which, on reconsideration, granted the motion and reopened the proceeding for the limited purpose of considering the effect, if any, the loss of two fuel rods at Millstone Unit 1 might have on the issues raised in Contention 4. The Board ultimately denied CCAM/CAM's request for an evidentiary hearing and terminated the proceeding. The Board ultimately denied CCAM/CAM's request for an evidentiary hearing and terminated the proceeding.

CCAM/CAM raised the terrorism contention in the reopened proceeding. CCAM/CAM asserted that changed circumstances — i.e., the terrorist attacks on the World Trade Center and the Pentagon — demonstrate that severe fuel pool "accidents" caused by acts of malevolence or insanity are reasonably foreseeable and must be addressed in an EIS. The Board rejected the contention on the authority of 10 C.F.R. § 50.13 and referred its ruling to the Commission.¹⁴

⁸ The Licensee at the time of filing the application was Northeast Nuclear Energy Company. On March 31, 2001, DNC became the Licensee and party in interest in this matter, due to a license transfer.

⁹ See Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), LBP-00-26, 52 NRC 181 (2000).

¹⁰ See CLI-01-3, 53 NRC 22 (2001). The Commission recognized that the GDC 62 issue also affected the spent fuel pool expansion license amendment proceeding for the Shearon Harris nuclear power plant; therefore, we invited the Shearon Harris parties, Carolina Power & Light Company and the Orange County Board of Commissioners, to file amicus curiae briefs.

¹¹ See CLI-01-10, 53 NRC 353 (2001).

¹² See CLI-00-25, 52 NRC 355 (2000).

¹³ See LBP-02-16, 56 NRC 83 (2002). The Commission upheld LBP-02-16 on November 21, 2002. See CLI-02-22, 56 NRC 213 (2002).

¹⁴ See note 2, supra, and accompanying text.

II. DISCUSSION AND CONCLUSION

For the reasons we stated today in *Private Fuel Storage*, we find that NEPA imposes no legal duty on the NRC to consider intentional malevolent acts, such as those directed at the United States on September 11, 2001, in conjunction with the license amendment to expand spent fuel pool storage capacity at Millstone Unit 3.¹⁵ As we said in *Private Fuel Storage*, "the possibility of a terrorist attack . . . is speculative and simply too far removed from the natural or expected consequences of agency action to require a study under NEPA." Moreover, the NRC cannot make publicly available the kind of information necessary for a more than superficial NEPA review. ¹⁷

Our conclusion comports with the practical realities of spent fuel storage, which has been occurring at Millstone for nearly two decades and will continue, regardless of our decision today. Congress has recognized the need for and encouraged high-density spent fuel storage at reactor sites. Further, all that we decide today is that *NEPA* is not the right vehicle for considering the impact of terrorism. Our post-September 11th generic analysis of safeguards and security issues already includes reevaluation of interim spent fuel storage at power reactor sites. The Millstone 3 license amendment does not entail any technological challenges that warrant immediate site-specific treatment before our Staff concludes its assessment of security at all nuclear facilities we license or completes any generic rulemaking proceeding precipitated by the recent terrorist attacks.

¹⁵ See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002); accord Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358 (2002); and Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-24, 56 NRC 335 (2002).

¹⁶ Private Fuel Storage, CLI-02-25, 56 NRC at 349.

¹⁷ See id. at 354-57.

¹⁸ Cf. McGuire, CLI-02-26, 56 NRC at 365.

¹⁹ See Nuclear Waste Policy Act, 42 U.S.C. §§ 10131 et seq.

²⁰ See Private Fuel Storage, CLI-02-25, 56 NRC at 343-45.

Accordingly, we *affirm* the Board's decision to reject the terrorism contention proposed by CCAM/CAM.

IT IS SO ORDERED.

For the Commission²¹

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 18th day of December 2002.

 $^{^{21}}$ Commissioner Dicus was not present for the affirmation of this Order. If she had been present, she would have approved it.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of Docket Nos. 50-369-LR

50-370-LR 50-413-LR 50-414-LR

DUKE ENERGY CORPORATION
(McGuire Nuclear Station, Units 1 and 2;
Catawba Nuclear Station, Units 1
and 2)

December 18, 2002

The Commission responds to two related items: (1) a Licensee motion seeking clarification of an earlier Commission Memorandum and Order, CLI-02-17, 56 NRC 1 (2002); and (2) a certified question by the Atomic Safety and Licensing Board seeking guidance from the Commission on specific issues.

RULES OF PRACTICE: CONTENTIONS (SCOPE)

Where an issue arises over the scope of an admitted contention, NRC opinions have long referred back to the bases set forth in support of the contention.

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

A generalized reference to an overall figure in a report does not raise a sufficient issue for an NRC hearing on each and every assumption that in some fashion went into developing that figure.

RULES OF PRACTICE: CONTENTIONS

While a contention contesting an applicant's environmental report generally may be viewed as a challenge to the NRC Staff's subsequent draft EIS, *new* claims must be raised in a new or amended contention. Accordingly, where a contention is superseded by the subsequent issuance of licensing-related documents, the contention must be disposed of or modified. Thus, where a contention only alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant or considered by the Staff in a draft EIS, the contention is moot. Intervenors must file a new or amended contention that addresses the factors in 10 C.F.R. § 2.714(b) in order to raise specific challenges regarding the new information.

MEMORANDUM AND ORDER

The Commission today responds to two separate, although related, items. One is a motion filed by the Duke Energy Corporation (Duke), seeking clarification of a Commission Memorandum and Order issued several months ago, CLI-02-17, 56 NRC 1 (2002). The second is a certified question by the Licensing Board that seeks guidance from the Commission on specific issues.

In CLI-02-17, the Commission affirmed in part and reversed in part a decision by the Licensing Board that admitted one contention challenging the Severe Accident Mitigation Alternatives (SAMA) analysis provided in Duke's Environmental Reports for the Catawba and McGuire nuclear stations' joint license renewal application. In its motion, Duke requests that the Commission clarify the following two points: (1) "a characterization of the Sandia study in CLI-02-17 that does not appear to be technically accurate"; and (2) "the Commission's intent regarding the scope of the admitted [contention] and how that scope relates to the issue of mootness previously raised by Duke."

While the Commission was still considering Duke's motion, the Licensing Board certified a question to the Commission.³ Noting that Duke had made essentially similar claims in both its motion for clarification before the Commission and in a motion for reconsideration before the Board,⁴ the Board asked whether it should await "clarification from the Commission before

¹ See LBP-02-4, 55 NRC 49 (2002).

² Motion for Clarification of CLI-02-17 (Aug. 2, 2002) ("Duke Motion") at 1-2.

³ Memorandum and Order (Certifying Question to Commission) (Aug. 28, 2002) (unpublished).

⁴ "Motion for Reconsideration" (Aug. 8, 2002).

proceeding further with regard to the[] areas of dispute between the parties."⁵ The key areas of dispute, the Board specified, were the following questions:

- (1) whether the "values" from NUREG/CR-6427 referred to by the Commission in CLI-02-17 include only "conditional containment failure probabilities," or encompass "overall containment failure probabilities"; and
- (2) whether resolution of Contention 2 requires any comparison of Duke's containment failure probability estimates and those of NUREG/CR-6427, or evaluation of the adequacy of Duke's SAMA analysis in light of NUREG/CR-6427.

Below we address the issues raised by Duke's motion for clarification and the Board's own order requesting Commission guidance. We also offer guidance on the next phase of this litigation.

I. CHARACTERIZATION OF SANDIA STUDY'S INFORMATION ON STATION BLACKOUT FREQUENCY

Duke requests that the Commission clarify the limited scope of actual findings made by NUREG/CR-6427, the Sandia National Laboratories study that lies at the heart of the admitted contention in this proceeding. In particular, Duke takes issue with the phrasing of one sentence in CLI-02-17, which reads as follows: "The Sandia study went on to find significantly higher station blackout frequencies and, consequently, higher probabilities of containment failure, particularly for the McGuire station," than previous cost-benefit studies.

Duke is correct that, while the Sandia study did indeed "find" higher probabilities of containment failure, it made no fresh finding on station blackout frequency. On that point, the Sandia study relied on "core damage frequencies previously reported, such as those for the McGuire and Catawba stations in assessments submitted as part of the Individual Plant Examination (IPE) process." The Sandia study, in other words, applied or incorporated long-available, published data on station blackout frequencies, and then on its own found higher conditional containment failure probabilities. Thus, as the NRC Staff says, the Sandia study itself "included no new analyses and made no findings regarding core damage frequency" or station blackout. "[I]t simply

⁵ Memorandum and Order at 1.

⁶ *Id.* at 1-2.

⁷ See NUREG/CR-6427, "Assessment of the DCH [Direct Containment Heating] Issue for Plants with Ice Condenser Containments" (April 2000) ("Sandia study").

⁸CLI-02-17, 56 NRC at 8.

⁹Duke Motion at 3.

¹⁰NRC Staff's Response to Applicant's Motion for Clarification of Memorandum and Order CLI-02-17 (Aug. 12, 2002) ("Staff's Response to Duke Motion") at 6.

assumed that core damage would occur at the frequency predicted in each ice condenser licensee's individual plant examination and focused on containment failure probabilities, which were calculated through a simplified containment event tree similar to that used in a level 2 PRA." We agree with the Staff's characterization.

II. CLI-02-17 DID NOT RULE ON THE CONTENTION'S SCOPE

The Licensing Board and the parties have expressed substantial disagreement on the scope of the admitted contention. This disagreement existed well before the Commission issued its decision in CLI-02-17. Now, in briefs filed with the Commission, both Duke and the NRC Staff claim that the Licensing Board has misinterpreted CLI-02-17 to broaden the scope of the admitted contention. They are correct.

The Licensing Board apparently believes that in CLI-02-17 we intended to broaden the scope of the admitted contention. The Commission's decision, however, did not address the contention's scope; it considered only whether the contention, as reframed by the Board, was admissible. The decision held merely that the Petitioners alleged enough to raise a litigable question — whether Duke's original SAMA analyses, contained in the Environmental Reports for the McGuire and Catawba stations, "should have incorporated or otherwise acknowledged" the containment failure probability estimates contained in the Sandia study. Simply put, as we saw it, the contention had raised a "question about whether information from the Sandia study should have been utilized or otherwise addressed in Duke's [original] SAMA analysis." "Whether the SAMA analysis in fact should have addressed the study was a question for the merits, the Board held," and the Commission agreed.

Notably, after finding the contention admissible, the Commission then pointed out that — in contrast to the earlier-filed Environmental Reports which were the subject of the original contention — "Duke has *now* addressed the Sandia study" in responses to NRC Staff Requests for Additional Information (RAIs). Even more significantly, we stressed that "after Duke's appeal was filed, the

¹¹ *Id*.

¹² See, e.g., BREDL and NIRS's Response to Duke Energy Corp.'s Motion for Clarification (Aug. 12, 2002) ("Intervenors" Response to Duke Motion") at 3; Transcript of July 29, 2002 Telephone Conference ("July 29 Transcript") at 1092, 1097, 1107, 1113, 1126.

¹³ See, e.g., Transcript of April 29, 2002 Telephone Conference ("April 29 Transcript") at 873-78, 911 ("there's a real disagreement here about what the contention means as it was worded and admitted by the Licensing Board").

¹⁴ See, e.g., July 29 Transcript at 1081-82, 1084, 1101-02, 1106.

¹⁵ See CLI-02-17, 56 NRC at 7.

¹⁶ *Id.* at 8.

¹⁷ *Id.* at 9.

¹⁸ Id. at 10 (emphasis added).

NRC Staff issued draft [Supplemental Environmental Impact Statements (SEISs)] for McGuire and Catawba that also take into account the containment failure probabilities from the Sandia study." As CLI-02-17 stated, these events (both of which occurred after the contention was filed) "may — indeed largely appear to — render moot the contention's [] concern [over] the SAMA analysis's failure to include information from the Sandia study." Whether the contention is moot, the Commission noted, was a "factual question best addressed by the Licensing Board in the first instance, perhaps in response to a summary disposition motion."

It was the Commission's expectation that the Board would, as its next step, seek to determine whether any aspect of the originally admitted contention remained alive — i.e., not moot — in the wake of the draft SEISs. Instead, as the NRC Staff describes,

during a July 29, 2002, prehearing teleconference, the Board repeatedly expressed the view that, in light of CLI-02-17, [the contention] raised questions about which set of CCFPs [conditional containment failure probabilities] were "better" for use in Duke's SAMA analysis, the plant-specific CCFPs used in Duke's initial SAMA analysis, or those used by the Sandia study.²²

The Board said that it would not yet determine whether the draft SEISs rendered the original contention moot because it had yet to determine which set of values were "better," and thus directed that discovery begin on the contention.²³

Apparently, the Board understood CLI-02-17 to go well beyond a mere ruling on the threshold admissibility of the Petitioners' contention. But that was not our intent. Nothing in CLI-02-17 addressed the scope of the contention, as such. We relied on the Board's own formulation of the contention.²⁴ It appears that the Board has focused upon language in CLI-02-17 that was intended merely to concur with the Board's reasoning in admitting the contention. The Board misread our language as mandating various additional inquiries that appear now to be unnecessary, given the draft SEISs for Catawba and McGuire.

Contrary to the Board's assumption, our decision in CLI-02-17 did not call for discovery and litigation on which set of containment failure probability estimates, Duke's or Sandia's, was "better." As Duke argues, "determining whether Duke [in its Environmental Report] 'should have' submitted analyses based on the Sandia containment failure probabilities in the first place is unnecessary. Likewise, determining which analysis of potential SAMA benefits is 'better' [Duke's early analysis submitted in the Environmental Reports or Duke's later

¹⁹ *Id.* at 10- 11.

²⁰ *Id.* at 11 (internal quotations omitted).

²¹ Id.

²² Staff Response to Duke Motion at 7.

²³ See July 29 Transcript at 1070, 1080-82, 1094-95, 1102, 1105, 1109-11, 1116, 1119, 1130.

²⁴ See CLI-02-17, 56 NRC at 6, 9-10.

analysis which takes into account the Sandia containment failure probability estimates] is unnecessary. Both versions have now been submitted by Duke."²⁵ And, most importantly, the Staff explicitly has chosen to take into account the Sandia containment failure probability estimates in the draft SEISs.

The Commission thus sees no purpose in returning to the question whether the earlier Environmental Reports *should have* considered the Sandia estimates, a matter that went to the sufficiency of the admitted contention, to be sure, but that now has been superseded by the draft SEISs' actual use of Sandia containment failure probabilities. That is why the Commission emphasized that the original contention — while indeed admissible, as the Board had found — now "largely appear[ed]" moot. The Board's current focus, then, should be on the latest SAMA analyses — those found in the draft SEISs — not Duke's original SAMA analyses in the Environmental Reports. If, as appears to be the case, the draft SEISs now acknowledge the relevant Sandia findings, then the original contention is moot.

III. THE SCOPE OF THE ORIGINAL CONTENTION COVERED MISSING "NEW" INFORMATION FROM THE SANDIA STUDY, NOT INADEQUACIES IN USING THE INFORMATION

The Intervenors maintain that the original contention is not moot. In their response to Duke's motion for clarification, they stress that Duke still has not adequately taken into account *all* of the relevant "values" from the Sandia study:

While Duke did, in fact, use the conditional containment failure value of NUREG/CR-6427 in its updated SAMA analysis, it did so in a manner that canceled the overall significance of incorporating that value. It accomplished this by using a lower value for station blackout (SBO) probability than had been used in NUREG/CR-6427. As a result, Duke's estimate of the *overall* probability of containment failure was lower than the estimate in NUREG/CR-6427. ²⁶

The Intervenors argue that Duke should apply the higher station blackout frequencies for McGuire and Catawba used in the Sandia study to the SAMA cost-benefit calculations. At bottom, then, the issue is whether the Intervenors' original contention encompasses a challenge to the specific station blackout frequency used in Duke's SAMA analyses. The Licensing Board and the parties have requested that the Commission resolve this question on the contention's scope.

²⁶ Intervenors' Response to Duke Motion at 3.

²⁵ Duke Motion at 8 (emphasis added) (internal citations omitted).

Where an issue arises over the scope of an admitted contention, NRC opinions have long referred back to the bases set forth in support of the contention. ²⁷ The Commission therefore has reviewed the claims made in support of the Intervenors' original contention. We find that the contention did not challenge the specific station blackout frequency estimates utilized by Duke in the Environmental Reports' SAMA analyses. Nothing in either BREDL's or NIRS's original submissions — later consolidated into one admitted SAMA contention — can be said to specifically attack, with support, the station blackout frequency used by Duke in its Environmental Reports.

While the original contention alleged that Duke's SAMA analysis was deficient, it neither referenced nor discussed any particular frequencies, calculations, or reasoning found in Duke's SAMA analysis. Instead, the admitted contention wholly focused upon the Sandia study and the emergence of its "new" findings — findings that were alleged to reveal previously unknown vulnerabilities in ice condenser containments. BREDL, for instance, claimed that "[t]he licensee's SAMA analysis is incomplete because it fails to incorporate new and extensive information regarding ice condenser vulnerabilities." Similarly, NIRS stressed that "[i]n the past year (2000) new information concerning station blackout and early containment failure has been published," and that "Duke's license renewal application fails to mention NUREG/CR-6427, nor [sic] to provide analysis of the findings of this report." In essence, then, the Intervenors' contention merely alleged that there was new, significant information that Duke should have taken into account or acknowledged when performing its SAMA cost-benefit analyses.

The only new information contained in the Sandia study that is relevant to Duke's SAMA analysis consists of conditional containment failure probabilities found by the study. As the Staff notes, the "Sandia study found significantly higher conditional containment failure probabilities during station blackout (SBO) events for plants with ice condenser containments than had been previously reported."³⁰ But as to SBO frequency, the Sandia study revealed no new information and made no new findings. It merely assumed a core damage frequency estimate obtained from earlier, plant-specific, individual plant examinations (IPEs), the results of which were submitted approximately a decade ago.³¹ The Sandia study thus incorporated long-available station blackout frequency estimates. It did not assess the accuracy of those estimates. It did not attempt to fine-tune those estimates to reflect the most recent plant-specific improvements at McGuire or Catawba. They

²⁷ See, e.g., Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), aff'd sub nom. Massachusetts v. NRC, 924 F.2d 311 (D.C. Cir.), cert. denied, 502 U.S. 899 (1991).

²⁸ See BREDL Submittal of Contentions in the Matter of Renewal of Licenses for Duke Energy Corp. McGuire Nuclear Stations 1 & 2 and Catawba Nuclear Stations 1 & 2 (Nov. 29, 2001) ("BREDL Contentions") at 38.

²⁹ Contentions of NIRS (Nov. 29, 2001) at 14-15.

³⁰ Staff's Response to Duke Motion at 3.

³¹ See Sandia study at 29-31.

were "plugged in" to serve as modeling assumptions. Accordingly, no part of the Sandia study is directed toward examining SBO frequency, as such. The study in fact makes clear that the "best way" to assess issues raised in the report "is through detailed and credible Level I and Level II probabilistic analyses, specific to each individual plant," but that such detailed analyses were "outside of the [report's] scope." Scope.

If the Intervenors sought to challenge the SBO frequency used by Duke in its SAMA analysis, their contention should have made a particularized claim to that effect. But the contention made no attempt to identify, analyze, or otherwise discuss any SBO frequency or related core damage frequency information provided in the SAMA analyses. Nor did it compare any SBO information from the Sandia study to specific SBO-related information in the SAMA analyses. The Board recognized as much in a telephone conference:

[T]he contention does not challenge the core damage frequency calculations that Duke has made. In other words, the contention is solely based on the question of consideration of NUREG/CR-6427. It doesn't address the question of, have they estimated the core damage frequency correctly?³³

Moreover, in the Environmental Reports' SAMA analyses Duke provided reasons for why it was using SBO frequency estimates obtained from Revision 2 of Duke's McGuire and Catawba Probabilistic Risk Assessments (PRAs). Duke set forth the history of the McGuire and Catawba PRAs and of the IPE process and went on to outline how results from these studies "prompted changes in equipment, plant configuration and enhancements in plant procedures to reduce [plant] vulnerability." ³⁴ Several of the cited improvements — including enhancements to the Emergency Diesel Generator System — go to a reduction in station blackout frequency and core damage frequency, thus seemingly lending support to Duke's use of a revised and lower SBO frequency than that obtained in the IPE.³⁵ Yet nowhere did the Intervenors' contention challenge the reasons — or even the extent or completeness of the information — Duke provided for relying upon the lower core damage frequency estimates obtained from the revised PRA. There is no claim, for instance, that Duke's cited improvements would not significantly reduce SBO frequency, or that the information was otherwise inadequate to justify use of the lower frequency estimates from the revised PRA.

 $^{^{32}}$ Sandia study at 6.

³³ April 29 Transcript at 884.

³⁴ See Attachment K, McGuire Nuclear Station SAMAs Analysis (May 2001) at 3, 4-5, 7; see also Attachment H, Catawba Nuclear Station SAMAs Analysis (May 2001) at 3-7.
³⁵ See, e.g., Attachment K, McGuire Nuclear Station SAMAs Analysis (May 2001) at Table 2-1, "Risk Reduction

³⁵ See, e.g., Attachment K, McGuire Nuclear Station SAMAs Analysis (May 2001) at Table 2-1, "Risk Reduction Measures Implemented at McGuire."

Based upon information provided in the Environmental Reports, therefore, the Intervenors clearly could have raised a specific claim about SBO frequency, related issues in the McGuire or Catawba core damage frequency profile, or Duke's use of PRA Revision 2. Indeed, they now do make various such claims both in their amended contention, which challenges Duke's responses to Staff RAIs, and in their response to Duke's motion for clarification.³⁶ But these SBO frequency-related arguments are new. They were not part of the original contention. Nonetheless, the Intervenors attempt to bring SBO frequency within the original contention by stressing that actual Sandia study "results" include not only conditional containment failure probabilities, but also overall containment failure probabilities. ³⁷ To derive a plant's overall containment failure probability, one takes into account both the conditional containment failure probability and SBO frequency, among other things. The Sandia study thus estimated an overall containment failure probability for McGuire by factoring in both (1) the conditional containment failure probability the study actually found and (2) the IPE-derived station blackout frequency estimate the study assumed.³⁸ Noting that Duke has now redone its SAMA analysis to apply the higher conditional containment failure probabilities found by the study, but has continued to use a lower SBO frequency obtained from a revised PRA, the Intervenors insist that the original contention cannot be moot because Duke still has not come up with the same 13.9% overall containment failure probability for McGuire estimated in the Sandia study.

We cannot agree that merely because the Sandia study assumed a particular SBO frequency in reaching other overall estimates, the Intervenors' contention must be read to directly challenge the SBO frequency that Duke chose to use, despite the lack of specificity or basis in the contention, despite the particular — unchallenged — history or reasoning provided in Duke's SAMA analysis concerning SBO frequency, and despite the fact that the SBO assumption in the Sandia study does not reflect any new finding. A generalized reference to an overall figure in a report does not raise a sufficient issue for an NRC hearing on each and every assumption that in some fashion went into developing that figure. Our contention rules require "reasonably specific factual and legal" allegations at the outset. The Intervenors' original contention in this case simply cannot be understood as specifically challenging Duke's SBO frequency figures. 40

 $^{^{36}\,}See,\,e.g.,$ Intervenors' Response to Duke's Motion at 4, 8.

³⁷ *Id.* at 6-7.

³⁸ See Sandia study at 29-30.

³⁹ Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 359 (2001) (citations omitted).

⁴⁰ In referring to Sandia's estimated 13.9% overall containment failure probability for McGuire, BREDL quoted the Sandia report's statement that "[t]he [Duke] IPE assessments of early containment failure at McGuire (2%) are

IV. CONTENTIONS OF OMISSION

As we have seen, the Intervenors' original contention alleged that the SAMA analyses in the Catawba and McGuire ERs omitted addressing the Sandia study. Even though Duke and the NRC Staff now have addressed the study, the Intervenors insist that their contention is not moot because it involves "not just a matter of Duke looking at the data that's in the NUREG, but actually whether we agree upon the way it was used." ⁴¹

This is incorrect. The Intervenors' original contention, by its own terms, challenged Duke's failure to discuss the Sandia study at all. At the time, Duke had yet to address the study. Once Duke redid its SAMA analyses to acknowledge the Sandia study, and certainly once the NRC Staff discussed the study in its draft EIS, it was incumbent upon the Intervenors to amend their original contention to set forth with specificity any concern over Duke's discussion of the Sandia information. While a contention contesting an applicant's environmental report generally may be viewed as a challenge to the NRC Staff's subsequent draft EIS, new claims must be raised in a new or amended contention. Accordingly, where a contention is "superseded by the subsequent issuance of licensing-related documents" — whether a draft EIS or an applicant's response to a request for additional information — the contention must be disposed of or modified.⁴² The Intervenors' previous concern was Duke's failure to acknowledge the Sandia study. Now their concern relates to how Duke and the NRC Staff applied the Sandia information in their latest SAMA analyses. This is a new concern based on revised analyses using different containment failure probability estimates than those used in the Environmental Reports. The appropriate vehicle for the Intervenors' new challenge was an amended contention.

There is, in short, a difference between contentions that merely allege an "omission" of information and those that challenge substantively and specifically

significantly lower than our assessments; however we have not investigated the reasons for the difference." See BREDL Contentions at 40 (citing Sandia study at 124). This passage compares the overall containment failure probability estimated by Sandia (13.9%) with that earlier estimated by Duke in its Individual Plant Examination (2%). Significantly, however, the discrepancy or "difference" that this statement highlights has nothing to do with station blackout frequency. The station blackout frequency used in calculating both these overall failure probabilities was the same — both the Sandia and the earlier Duke IPE assessment incorporated the same IPE-derived station blackout frequency. Thus, this highlighted difference between a 13.9% and 2% overall early containment failure probability does not call into question any particular station blackout frequency. Instead, the discrepancy relates to the various different assumptions that went into determining the conditional containment failure probability portion of the overall containment failure probability. The Board underscored a similar point when it noted that "the discrepancies addressed by the NUREG arise after the core has been damaged. In other words, core damage is assumed. And so the likelihood [of core damage], although it enters into some absolute calculations, is not addressed in NUREG/CR-6427. . . . What we're discussing is the conditional [containment failure] probability." See April 29 Transcript at 883 (emphasis added).

⁴¹ April 29 Transcript at 873-74.

⁴² See Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1050 (1983); see also 10 C.F.R. § 2.714(b)(2)(iii). The Commission has long insisted that intervenors examine available documents and formulate contentions "as early as possible." Catawba, CLI-83-19, 17 NRC at 1050.

how particular information has been discussed in a license application. Where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant or considered by the Staff in a draft EIS, the contention is moot.⁴³ Intervenors must timely file a new or amended contention that addresses the factors in section 2.714(b) in order to raise specific challenges regarding the new information. As the Licensing Board explained in a recent decision in the *Private Fuel Storage* proceeding:

[A] significant change in the nature of the purported NEPA imperfection, from one focusing on comprehensive information omission to one centered on a deficient analysis of subsequently supplied information, *warrants issue modification by the complaining party*. Otherwise, absent any new pleading, the other parties would be left to speculate whether the concerns first expressed had been satisfied by the new information.⁴⁴

If we did not require an amended or new contention in "omission" situations, an original contention alleging simply a failure to address a subject could readily be transformed — without basis or support — into a broad series of disparate new claims. This approach effectively would circumvent NRC contention-pleading standards and defeat the contention rule's purposes: (1) providing notice to the opposing party of the issues that will be litigated; (2) ensuring that at least a minimal factual or legal foundation exists for the different claims that have been alleged; and (3) ensuring there exists an actual "genuine dispute" with the applicant on a material issue of law or fact.⁴⁵ By contrast, a valid contention challenging how specific substantive information is discussed in an application — or draft EIS — must identify "each [such] failure," setting forth both the Applicant's — or Staff's — position and "the Petitioner's opposing view." The Intervenors' original SAMA contention in this case complained of the Sandia study's omission, not specific deficiencies in the way the study was used.

Eventually, at the Board's prompting, the Intervenors filed an amended contention that did raise concerns about Duke's revised SAMA analyses. We

⁴³ See, e.g., Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-26, 54 NRC 199, 207-09 (2001); LBP-01-23, 54 NRC 163, 171-72 (2001); LBP-02-2, 55 NRC 20, 29-30 (2002).

⁴⁴ PFS, LBP- 02-2, 55 NRC at 30 (emphasis in original) (quotations and citations omitted). In contrast, as the PFS Board explained, a contention

initially framed as a challenge to the substance of an applicant's ER analysis of particular matters would not necessarily require a late-filed revision or substitution to constitute a litigable issue statement relative to the substance of the Staff's DEIS (or final environmental impact statement) analysis of the same matter.

PFS. LBP-01-26. 54 NRC at 208.

⁴⁵ See Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-35 (1999). A contention's form may not always be readily apparent, and therefore it may be necessary to examine "the language of the bases" to determine the contention's scope. See PFS, LBP-01-23, 54 NRC at 171 (citation omitted). Also, conceivably there could be contentions that involve both a claim of omission and some particularized, substantive challenge to a license application.

⁴⁶ See Oconee, CLI-99-11, 49 NRC at 336 (quoting 10 C.F.R. § 2.714(b)(2)(iii)).

⁴⁷ See Millstone, CLI-01-24, 54 NRC at 358 (quoting Final Rule, "Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process," 54 Fed. Reg. 33,168, 33,170 (Aug. 11, 1989).

recognize that because of ambiguous Board statements made in the course of the proceeding⁴⁸ and apparent widespread confusion over the original contention's scope, the Intervenors may have had good cause to believe that filing an amended contention was unnecessary. That goes to the timeliness of their amended contention, a determination we leave for the Board on remand. We offer some guidance on the amended contention in the next section of this Decision.

Having found that SBO frequency was not adequately raised and supported as an issue in the original contention, and that the original contention itself included no specific challenge to the adequacy of Duke's discussion of the Sandia study, we agree with the NRC Staff that the resolution of the originally admitted "BREDL/NIRS Contention 2 requires no more than a formal finding by the Board" that Duke in its supplemental analyses, or more importantly, the NRC Staff in the draft SEISs, "has in fact utilized, incorporated, or addressed the CCFPs [conditional containment failure probabilities] of the Sandia study." We further agree that "this can best be accomplished through a motion for summary disposition, and discovery is not necessary, given the evidence already available." 50

V. THE INTERVENORS' AMENDED CONTENTION

Even if the original contention is moot, the Intervenors had the opportunity to raise amended or new contentions based upon any *new* data or conclusions found in the Duke responses to Staff RAIs or the draft SEISs.⁵¹ The Commission's decision in CLI-02-17 recognized that the Intervenors did file before the Board an amended contention challenging Duke's responses to RAIs, but stated that "[w]hether the amended contention is timely and otherwise admissible are issues currently before the Board." A ruling on the amended contentions," as Duke indicates, "would have been one means to get to the core mootness issue: i.e., whether there is some [relevant] aspect of the Sandia study data that has not been incorporated in the revised SAMA analyses." But the Board chose instead to defer determination of mootness pending discovery. Its expansive interpretation of the original contention's scope — based as we have seen on a misunderstanding of CLI-02-17 — indeed led the Intervenors to *withdraw* their amended contention

⁴⁸ For example, the Intervenors point to a passage in the Board's decision describing the admitted contention as "whether *and to what extent* Duke's SAMA analysis should take into account the calculations and values referenced in [the Sandia study]." April 29 Transcript at 875-77 (emphasis added) (referencing LBP-02-4, 55 NRC at 127).

⁴⁹ Staff's Response to Duke Motion at 8.

⁵⁰ *Id*.

⁵¹ See 10 C.F.R. § 2.714(b)(2)(iii).

⁵²CLI-02-17, 56 NRC at 11 n.33.

⁵³ Duke Motion at 9.

altogether.⁵⁴ Because the Intervenors withdrew their amended contention under the Board's mistaken assumptions about what the Commission held in CLI-02-17, we hereby reinstate the amended contention before the Board.

We leave the timeliness and admissibility of the amended contention to the Board. As guidance to the parties and the Board, however, we offer a few observations.

First, the Petitioners submitted their amended contention soon after the draft SEISs had been issued. They mention the draft SEISs and raise a few claims directly about them, but the primary focus of the amended contention seems to be Duke's responses to the Staff's RAIs. This may be significant because the NRC Staff's analyses in the SEISs, while taking into account Duke's responses, are not identical to Duke's analyses. The SEISs often go a step further, providing additional information, analysis, and reaching some conclusions different from Duke's. Hence, many of the concerns in the amended contention may have been cured by the Staff's SAMA analyses, found in the draft SEISs. For example, the Intervenors claim that a Duke RAI response failed to justify its conclusion that "return fans are essential in order to ensure the effectiveness of hydrogen igniters."55 The draft SEISs, however, did not agree with Duke on this point, and instead noted that, "based on technical information, it is not clear that operation of an air-return fan is necessary to provide effective hydrogen control."56 Indeed, citing the draft SEIS, the Intervenors state that they are "in agreement with the NRC" and concur with the draft SEIS discussion of this issue.⁵⁷ Thus, the draft SEISs appear to resolve this concern. The Commission sees no point in focusing exclusively on Duke's responses to Staff RAIs when the draft SEISs (which already take into account Duke's RAI responses) provide a more recent and often more thorough discussion of relevant issues.⁵⁸ In the end, it is the NRC Staff that "bears the ultimate burden of demonstrating that environmental issues have been adequately considered."59

Second, to be admitted for hearing, the Intervenors' amended contention must rest on data or conclusions that "differ significantly" from what was submitted in the Environmental Report. 60 An amended NEPA contention is not an occasion

⁵⁴ See Transcript at 1118; Intervenors' Response to Duke Motion at 5.

⁵⁵ BREDL's and NIRS's Amended Contention 2 (May 20, 2002) ("Amended Contention") at 17.

⁵⁶ See, e.g., Catawba Draft SEIS at 5-27.

⁵⁷ Amended Contention at 17.

⁵⁸ See, e.g., McGuire Draft SEIS at 5-6, 5-7, 5-10, 5-11, 5-17, 5-27 to 5-30 (outlining Staff's reasons behind particular station blackout frequencies assumed for draft Environmental Impact Statement's SAMA cost-benefit analyses, namely, that Sandia used station blackout frequencies obtained from individual plant examinations, but that there are more complete probabilistic risk assessment (PRA) models available).

⁵⁹ Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998).

⁶⁰ See 10 C.F.R. § 2.714(b)(2)(iii).

to raise additional arguments that could have been raised previously. ⁶¹ Indeed, the Licensing Board in this case repeatedly stressed that the amended contention was to be based only on "any new information not previously available." ⁶² In their amended contention, the Intervenors begin by insisting that the "only change" they "intend to make to the contention is to provide specific information about the deficiencies in Duke's discussion of NUREG/CR-6427 [the Sandia study]." ⁶³ Yet the amended contention seemingly attempts to insert numerous discrete new claims that arguably might have been raised earlier, or that have little to do with the Sandia study. Hearing petitioners have an "ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable the petitioner to uncover any information that could serve as the foundation for a specific contention." ⁶⁴ An intervenor may not freely "change the focus of an admitted contention at will as litigation progresses, but is bound by the terms of the contention."

Third, we note that the Intervenors' SAMA contention has triggered disputes over the access to Duke's probabilistic risk assessments (PRAs), Levels 1, 2, and 3. The Intervenors' request for the PRAs first arose during the course of settlement discussions with Duke.⁶⁶ The Intervenors claim that they need the PRAs in order to have "sufficient information to evaluate the information that's been presented in the RAI response," ⁶⁷ and that "without access to the PRA[s]" it would be impossible "to evaluate the adequacy of the [SAMA] analysis." ⁶⁸ They stress that "[w]hile Duke's analysis may eventually be shown to be legitimate,"

⁶¹ See, e.g., Union of Concerned Scientists v. NRC, 920 F.2d 50, 55 (D.C. Cir. 1990) ("we think it unreasonable to suggest that the NRC must disregard its procedural timetable every time a party realizes based on NRC environmental studies that maybe there was something after all to a challenge it either originally opted not to make or which simply did not occur to it at the outset"); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-00-27, 52 NRC 216, 223 (2000) (late contention denied where only assertion was that "certain concerns that were not dealt with in the ER have additionally not been dealt with in the DEIS" and no showing of "new or different data or conclusions" in the DEIS); Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), LBP-82-79, 16 NRC 1116, 1118 (1982) (no good cause for late filing where draft environmental impact statement contained no new information relevant to contention).

⁶² April 29, 2002 Transcript at 904-05; see also Order (May 13, 2002) (unpublished) at 1.

⁶³ Amended Contention at 3.

⁶⁴ See Final Rule, "Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process," 54 Fed. Reg. 33,168, 33,170 (Aug. 11, 1989).

⁶⁵ Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 42 (1993); see Seabrook, ALAB-899, 28 NRC at 96-97 & n.11 (microbiologically induced corrosion not part of contention that ocean-water cooling system might fail because of accumulation of mollusks and other microbiological organisms). See also Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), ALAB-843, 24 NRC 200, 208 (1986) (contention did not "deal with the adequacy of testing or test data," but only whether tests represented actual plant conditions); Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), ALAB-856, 24 NRC 802, 814-16 (1986) (contention questioned whether electrical equipment met environmental qualifications, but had not alleged occurrence of fraudulent testing).

⁶⁶April 10, 2002 Transcript at 851; April 29, 2002 Transcript at 885. The Board appeared inclined to allow discovery of PRA-related issues. See, e.g., July 29 Transcript at 1079- 81, 1089, 1099-1100, 1108-09, 1128-29.

April 29, 2002 Transcript at 873.Amended Contention at 4.

they need the PRAs to "assist in verifying the reasonableness" of Duke's SAMA cost- benefit analysis.69

In response, Duke argues that the record already contains "sufficient information . . . on the docket in order to do an independent assessment of the specific calculations and the specific issues" in the contention, and that the Intervenors "could have taken the time to access publicly available information and assess it before the original proposed contentions were filed."70 Duke further claims that the Intervenors' request "confuses contentions and discovery" and "[i]n effect, the Intervenors want to review the PRA in search of an issue."71 The NRC Staff agrees with Duke that sufficient information on the PRAs has been available publicly, and that the Intervenors never "demonstrated why such information has been inadequate to ensure the reliability of Duke's PRA."72 The Staff further stresses that the "absence of Duke's full PRA from its application has been evident . . . since the time the application was filed in June, 2001," and the Intervenors made "no attempt to demonstrate" why their concerns regarding their need to access the PRA could not have been raised at that time.⁷³

These inquiries are fact- and record-specific, and we therefore leave them for the Board to resolve on remand. In particular, the Board must consider the objections raised by Duke and the Staff. The Board should keep in mind that our 1989 contention rule revisions bar "anticipatory" contentions, where petitioners have only "what amounts to generalized suspicions, hoping to substantiate them later," or "simply desire more time and more . . . information to determine [if] they even have a genuine material dispute for ligitation." A petitioner is not permitted "to file a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery."⁷⁵

We conclude with a final point. The Intervenors' original contention implied that the SAMA analyses found in Duke's Environmental Reports were deficient because, by not using the higher containment failure probabilities found in the Sandia study, the analyses may have underestimated the benefits of implementing backup hydrogen control capability during SBO events, and in turn erroneously concluded that no such SAMA was cost-beneficial. But this deficiency, if deficiency it was, seemingly has been cured. The draft SEISs conclude that if the conditional containment failure probabilities from the Sandia study are assumed,

⁶⁹ Intervenors' Response to Duke Motion at 4, 8.

⁷⁰ April 10 Transcript at 854; Response of Duke Energy Corp. to Proposed Late-Filed Contentions (June 10, 2002) at 26.

71 Id. at 22.

⁷² NRC Staff's Answer to Amended Contention (June 10, 2002) at 14-15.

⁷³ *Id.* at 15.

 $^{^{74}\,}Oconee,$ CLI-99-11, 49 NRC at 337-38.

⁷⁵ Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983); see also Millstone, CLI-01-24, 54 NRC at 363; 54 Fed. Reg. at 33,170.

then adopting "plant and procedure modifications to enable the existing hydrogen control (igniter) system to be powered from an ac-independent power source in SBO events" does "appear[] to be cost-beneficial." Given that the draft SEISs already find that an ac-independent backup power source appears to be a cost-beneficial SAMA under these assumptions, it is unclear what additional result or remedy would prove meaningful to the Intervenors.

VI. CONCLUSION

In sum, CLI-02-17 did not broaden or in any respect redefine the scope of the Intervenors' original contention. It did characterize the Sandia study inaccurately, a characterization we clarify above. Issues remaining before the Board, which the Board should resolve prior to discovery, are:

- 1. whether the draft SEISs render the original contention moot;
- 2. whether the Intervenors' amended contention raises timely, adequately supported, and otherwise admissible genuine material disputes for litigation; and
- 3. whether there is any basis for the Intervenors' demand for access to Duke's PRA analysis.

We remand the case to the Board to make these determinations and to conduct whatever further proceedings may be appropriate.

⁷⁶ McGuire Draft SEIS at 5-5; see also Catawba Draft SEIS at 5-5.

⁷⁷ The SEISs also point out that "this SAMA does not relate to adequately managing the effects of aging during the period of extended operation," and "[t]herefore, it need not be implemented as part of license renewal pursuant to 10 CFR Part 54." See, e.g., Catawba Draft SEIS at 5-29. Nonetheless, the draft SEISs emphasize that maintaining power to the hydrogen igniter system is "sufficiently important for all PWRs [pressurized water reactors] with ice condenser containments," and therefore the "NRC has made the issue a Generic Safety Issue (GSI), GSI-189 — Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident." The "need for plant design and procedural changes will be resolved as part of GSI-189 and addressed [for McGuire and Catawba] and other ice condenser plants as a current operating license issue." See, e.g., McGuire Draft SEIS at 5-29. Thus, the ultimate agency decision on whether to require facilities with ice condenser containments to implement any particular SAMA will fall under a Part 50 current licensing basis review. NEPA "does not mandate the particular decisions an agency must reach," only the "process the agency must follow while reaching its decisions." Committee to Save the Rio Hondo v. Lucero, 102 F.3d 445, 448 (10th Cir. 1996) (citing Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989)).

IT IS SO ORDERED.

For the Commission⁷⁸

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 18th day of December 2002.

 $^{^{78}}$ Commissioner Dicus was not present for the affirmation of this Order. If she had been present, she would have approved it.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Richard A. Meserve, Chairman Greta Joy Dicus Nils J. Diaz Edward McGaffigan, Jr. Jeffrey S. Merrifield

In the Matter of

Docket No. 72-22-ISFSI

PRIVATE FUEL STORAGE, L.L.C. (Independent Spent Fuel Storage Installation)

December 18, 2002

NUCLEAR WASTE POLICY ACT: REGULATION OF SPENT NUCLEAR FUEL

The NWPA does not expressly repeal NRC's Atomic Energy Act-derived authority over spent fuel storage. NWPA section 135(h) provides that the NWPA itself does not authorize away-from-reactor ISFSIs.

NUCLEAR WASTE POLICY ACT: REGULATION OF SPENT NUCLEAR FUEL

Where an activity is already authorized by another provision of law, declining to "authorize" it anew is not the same as prohibiting it.

ATOMIC ENERGY ACT: REGULATION OF SPENT NUCLEAR FUEL

The NRC derives its authority to regulate spent nuclear fuel from the Atomic Energy Act. The AEA gives the Commission regulatory jurisdiction over the constituent materials of spent nuclear fuel. It authorizes the Commission to

license and regulate the possession, use, and transfer of source, byproduct, and special nuclear materials regardless of their aggregate form. *See* AEA §§ 53, 62, 63, 81, 161(b), 42 U.S.C. §§ 2073, 2092, 2093, 2111, 2201(b). These materials include uranium, thorium, plutonium, and "any radioactive material . . . yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material." *See* AEA §§ 11e(1), z, aa, 42 U.S.C. §§ 2014(e)(1), (z), (aa). Source, byproduct, and special nuclear material are all found in spent nuclear fuel. *See* 10 C.F.R. § 72.3.

NUCLEAR WASTE POLICY ACT: REGULATION OF SPENT NUCLEAR FUEL

STATUTORY INTERPRETATION: GENERAL RULES

Congress knows how to draft legislation that clearly states its intent. If Congress intended the NWPA to absolutely prohibit private offsite storage, it would have accomplished that with concrete and specific language.

STATUTORY INTERPRETATION: IMPLIED REPEAL OF PRIOR LAW

One of the strongest maxims of statutory interpretation is that the law disfavors implied repeals. See, e.g., Morton v. Mancari, 417 U.S. 535, 549-50 (1974). Accord, J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred International, Inc., 122 S. Ct. 593, 604-05 (2001); FTC v. Ken Roberts Co., 276 F.3d 583, 592-93 (D.C. Cir. 2001); Elephant Butte Irrigation District v. U.S. Department of the Interior, 269 F.3d 1158, 1164 (10th Cir. 2001). Where two statutes are "capable of coexistence, it is the duty of the courts, absent a clearly expressed congressional intention to the contrary, to regard each as effective." Morton v. Mancari, 417 U.S. at 551.

NRC: RULEMAKING AUTHORITY

REGULATIONS: VALIDITY

NRC's properly promulgated, substantive regulations have the full force and effect of law. *See, e.g., Chrysler Corp. v. Brown*, 441 U.S. 281, 295 (1979).

NUCLEAR WASTE POLICY ACT: REGULATION OF SPENT NUCLEAR FUEL

STATUTORY INTERPRETATION: IMPLIED REPEAL OF PRIOR LAW

It is not surprising that the law creates significant differences between a DOE facility storing commercial spent fuel under NWPA section 135 and a private interim storage facility. The Commission finds no real incompatibility in these laws, let alone the kind of "positive repugnancy" that it would need to see to find that the NWPA implicitly repealed its general regulatory authority over spent fuel. *J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred International, Inc.*, 122 S. Ct. at 605, *quoting Radzanower v. Touche Ross & Co.*, 426 U.S. 148, 155 (1976).

NUCLEAR WASTE POLICY ACT

STATUTORY INTERPRETATION: CONGRESSIONAL INTENT

There is no indication that Congress intended NWPA to effect a sweeping reform of all then-existing regulations relating to nuclear waste. In the NWPA, Congress intended not to reduce spent fuel storage options, but rather to expand them.

MEMORANDUM AND ORDER

By order dated April 3, 2002, the Commission granted review of the State of Utah's claim that this agency has no authority to issue the license sought by Private Fuel Storage, L.L.C. (PFS), in this proceeding. We conclude that Congress, in enacting the Atomic Energy Act (AEA), gave the NRC authority to license privately owned, away-from-reactor (AFR) facilities and did not repeal that authority when it later enacted the Nuclear Waste Policy Act of 1982, as amended (NWPA). Accordingly, we reject Utah's claim that we lack authority to license the proposed PFS facility.

¹CLI-02-11, 55 NRC 260 (2002).

² 42 U.S.C. § 2011 et seq.

³ 42 U.S.C. § 10101 et seq.

I. THE NWPA'S STATUTORY FRAMEWORK AND UTAH'S JURISDICTIONAL THEORY

Utah's "Suggestion of Lack of Jurisdiction" argued that NWPA deprives the Commission of "jurisdiction" over PFS's application for a license to construct and operate an independent spent fuel storage installation (ISFSI) on the reservation of the Skull Valley Band of Goshute Indians. In a companion "Petition To Institute Rulemaking and To Stay Licensing Proceeding," Utah asked the Commission to amend its regulations in accordance with this theory, and to suspend related proceedings while the rulemaking is pending. We declined to suspend proceedings while we considered the merits of Utah's theory.

Utah argues that the NWPA contemplates a comprehensive and exclusive solution to the problem of spent nuclear fuel and does not authorize private, AFR storage facilities such as the proposed PFS facility. Utah rests its argument on the following provision, found in subsection 135(h) of the Act:

Notwithstanding any other provision of law, nothing in this Act shall be construed to encourage, authorize, or require the private or Federal use, purchase, lease, or other acquisition of any storage facility located away from the site of any civilian nuclear power reactor and not owned by the Federal Government on the date of the enactment of this Act.⁵

Therefore, says Utah, the NWPA does not allow any AFR storage facility not located on federally owned land. Utah claims that the NWPA is the only possible source for NRC's jurisdiction over spent fuel storage and overrides the Commission's general authority under the AEA to regulate the handling of spent fuel because it established a comprehensive system for dealing with spent nuclear fuel.

PFS and the NRC Staff oppose Utah's position. They argue that nothing in the NWPA expressly repeals the NRC's general, AEA-based licensing authority over spent fuel. They emphasize that the provision on which Utah relies (subsection 135(h)) does not explicitly prohibit a private, AFR facility; it only fails to "authorize" such a facility.

In order to resolve the opposing claims, we start with a review of the NWPA's statutory framework. The NWPA's purpose was to establish the federal government's responsibilities for the permanent disposal and interim storage of spent nuclear fuel and high-level waste, including a schedule for the development of permanent repositories.⁶ Subtitle A of the Act establishes a plan for the federal government to build a permanent repository. Subtitle B deals with interim

⁴ See CLI-02-11, 55 NRC at 262-65.

⁵NWPA § 135(h), 42 U.S.C. § 10155(h).

⁶ See NWPA § 111(b), 42 U.S.C. § 10131(b).

storage of spent nuclear fuel — that is, storage pending permanent disposal. Other portions of the Act concerned investigating the feasibility of monitored retrievable storage, financial arrangements for decommissioning low-level radioactive waste sites, and a program for the DOE to conduct research and development on waste disposal technologies. 10

Subtitle B contains the provisions of particular importance here. It seeks to help nuclear power reactor owners and operators manage spent fuel while waiting for a permanent disposal site. The Subtitle includes three "findings": that the owners and operators of reactors have the primary responsibility to provide interim storage by maximizing onsite storage; that the federal government has the responsibility to "encourage and expedite" the owners use of onsite storage options; and that the federal government has the responsibility to provide a limited amount of storage capacity. 11 Subtitle B established a federal program, now expired, to provide limited interim storage at existing federal facilities.¹² Subtitle B's section 135, which includes the provision upon which Utah relies, required the Department of Energy (DOE) to provide up to 1900 metric tons of interim storage capacity if necessary to keep a reactor from having to shut down for lack of storage capacity. Other provisions of Subtitle B were designed to help the utilities meet their own storage needs by providing for expedited licensing procedures for onsite storage expansion, alternative storage technologies, and transshipments of spent fuel between facilities owned by the same utility.¹³

To trigger DOE's duty to take spent fuel for interim storage, Subtitle B required reactor owners to exhaust reasonable, practical, at-reactor storage options. NWPA subsection 135(b) required that, prior to DOE's entry into contracts for interim storage, the Commission must first determine that the reactor is in danger of having to shut down for lack of storage capacity, and that the owner was "diligently pursuing licensed alternatives to the use of Federal storage capacity," including various onsite storage options:

⁷ See NWPA §§ 131-137, 42 U.S.C. §§ 10151-10157.

⁸ NWPA, Subtitle C, 42 U.S.C. §§ 10161-10169.

⁹NWPA, Subtitle D, 42 U.S.C. § 10171.

 $^{^{10}\,\}text{NWPA},$ Title II, 42 U.S.C. §§ 10191-10204.

¹¹ NWPA § 131(a), 42 U.S.C. § 10151(a).

¹² See NWPA, §§ 135-137, 42 U.S.C. §§ 10155-10157. The Department of Energy was authorized to enter contracts for interim storage no later than January 1, 1990. NWPA § 136(a)(1), 42 U.S.C. § 10156(a)(1).

¹³ Section 132 directs the DOE and the NRC to take actions to "encourage and expedite the effective use" of existing and additional at-reactor storage. 42 U.S.C. § 10152. Section 133 directs the NRC to establish procedures for licensing spent fuel storage technologies. 42 U.S.C. § 10153. Section 134 provides an expedited process for NRC licensing of alternative at-reactor storage technology, expanded at-reactor storage capacity, and transshipments of spent nuclear fuel between reactors within the same utility system. 42 U.S.C. § 10154.

- (i) expansion of storage facilities at the site of any civilian nuclear power reactor operated by such person;
- (ii) construction of new or additional storage facilities at the site of any civilian nuclear power reactor operated by such person;
- (iii) acquisition of modular or mobile spent nuclear fuel storage equipment, including spent nuclear fuel storage casks, for use at the site of any civilian nuclear power reactor operated by such person; and
- (iv) transshipment to another civilian nuclear power reactor owned by such person. 14

Utah contends that the NWPA contemplates that owners will use these options, and no others, to meet their spent fuel storage needs until such time as the federal government takes the material off their hands. The option to use federal interim storage expired in 1990, 15 with no generators having ever taken advantage of the program.

II. THE COMMISSION DERIVES ITS AUTHORITY TO LICENSE INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS FROM THE ATOMIC ENERGY ACT

The NRC and its predecessor, the Atomic Energy Commission, have always regulated the storage of spent fuel from commercial reactors pursuant to their general authority under the AEA. In 1980, the NRC formally promulgated regulations governing the licensing of ISFSIs, 10 C.F.R. Part 72, under its AEA authority to regulate the use and possession of special nuclear material. The regulations applied to both at-reactor and away-from-reactor ISFSIs. This was 2 years before Congress enacted the NWPA.

A. The AEA Gives NRC the Power To Regulate Constituent Materials

The AEA does not specifically direct the NRC to regulate spent fuel storage and disposal. Rather, it gives the Commission regulatory jurisdiction over the constituent materials of spent nuclear fuel. The AEA authorizes the Commission to license and regulate the possession, use, and transfer of source, byproduct, and special nuclear materials regardless of their aggregate form. ¹⁸ It defines these

¹⁴NWPA § 135(b)(1)(B), 42 U.S.C. § 10155(b)(1)(B).

¹⁵NWPA § 136(a)(1), 42 U.S.C. § 10156(a)(1).

¹⁶ See Licensing Requirements for the Storage of Spent Fuel in an Independent Fuel Spent Storage Installation, 45 Fed. Reg. 74,693 (Nov. 12, 1980).

¹⁷ See id. at 74,696.

¹⁸ See AEA §§ 53, 62, 63, 81, 161(b), 42 U.S.C. §§ 2073, 2092, 2093, 2111, 2201(b).

materials to include uranium, thorium, plutonium, and "any radioactive material yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material." Source, byproduct, and special nuclear material are all found in spent nuclear fuel.²⁰

Various courts have recognized the Commission's authority under the AEA to license and regulate the storage of spent nuclear fuel. The U.S. Supreme Court noted in *Pacific Gas and Electric Co. v. State Energy Resources Conservation and Development Commission* that the AEA gave the Commission "exclusive jurisdiction to license the transfer, delivery, receipt, acquisition, possession and use of nuclear materials." The courts of appeals have followed the Supreme Court's lead. Relying on *Pacific Gas and Electric*, the Third Circuit held that the Commission's "exclusive" jurisdiction includes authority to regulate the shipment and storage of radioactive materials. The Seventh Circuit, too, has expressly held that the AEA gives the Commission jurisdiction to regulate spent fuel storage. In holding that the AEA preempted an Illinois law prohibiting the storage and transportation of spent nuclear fuel to a privately owned, AFR facility, the Court stated:

The Atomic Energy Act sets up a comprehensive scheme of federal regulation of atomic energy, administered by the Nuclear Regulatory Commission. The Act does not refer explicitly to spent nuclear fuel, but it does refer to the constituents of that fuel, and the state does not, and could not, question the Commission's authority to regulate the storage of spent nuclear fuel.²³

In a more recent case challenging a state law that required a siting permit prior to construction of an ISFSI, a federal district court in Maine noted that "the NRC unquestionably retains full regulatory authority over the radiological health and safety aspects of spent fuel storage."²⁴

B. The NWPA Does Not Expressly Repeal NRC's Authority over Spent Fuel Storage

Nowhere does the NWPA purport to limit the Commission's general authority under the AEA to regulate spent fuel. Section 135(h), the provision on which Utah

¹⁹ AEA §§ 11e(1), z, aa, 42 U.S.C. §§ 2014(e)(1), (z), (aa).

²⁰ See 10 C.F.R. § 72.3.

²¹ 461 U.S. 190, 207 (1983).

²² Jersey Central Power & Light Co. v. Lacey Township, 772 F.2d 1103, 1111 (3d Cir. 1985). See also Kelley v. Selin, 42 F.3d 1501 (6th Cir. 1995), cert. denied, 515 U.S. 1159 (1995).

²³ Illinois v. General Electric Co., 683 F.2d 206, 214-15 (7th Cir. 1982) [internal citations omitted], cert. denied, 461 U.S. 913 (1983).

⁴⁶¹ U.S. 913 (1983).

²⁴ Maine Yankee Atomic Power Co. v. Bonsey, 107 F. Supp. 2d 47, 53 (D. Me. 2000) (holding that the state permit requirement was preempted under the AEA).

relies, states only that the NWPA itself does not authorize away-from-reactor ISFSIs:

Notwithstanding any other provision of law, nothing in this Act shall be construed to encourage, authorize, or require the private or Federal use, purchase, lease, or other acquisition of any storage facility located away from the site of any civilian nuclear power reactor and not owned by the Federal Government on the date of the enactment of this Act.²⁵

Notably, this provision contains no language of prohibition; it says simply that the NWPA does not "authorize . . . the private . . . use, purchase, lease or other acquisition" of any storage facility that is not at the site of a civilian nuclear power reactor or at a federally owned facility. According to Utah, though, "[t]his language is an express disallowance of any away-from-reactor storage other than that provided for in the NWPA."²⁶

Contrary to Utah's claims, where an activity is already authorized by another provision of law, declining to "authorize" it anew — or encourage it or require it — is not the same as prohibiting it. As noted above, when the NWPA was enacted, the AEA and the NRC's existing Part 72 regulations allowed private owners of spent fuel to use an offsite facility for storage and provided for NRC licensing of such facilities. By stating "nothing in *this Act* shall . . . authorize" such storage, Congress limited the scope of section 135(h) to those programs created under the NWPA itself (emphasis added). The language of section 135(h) is facially neutral on the question of the NRC's general AEA authority to license away-from-reactor ISFSIs. Section 135(h) says what the then-new NWPA authorized, but it says nothing to override existing law.

Congress knows how to draft legislation that clearly states its intent. If Congress intended an absolute prohibition against private offsite storage, it could have accomplished that with concrete and specific language, such as: "Notwithstanding any other provision of law, this Act *prohibits* the private or Federal use...," or "there shall be no private or Federal storage of spent nuclear fuel on any site...." Arguably, had Congress stated in the NWPA that private AFR storage "is not authorized," without limiting that statement to the effect of "this Act," it might have suggested an intent to revoke the Commission's AEA authority to allow such storage. But Congress did not use such absolute language, and we believe that its choice of words was deliberate.

Utah's reading of section 135(h) violates the principle of statutory construction that a statute should be interpreted, if possible, in a way that gives every word meaning.²⁷ It would make no sense to provide that a law does not "encourage"

²⁵NWPA § 135(h), 42 U.S.C. § 10155(h).

²⁶ Utah's Petition To Institute Rulemaking and To Stay Licensing Proceeding (Feb. 11, 2002), at 10.

²⁷ See United States v. Alaska, 521 U.S. 1, 59 (1997); see also Rosenberg v. XM Ventures, 274 F.3d 137, 141 (3d Cir. 2001) ("[W]hen interpreting a statute, courts should endeavor to give meaning to every word that Congress used and therefore should avoid an interpretation which renders an element of the language superfluous").

or "require" an activity if the law actually banned that activity altogether, as Utah maintains. Utah's interpretation would make the words "encourage" and "require" superfluous. The State offers no explanation why Congress would see a need to add that it was not "encouraging" or "requiring" private, offsite storage if its decision not to authorize it in the NWPA were tantamount to an across-the-board prohibition.

But "encourage," "authorize," and "require" each has its own significance when read in context of the whole of Subtitle B, because this subtitle variously authorizes, encourages, and requires different things. By saying the NWPA did not "authorize" the use of a private facility, section 135(h) limited DOE's powers under NWPA. Because DOE's authority to take spent fuel for storage originated with section 135 of NWPA, section 135(h) ensured that DOE would not take over a private facility to fulfil its section 135 obligation. But because private generators' authority to store spent fuel originated with the AEA, the NWPA's failure to "authorize" them to take the fuel had no effect on that preexisting authority.

With respect to DOE's role, it was not necessary to add that the NWPA doesn't "encourage" or "require" DOE to acquire or use private facilities. But Congress had a reason to add that the NWPA did not "encourage" and "require" storage at a private, AFR facility. These two terms relate to Subtitle B's provisions affecting private parties who own or generate spent fuel.

Subtitle B has several provisions that "encourage" generators to expand onsite storage. For example, section 132 requires DOE, NRC, and "other authorized federal officials" to "take such actions as ... necessary to encourage and expedite the effective use" of onsite storage. Section 133 directs the Commission to devise procedures for licensing alternative onsite storage technologies, and section 134 provides for expedited hearings for the expansion of at-reactor storage. These provisions facilitating or encouraging expansion of onsite storage do not mention private offsite storage. Section 135(h) emphasized that they should not be construed as encouraging private storage located away from a reactor.

Context, and a little legislative background, also explains why Congress would specify that the NWPA did not "require" private offsite storage. NWPA section 135(b)(1)(B) "required" generators to maximize at-reactor storage as a prerequisite to DOE's taking possession for limited interim storage. For some time during the legislation's formative period, H.R. 3809 (the bill that was eventually enacted) and similar bills would have also required that generators exhaust private offsite storage options before they could ask DOE to take the fuel for interim

²⁸ Preventing DOE from taking over existing private or nonfederal spent fuel storage facilities was a specific concern of some members of Congress, as shown in both the debates (*see infra* notes 74-77 and accompanying text), and in previous versions of the bill (*see infra* note 31 and accompanying text).

²⁹NWPA § 132, 42 U.S.C. § 10152.

³⁰ See 10 C.F.R. §§ 2.1101-1117 (implementing § 134).

storage.³¹ Subsection 135(h) underscores that this requirement was eliminated in the final draft of the legislation: generators would not have to prove that they could not meet their own storage needs through storage at a private AFR facility.

The revisions made to section 135(h) as the legislation evolved affirm this interpretation. We can see, in an early version of H.R. 3809, the precursor of the provision that would become subsection 135(h). This was a site limitation provision prohibiting DOE from taking over commercial reprocessing facilities, which had onsite storage pools, to provide interim storage:

For purposes of providing storage capacity under subsection (a), the Secretary may not purchase, lease, or otherwise acquire any commercial facility designed or intended to be used for the reprocessing of spent nuclear fuel for extraction of uranium or plutonium.³²

There were, at the time, three facilities that had been built for commercial reprocessing — in Morris, Illinois; West Valley, New York; and Barnwell, South Carolina — none of which was operating. Morris and West Valley were both being used to store spent fuel, and there had been discussions of using all three for federal interim storage. If the legislation as enacted had kept the requirement that the owners of spent fuel had to show they could not meet their storage through private, offsite storage, these were the facilities to which the generators likely would have turned.³³

Around the time the requirement that spent fuel owners exhaust private storage was removed, the site limitation provision was put into its current form, providing that private offsite storage was not "require[d]." The simple language of prohibition used in the earlier draft — "the Secretary may not" — was changed to the broader yet vaguer statement that the Act did not "authorize, encourage or require" either private or federal entities to use offsite AFR facilities.

Section 135(h), therefore, accomplished two things: it kept DOE from taking over a private AFR facility to fulfil its obligation under NWPA, while providing

³¹ See H.R. Rep. No. 97-491, at 20 (1982), reprinted in part in 1982 U.S.C.C.A.N. 3792 (H.R. 3809, § 133(b)(1)(D), reported out of the House Comm. on Interior and Insular Affairs on April 27, 1982). See also Nuclear Waste Disposal Policy: Hearings Before the Subcomm. on Energy Conservation and Power of the House Comm. on Energy and Commerce on H.R. 1993, H.R. 2881, H.R. 3809, and H.R. 5016, 97th Cong. 2-3 (1982) [hereinafter 1982 Hearings on H.R. 1993] (statement of Chairman Richard L. Ottinger (NY), before June 8, 1982 hearings that parties had reached "tentative agreement" calling for limited federal storage after generator had exhausted onsite storage, transshipment, or private offsite storage as options). See also S. 1662, 97th Cong. § 302(a) (1982) (as reported out of the Comm. on Env't and Pub. Works March 8, 1982); H.R. 6598, 97th Cong. § 135(b)(2)(B) (1982) (as reported from the Subcomm. on Energy Conservation and Power of the House Comm. on Energy and Commerce, July 8, 1982).

³² See H.R. 3809, § 133(d) (as reported out of the House Committee on Interior and Insular Affairs on April 27, 1982). West Valley, the only facility that had ever reprocessed fuel, had a Part 50 license. The General Electric Company facility in Morris, Illinois, initially accepted spent fuel for storage under a Part 70 license, and was granted a license renewal under Part 72 in May 1982. See Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, 51 Fed. Reg. 19,106, 19,107 (May 27, 1982).

³³Possibly, under the original legislative approach, the owners of spent fuel would have had to show that they could not build their own offsite storage facility in time to avoid shutdown. But because the licensing process is lengthy, the owners likely may have been able to show that this was not feasible.

that Subtitle B's various provisions facilitating expanded onsite storage would not extend to private offsite storage. This reading comports with the rules of statutory construction because it gives each word Congress used a separate and distinct significance which is consistent with its ordinary meaning. This interpretation also explains why the NWPA's only reference to private, AFR storage is found in the middle of a complex statutory provision (section 135) describing a limited federal program to provide emergency storage at DOE sites. The reason is that Congress was concerned with how Subtitle B, generally, and the federal storage program, specifically, might be interpreted to affect private AFR facilities. The language of section 135(h) clarifies that there is to be no effect one way or the other.

In addition, we understand the phrase "[n]otwithstanding any other provision of law, nothing in *this Act* [shall authorize offsite storage]" to be an acknowledgment that other provisions of law might authorize private or federal use of nonfederal facilities for storage. Hembers of Congress clearly were well aware that "other provisions of law" authorized private AFR storage facilities, as the existence, and fate, of such facilities was discussed in congressional committee debates. Likewise, "other provisions of law" allowed DOE to use nonfederal storage facilities for purposes other than fulfilling its NWPA interim storage obligation. For example, Congress had only recently enacted the West Valley Demonstration Project Act, which directed DOE to take possession of, but not title to, a New York state-owned facility for a demonstration of high-level waste solidification techniques. 6

If section 135(h) meant what Utah claims it does — namely, that prior laws granting authority to use nonfederal storage facilities were repealed —

³⁴On October 2, 2002, approximately 31/2 months after the close of briefing on this matter, Utah moved to supplement its brief with an argument concerning the meaning of the phrase "[n]otwithstanding any other provision of law." Utah's Motion To Allow Three-Page Supplement on the Meaning of 42 U.S.C. 10155(h). Utah argues that the motion was timely because it was filed within 5 days of its lawyers' "flash" of insight into the meaning of the very provision of law upon which its whole argument turns. *See id.* This does not make its supplemental brief timely. We cannot accept the late brief, for to do otherwise would make briefing schedules meaningless and efficient case management impossible.

The Commission has been extremely indulgent with Utah in allowing it to explore and develop its arguments on the jurisdictional claim, which were first raised in 1997 with Utah's initial contentions before the Board. The Board rejected the argument in 1998. See Private Fuel Storage, L.L.C., (Independent Spent Fuel Storage Installation) LBP-98-7, 47 NRC 142, 183-84 (1998). Although NRC Staff and the Applicant objected that Utah's effort to bring its jurisdictional claim before the Commission in 2002 amounted to an untimely appeal of the 1998 Board ruling, we accepted review in April 2002, allowing 6 weeks for briefing. See CLI-02-11, 55 NRC 260. Then, at Utah's request and again over the Applicant's and NRC Staff's objections, we allowed reply briefs. We also note that Utah has raised the same arguments in separate litigation in federal district court, where it might have come up with its latest ''insight'' a long time ago. See Skull Valley Band of Goshute Indians v. Leavitt, 215 F. Supp. 2d 1232 (D. Utah 2002) (appeal pending).

³⁵ See, e.g., 128 Cong. Rec. 28,033-34 (1982) (Nov. 30, 1982); 128 Cong. Rec. H10522 (daily ed. Dec. 20, 1982); 128 Cong. Rec. S15,659 (daily ed. Dec. 20, 1982).

³⁶West Valley Demonstration Project Act of 1980, 42 U.S.C. § 2021a. The West Valley facility, originally designed and licensed for spent fuel reprocessing, had been storing spent commercial fuel since its operators abandoned reprocessing in 1975.

then the West Valley Project would have been scuttled. Section 135(h) did not, in fact, affect that project, which is ongoing.³⁷ Similarly, under Utah's interpretation, existing storage facilities like that in Morris, Illinois, would have been rendered unlawful. There is no evidence that Congress intended that result. We conclude that Congress intended the 'notwithstanding' clause in section 135(h) to recognize and distinguish, not abrogate, existing provisions of law authorizing AFR spent fuel storage.

C. The NWPA Does Not Implicitly Repeal NRC's General Authority

Because the NWPA does not expressly "prohibit" private away-from-reactor storage, but only declines to "authorize" it, Utah's argument depends upon a finding that the NWPA's waste storage provisions are exclusive. But Congress could not have created an exclusive means for dealing with waste without repealing the general authority over waste that the AEA already granted. As we have discussed, the NWPA does not explicitly repeal the NRC's AEA authority. If the NWPA took away the NRC's authority to license an AFR storage facility, then it must have done so through an *implied* repeal of the general regulatory power under which the NRC promulgated Part 72. But there is no evidence of such an implied repeal.

1. The NWPA- and AEA-Authorized Private Facility Are "Capable of Coexistence"

One of the strongest maxims of statutory interpretation is that the law disfavors implied repeals.³⁸ Where two statutes are "capable of co-existence, it is the duty of the courts, absent a clearly expressed congressional intention to the contrary, to regard each as effective."³⁹ This is because Congress is presumed to know the state of the law when it enacts legislation.⁴⁰ Therefore, courts can normally assume that Congress will specify any provisions of law that are to be superseded by new legislation.⁴¹

The U.S. Court of Appeals for the District of Columbia Circuit once cautioned that, without the presumption against implied repeals, the difficulty in determining the effect of a bill on the body of preexisting law would turn the legislative

³⁷ See http://www.wv.doe.gov/.

³⁸ See, e.g., Morton v. Mancari, 417 U.S. 535, 549-50 (1974). Accord, J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred International, Inc., 122 S. Ct. 593, 604-05 (2001); FTC v. Ken Roberts Co., 276 F.3d 583, 592-93 (D.C. Cir. 2001); Elephant Butte Irrigation District v. U.S. Department of the Interior, 269 F.3d 1158, 1164 (10th Cir. 2001).

³⁹ *Morton v. Mancari*, 417 U.S. at 551.

⁴⁰ See, e.g, Edelman v. Lynchburg College, 122 S. Ct. 1145, 1151-52 (2002); South Dakota v. Yankton Sioux Tribe, 522 U.S. 329, 351 (1998); White v. Mercury Marine, Division of Brunswick, Inc., 129 F.3d 1428, 1434 (11th Cir. 1997).

⁴¹ United States v. Hansen, 772 F.2d 940, 944-45 (D.C. Cir. 1985).

process into "blind gamesmanship, in which Members of Congress vote for or against a particular measure according to their varying estimations of whether its implications will be held to suspend the effects of an earlier law that they favor or oppose." Thus, in the current situation, only if there is no way to reconcile the AEA's general authority with the NWPA should we find that the latter overruled the former. For us to find an implied repeal, where the two laws can be reconciled, would give the NWPA a wider impact than Congress intended.

We should emphasize that Congress was well aware that private offsite storage was lawful when it enacted the NWPA. We could simply presume Congress knew that the AEA granted NRC the general power to regulate spent fuel storage and stop there. Or we could impute to Congress knowledge that the Commission had issued regulations allowing offsite storage, as this was announced in the Federal Register. 43 But we do not have to rely on any presumption that Congress was aware of existing law, for the legislative record shows that existing law on offsite storage was brought to Congress's attention. During Congress's consideration of the NWPA, NRC representatives testified before both the House and Senate concerning interim storage and the NRC's Part 72 regulations.⁴⁴ In addition, the hearings show that at least some members fully understood that NRC regulations allowed private, offsite storage. For example, in a 1981 hearing, Rep. Richard L. Ottinger asked an industry representative why the federal government should provide offsite storage when the law allowed the utilities to build their own facilities. 45 Finally, Congress knew that AFR storage facilities already existed at Morris, West Valley, and Barnwell, because their fate was specifically discussed. 46

Utah claims that there would be a "big anomaly" between a system (the NWPA's) that would allow small federal AFR facilities only in limited circumstances, and a system (Part 72) that would allow private AFR facilities of unlimited size without the restrictions imposed on federal facilities.⁴⁷ But in face of the presumption against implied repeals, we would have to find an

⁴² *Id.* at 944.

⁴³ See 45 Fed. Reg. at 74,696; 74,698. The Commission's Statement of Considerations supporting the promulgation of 10 C.F.R. Part 72 makes clear that Part 72 applied to both at-reactor and away-from-reactor ISFSIs.

⁴⁴ See S. Rep. No. 97-282, at 44 (1981) (statement of Chairman Pallidino); 1982 Hearings on H.R. 1993, supra note 31, at 326 (statement of William J. Dircks, Executive Director for Operations, U.S. Nuclear Regulatory Commission).

⁴⁵ 1982 Hearings on H.R. 1993, supra note 31, at 411-12. In testimony before the House Energy and Commerce Committee, Subcommittee on Energy Conservation and Power, Chairman Richard L. Ottinger asked Sherwood H. Smith, president, Carolina Power & Light Co.:

[[]A]s I understand it, you have the power now to expand away from reactor storage, to join together various utilities in establishing common sites away from reactor storage, and yet the utilities appear deliberately not to have done that, to have waited for the Federal Government to come in and dissolve their problem with some kind of federally provided reactor storage. Why should we save you from your own neglect?

⁴⁶ See, e.g., 128 Cong. Rec. 28,033-34 (Nov. 30, 1982); 128 Cong. Rec. H10522 (daily ed. Dec. 20, 1982); 128 Cong. Rec. S15,659 (daily ed. Dec. 20, 1982).

⁴⁷ Utah's Petition To Institute Rulemaking at 22-28; Utah's Reply Brief Regarding Utah's Suggestion of Lack of Jurisdiction (June 17, 2002), at 1-6.

irreconcilable conflict between the NWPA's provisions and our AEA-authorized Part 72 regulations to find that the NWPA implicitly limited the NRC's general authority to license AFR storage. There is, however, no irreconcilable conflict between a law imposing one set of restrictions on federal facilities (the NWPA), and another law imposing a different set of restrictions on private facilities (Part 72).

To demonstrate an incompatibility between the AEA and the NWPA, Utah cites various differences between a NWPA-authorized federal AFR facility and a Part 72 private AFR facility. For example, the NWPA limited a DOE storage facility to 1900 tons of material. In contrast, our Part 72 regulations do not limit the size of an ISFSI. Also, DOE was to take the fuel only where it was necessary to prevent reactor shutdown, whereas Part 72 has no parallel restriction. And DOE was only to provide storage at sites it already owned, while Part 72, of course, allows storage at privately owned sites. Other distinctions abound. Spent fuel was required to be removed from any subsection 135 facility within 3 years of the opening of a permanent repository or monitored retrievable storage facility; Part 72 allows for a 20-year, renewable license that is not tied to the availability of a permanent disposal site. Section 135 also had provisions regarding state notification and participation, which included, in some cases, a right for the state to disapprove storage within its boundaries which could only be overridden by congressional action.⁴⁸ By contrast, when an applicant seeks a license under Part 72, states may either intervene in NRC licensing hearings as an interested party, or participate as an interested state, but they do not have the veto power the NWPA granted over section 135 storage.⁴⁹

We see no particular incongruity, let alone absolute incompatibility, between the NWPA and our Part 72 regulations, as the differences between the law governing two types of facilities is accounted for by the fact that one facility is run by the DOE and the other privately. Federal programs use federal financial resources, and Congress would naturally set limits on the extent to which federal money and facilities are used to benefit a private commercial enterprise.

Utah argues that it would make no sense to impose a "host of protective strictures" on DOE with its "vast experience with things nuclear" while "none" are imposed on private licensees.⁵⁰ But it is hardly true that existing law imposes no "protective strictures" on private NRC licensees. Part 72 establishes an elaborate regulatory scheme designed to protect public health and safety. Indeed, in the ongoing PFS adjudication at the NRC, Utah and other litigants have challenged the Applicant's compliance with various aspects of Part 72. A DOE

⁴⁸ The state could disapprove provision of 300 or more tons of storage at any one site. See NWPA § 135(d)(6)(A), (D), 42 U.S.C. § 10155(d)(6)(A). The state had no right to disapprove a site on an Indian reservation, NWPA § 135(d)(6)(C), 42 U.S.C. § 10155(d)(6)(C).

49 See 10 C.F.R. §§ 2.714, 2.715(c).

⁵⁰ See Utah's Reply Brief at 3-4.

facility that is not otherwise subject to NRC licensing, however, would not become so when used to store fuel under section 135,⁵¹ so it was necessary for the NWPA itself to spell out any limits. To the extent that Utah suggests that limits spelled out in legislation are more "protective" than regulations promulgated by a regulatory agency, we simply note that an agency's properly promulgated, substantive regulations have the full force and effect of law.⁵² We also note that while DOE may have had "vast experience with things nuclear" at the time when the NWPA was enacted,⁵³ private utilities — such as those making up the PFS consortium — had been handling and storing nuclear materials for 25 years under NRC (or AEC) regulation, with a safety record that compared favorably to DOE's.

The NWPA's legislative history confirms that the limits imposed on the DOE's obligation to take spent fuel for interim storage stemmed, for the most part, not from opposition to a large, centralized facility, but from Congress's belief that interim storage was the generators' responsibility. Representative Stanley N. Lundine of New York, who sponsored an amendment that would have removed all of section 135 from the NWPA, summed up the principal arguments against federal interim storage. In debates before the full House in November 1982, he argued that federal interim storage would detract from efforts to develop a permanent repository, would lead to increased transportation of fuel, and would lead to utilities' avoiding taking initiative to solve their own spent fuel storage problems.⁵⁴ He warned that the utilities would simply request the government to increase the amount of federal storage available.⁵⁵ Proponents of the federal program countered that the various limits that had been developed during the long process of crafting the legislation assured that federal interim storage would only be a "safety valve" if the generators' self-help efforts failed.⁵⁶

Therefore, Utah's characterization of the NWPA's limits as somehow safety-related is inaccurate. The NWPA's statutory limits were clearly imposed not as safety limits, but to limit federal involvement in an area that was seen as private industry's responsibility. In particular, the 1900-ton total storage limit was not

⁵¹ See NWPA § 135(a)(1)(A)(i), 42 U.S.C. § 10155(a)(1)(A)(i). This provision exempts from NRC licensing DOE's use of federal government facilities for interim storage under section 135. The NWPA, however, did give a nonlicensing health-and-safety role to the Commission. See NWPA § 135(a)(1)(A), 42 U.S.C. § 10155(a)(1)(A).

⁵² See, e.g., Chrysler Corp. v. Brown, 441 U.S. 281, 295 (1979).

⁵³ Utah's Reply Brief at 3.

⁵⁴ 128 Cong. Rec. 28,032-33 (1982).

⁵⁵ *Id.* at 28,033.

⁵⁶ See, e.g., Comments of Mr. Lujan, 128 Cong. Rec. at 28,034 (1982) (''I think the thing we need to remember that we are providing for in the legislation is a last resort interim storage facility''); comments of Mr. Broyhill, *id.* at 28,035-36 (''this storage capacity cannot be used unless there are certain findings that are made by the NRC . . . If they show to the satisfaction of the NRC that they have been diligently pursuing licensing alternatives and they show they cannot reasonably provide that storage capacity, . . . then they would have access to these Federal facilities . . . it is only a safety valve''); comments of Mr. Marriot, *id.* at 28,038 (''Does not the present bill require the utilities to try to expand onsite storage before they apply for AFR's? . . . I do not understand what the problem is . . . We have then only to go to AFR's if in fact it was necessary and the reactors could make that point.'').

a safety measure; legislative history shows that it represented a compromise reached between those who wanted more and those who wanted less.⁵⁷ Limiting section 135 storage to existing DOE sites was also not a safety measure. During the hearings, the Department of Energy identified eighteen existing facilities, including Hanford Nuclear Reservation in Washington, that could accept spent reactor fuel with minimal modification.⁵⁸ The provision limiting federal storage to existing DOE sites meant that DOE would not have to acquire any new sites. Because existing facilities would only need some modification to accept spent commercial fuel, this provision also ensured that the storage would be available quickly.

In sum, it is not surprising that there are significant differences between a DOE facility storing commercial spent fuel under section 135 and a private interim storage facility. We do not find any real incompatibility in these laws, let alone the kind of "positive repugnancy" that we would need to see to find that the NWPA implicitly repealed our general regulatory authority over spent fuel.⁵⁹

2. "Comprehensive" Legislation Did Not Ban Storage Alternatives

Utah argues that because the NWPA was intended to be a "comprehensive" legislative solution for dealing with radioactive waste, any other provision of law concerning radioactive waste must necessarily be excluded. But, as we read the NWPA and its history, Congress intended to supplement, rather than replace, existing law.

Had Congress truly intended to revoke preexisting NRC licensing authority, as Utah believes, it forgot to provide for regulating those facilities that already existed. At the time of the NWPA's enactment, spent fuel was already being stored away from the reactor sites at two NRC-licensed facilities (Morris and West Valley). If section 135(h) banned such facilities, then Congress must be seen to have required these facilities to be shut down and the spent fuel sent elsewhere. But, if so, it is exceedingly odd that Congress did not explain how existing facilities should come into compliance. This is a gap in Utah's "comprehensiveness" position that the State has not addressed.

Another gap in the "comprehensiveness" of the NWPA is reflected in the fact that the federal interim storage program expired in 1990, at least 5 years before Congress anticipated the opening of a permanent repository. On This gap suggests that Congress intended to force the utilities to solve their own interim storage

 $^{^{57}\}mathit{See}$ Comments of Mr. Lujan, 128 Cong. Rec. at 28,035 (1982).

⁵⁸ See H. Rep. No. 97-491, at 37-38, 1982 U.S.C.C.A.N. at 3803-04.

⁵⁹ J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred International, Inc., 122 S. Ct. at 605, quoting Radzanower v. Touche Ross & Co., 426 U.S. 148, 155 (1976).

Ross & Co., 426 U.S. 148, 155 (1976).

60 See H. Rep. No. 97-491, at 31, reprinted in 1982 U.S.C.C.A.N. at 3797 (Chronology of the NWPA's deadlines anticipating that operations at a permanent repository could begin "around 1995").

solutions after the federal program had "bought them time" to do so. Again, this does not suggest an intent to restrain private-sector activities.

Utah cites the U.S. Supreme Court's ruling in United States v. Fausto to support its argument that where legislation is intended to be "comprehensive," it can be presumed that anything left out was thereby prohibited.⁶¹ Fausto involved an interpretation of the Civil Service Reform Act (CSRA). The Supreme Court considered the CSRA's failure to include a cause of action, previously recognized at common law, for a certain class of civil servants who claimed to have been wrongfully terminated. The Court said that the "structure of the statutory scheme" indicated that the omission was a purposeful denial of review to plaintiff, because the whole purpose of the CSRA was to achieve uniformity and predictability in civil servants' employment rights. The Court found that Congress would not have intentionally left open a common-law avenue of redress for employees like Fausto under the very system that it was trying to reform. As a result, the Court concluded that "the absence of provision for these employees to obtain judicial review is not an uninformative consequence of the limited scope of the statute, but rather manifestation of a considered congressional judgment that they should not have statutory entitlement to review."62

Fausto, in short, found that recognizing a cause of action not specifically recognized in the CSRA would undermine its whole purpose. To make a similar finding here, we would have to believe that Congress intended, with the NWPA, to replace all preexisting authority under the AEA, and all NRC's regulations promulgated thereto, with respect to spent fuel and nuclear waste. But Utah has not pointed out, and we do not see, any indication that Congress intended a sweeping reform of all then-existing regulations relating to nuclear waste. Indeed, Utah has not shown that Congress found that the availability of private offsite storage was a problem that needed redress. Rather, the lack of a permanent solution, and the possible imminent reactor shutdowns for lack of onsite storage, were the problems Congress sought to resolve with the NWPA. As we see the NWPA, Congress showed an intent not to reduce spent fuel storage options, but rather to expand them. Because of this, we do not believe that allowing a privately run, AFR storage facility undermines the NWPA in the way that Fausto's complaint undermined the CSRA.

⁶¹ United States v. Fausto, 484 U.S. 439 (1988).

⁶² Fausto, 484 U.S. at 448-49.

III. THE NWPA'S LEGISLATIVE HISTORY SUPPORTS A NEUTRAL INTERPRETATION OF SECTION 135(h)

Our reading of section 135(h) is that it is facially neutral: neither prohibiting nor promoting the use of private AFR storage facilities. There is a middle ground between requiring a thing and proscribing it; Congress appears to have agreed to settle on this middle ground with respect to private offsite storage.

As explained above, a straightforward reading of section 135(h) shows that it does not bar private AFR storage. Where a statute is unambiguous, there is no need to look at legislative history to interpret its meaning.⁶³ But, if we review the NWPA's legislative history, we find it does not support Utah's case. The history leads us to conclude that the language of section 135(h) was carefully and deliberately chosen to reflect a political compromise between the various factions interested in this legislation. We already have discussed some pertinent legislative history earlier in this opinion.⁶⁴ Here, we consider the history relating to the overall context for the legislation.

The 96th Congress considered almost fifty bills concerning radioactive waste management, but was not successful in enacting comprehensive legislation.⁶⁵ The 97th Congress also considered numerous bills. Portions of those bills addressing federally provided interim storage, which would eventually become NWPA section 135, went through numerous incarnations. A great deal of compromise was involved in getting the legislation passed.

The Carter Administration first proposed that the federal government take spent fuel for interim storage, but at the time there was no legal authority for DOE to do so.⁶⁶ The initial versions of bills that included federal interim storage envisioned that the government would simply take the fuel off the generators' hands; there were no requirements that industry exhaust other storage options, or other limitations on the site and size of a federal storage facility.⁶⁷

There ensued a political struggle between those in Congress who supported federal interim storage as a way to help the nuclear power industry and those who believed that interim storage was not the federal government's responsibility and would only detract from the primary goal of permanent storage. The NWPA,

⁶³ Barnhart v. Sigmon Coal Co., Inc., 534 U.S. 438, 450 (2002).

⁶⁴ See, supra, text accompanying notes 31-33, 35, 44-46, and 54-58.

⁶⁵ U.S. Congress, Office of Technology Assessment, Managing the Nation's Commercial High-Level Radioactive Waste, OTA-O-171 (March 1985).

⁶⁶ See H. Rep. No. 97-491, at 37, reprinted in 1982 U.S.C.C.A.N. at 3803.

⁶⁷ See, e.g., S. 637, 97th Cong. (1981) (introduced by Senator J. Bennett Johnston in March 1981); H.R. 2840, 97th Cong. (1981) (introduced by Rep. Jerry Huckaby in March 1981).

as ultimately enacted, reflected a compromise: federal interim storage was to be allowed but would be subject to limitations.⁶⁸

As noted above, at one point in the history of the evolving legislation, these limitations included a requirement that industry show it had exhausted private offsite storage as an option before seeking federal storage. The House Energy and Commerce Committee removed that requirement from the bill it was considering, H.R. 6598, when it reported the bill in August 1982.⁶⁹ We have not found any reference to who instigated the removal of this requirement or what reason they gave. The Committee report says simply:

The Committee bill does not require that storage capacity at a private AFR be exhausted or unavailable before a utility would be eligible for storage capacity provided by the Secretary.⁷⁰

This statement suggests that deletion of private, AFR storage from the list of eligibility criteria contained in NWPA subsection 135(b) was intended only to remove one obstacle faced by utilities seeking federal interim storage, not as an implicit prohibition on such facilities.

The record suggests that Congress removed the requirement to seek private offsite storage at the urging of the nuclear power industry. The industry had campaigned for federal government interim storage, claiming that the federal government had contributed to the storage problem by delaying a permanent solution and by changing its position on reprocessing.⁷¹ Representatives from the industry proposed that the federal government should acquire the existing spent fuel pools attached to the out-of-service reprocessing facilities at Morris, Illinois, West Valley, New York, and Barnwell, South Carolina, for this purpose.⁷² According to one industry representative's testimony before Congress, utilities could not finance acquisition of these facilities, particularly because the current

⁶⁸ See, generally, 1982 Hearings on H.R. 1993, supra note 31, at 1-4 (overview of statute by Rep. Richard L. Ottinger, Chairman of Subcommittee on Energy Conservation and Power).

⁶⁹ H.R. Rep. No. 97-785, pt. I, at 24.

⁷⁰ *Id.* at 41.

⁷¹ See, e.g., Radioactive Waste Legislation: Hearings Before the Subcomm. on Energy and the Environment of the House Comm. on Interior and Insular Affairs on H.R. 1993, H.R. 2800, H.R. 2840, H.R. 2881, H.R. 3809, 97th Cong. 532, 549-51 (1981) [hereinafter 1981 Hearings on H.R. 1993] (statement of Sherwood H. Smith, Jr., Chairman and Chief Executive Officer Carolina Power & Light Co. on behalf of the American Nuclear Energy Council, the Edison Electric Institute, and the Utility Nuclear Waste Management Group, July 9, 1981). See also 1982 Hearings on H.R. 1993, supra note 31, at 412, 434 (statement and testimony of Sherwood H. Smith, president, Carolina Power & Light Co.).

Co.).

72 1981 Hearings on H.R. 1993, supra note 71, at 530-32, 552, 566-67 (statement of Sherwood H. Smith); 578, 584-85 (statement of Bertram Wolfe, Chairman of Atomic Industrial Forum's Comm. on Fuel Cycle Policy). See also 1982 Hearings on H.R. 1993, supra note 31, at 438 (statement of Seymour Raffety, representing Dairyland Power Cooperative and the National Rural Electric Cooperative Assn.); Nuclear Waste Disposal: Joint Hearings Before the Comm. on Energy and Natural Resources and the Subcomm. on Nuclear Regulation of the Committee on Environment and Public Works, United States Senate, on S. 637 and S. 1662, 97th Cong. at 329, 336, 352-57 (1981) [hereinafter Senate Joint Hearings] (testimony and prepared statement of Sherwood H. Smith, Jr. on behalf of American Nuclear Energy Council, the Edison Electric Institute, and the Utility Nuclear Waste Management Group).

owners would be reluctant to sell the spent fuel pools alone.⁷³ Naturally, industry favored easing the conditions under which a utility could ask DOE's help. It was in the utilities' interest to remove from section 135 the requirement that they exhaust the opportunity for private offsite disposal before DOE could take their spent fuel.

Faced with the nuclear industry's advocacy of a federal solution to the waste issue, members of Congress from those districts containing existing storage facilities were concerned that DOE would use those facilities to satisfy its obligation under section 135. The opposition of those members is seen in the debates. After Congress put section 135(h) into its final form, some members continued to express concern. On November 30, 1982, the full House considered Representative Lundine's amendment that would strike the federal interim storage program completely.⁷⁴ Representative Broyhill, who favored limited federal interim storage, argued that section 135(h) would ensure that DOE would not take over existing private facilities:

Mr. Chairman, I would point out to the Members that the last resort interim storage program is limited to existing Federal facilities, and those facilities which have undergone a public health and safety review by NRC. And I would also say that we have special statutory language in section 135, which [Rep. Lundine] now would have us strike, that would exclude the use of private away-from-reactor facilities for the storage of spent fuel. We specifically put this language in here to take care of the problem that he and others have talked about; that is, the concerns that they have expressed as [to] the possible use of privately owned facilities in their particular districts. And he now wants to strike the language that we put in the bill for the express purpose of saying that there will be no funds used for the private facilities.⁷⁵

The same concerns were seen on the Senate side. Senator Strom Thurmond of South Carolina was a vocal opponent of federal interim storage, as DOE had raised the possibility of using the Barnwell reprocessing facility for that purpose. As the Senate was nearing its final vote, Senator Charles Percy of Illinois asked specifically:

Is it the intent of the managers of this legislation under section 135 to prohibit the Secretary from providing capacity for the storage of spent nuclear fuel from civilian nuclear power reactors at the following facilities:

First. The interim spent fuel storage facility owned and operated by General Electric in Morris, Ill.:

⁷³ Statement of Sherwood Smith, Senate Joint Hearings, supra note 72, at 354-55.

⁷⁴ See 128 Cong. Rec. at 28,032.

⁷⁵ *Id.* at 28,040.

⁷⁶ See 1982 Hearings on H.R. 1993, supra note 31, at 365-72 (testimony of Sen. Strom Thurmond).

Third. The Allied General Nuclear Services facility near Barnwell, S.C.?⁷⁷

Senator Simpson replied that that was the managers' intent.

Although the prevention of the federal takeover of private storage facilities was of great concern to those members of Congress with existing facilities in their districts, nothing in the NWPA ordered those private facilities to be shut down. Instead, the Act merely states that it does not "authorize" them to be used, purchased, leased, or acquired. Although the congressional deliberations leave the strong impression that members of Congress from districts with private storage facilities might have liked to see those facilities closed, it appears that those members of Congress settled for a provision that would in no way encourage their use.

We conclude that Congress was fully aware that existing law allowed for private parties to store spent nuclear fuel at an AFR facility and made a conscious decision not to prevent that storage. Congress intended section 135(h) to have no greater effect than what the provision clearly said: it was a limit on programs established under the NWPA and the NWPA alone. It did not affect preexisting regulatory authority under the AEA.

Finally, we reject as irrelevant Utah's arguments concerning the Nuclear Waste Policy Act Amendments of 2000, which was vetoed by President Clinton. The bill would have authorized DOE to take spent fuel immediately, and store it at the proposed permanent repository site as soon as NRC approves such site. Utah sees in this legislation confirmation that private interim offsite storage was not an option, because Congress thought federal storage was necessary. But this logic is unpersuasive: as Utah acknowledges, Congress was responding to the nuclear utilities' lawsuits over DOE's breach of its contracts to take the fuel off their hands by 1998. The existence of private storage would not relieve DOE of its contractual obligation. In addition, as the Supreme Court has noted, the "views of a subsequent Congress form a hazardous basis for inferring the intent of an earlier one." And, of course, vetoed legislation does not help us determine what the law is.

⁷⁷ 128 Cong. Rec. S15659 (daily ed. Dec. 20, 1982). Senator Percy also commented: "I am [] pleased that the compromise bill prohibits the Federal Government from taking over the interim spent fuel storage facility in Morris, Ill. . . . I am sure that people in the Morris community will be relieved to know that they will no longer face the possibility of a federal takeover of the nuclear waste storage facility in Morris." *Id.*

⁷⁸ See Waterman S.S. Corp. v. United States, 381 U.S. 252, 268-69 (1965), quoting United States v. Price, 361 U.S. 304, 313 (1960). Accord, Jones v. United States, 526 U.S. 227, 238 (1999); United States v. SCS Business & Technical Institute, Inc., 173 F.3d 870, 878 (D.C. Cir. 1999); Arco Oil & Gas Co. v. EPA, 14 F.3d 1431, 1435 n.4 (10th Cir. 1993).

IV. CONCLUSION

The Commission has the authority under the AEA to license privately owned, AFR spent fuel storage facilities. Nothing in the text or legislative history of the NWPA suggests that Congress intended to alter this authority when it enacted the NWPA, which is primarily concerned with the responsibilities and duties of federal agencies with respect to spent fuel storage and disposal.

Accordingly, we reject Utah's "Suggestion of Lack of Jurisdiction," and deny its "Petition to Institute Rulemaking."

IT IS SO ORDERED.

For the Commission80

ANNETTE L. VIETTI-COOK Secretary of the Commission

Dated at Rockville, Maryland, this 18th day of December 2002.

⁷⁹The Commission is aware that the Board's final decision is expected soon. In light of the complex issues that have arisen in this adjudication, the Commission intends that the Office of the Secretary will, soon after the Board's decision, issue a scheduling order setting time and page limits governing further motions and appeals before the Commission.

Commission.

80 Commissioner Dicus was not present for the affirmation of this Order. If she had been present, she would have approved it.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman Dr. Jerry R. Kline Dr. Peter S. Lam

In the Matter of

Docket No. 72-26-ISFSI (ASLBP No. 02-801-01-ISFSI)

PACIFIC GAS AND ELECTRIC COMPANY (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)

December 2, 2002

In this proceeding concerning the application of Pacific Gas & Electric Company (PG&E) under 10 C.F.R. Part 72 to construct and operate an independent spent fuel storage installation (ISFSI) at the Diablo Canyon Power Plant, the Licensing Board rules on (1) the standing of, and admissibility of contentions proffered by, individuals and organizations seeking to intervene in accordance with 10 C.F.R. § 2.714; and (2) the participation of, and admissibility of issues proffered by, professed state and local interested governmental entities seeking to take part in the proceeding in accordance with 10 C.F.R. § 2.715(c).

RULES OF PRACTICE: STANDING

A person who wishes to intervene in a Commission proceeding must file a petition that

set[s] forth with particularity the interest of the petitioner in the proceeding, how that interest may be affected by the results of the proceeding, including the reasons why petitioner should

be permitted to intervene, with particular reference to the factors in [§ 2.714(d)(1)], and the specific aspect or aspects of the subject matter of the proceeding as to which petitioner wishes to intervene.

10 C.F.R. § 2.714(a)(1)-(2). In determining whether a petitioner has sufficient interest to intervene in a proceeding, the Commission has traditionally applied judicial concepts of standing. See Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-83-25, 18 NRC 327, 332 (1983) (citing Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610 (1976)). Contemporaneous judicial standards for standing require a petitioner to demonstrate that (1) it has suffered or will suffer a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statutes (e.g., the Atomic Energy Act of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury can be fairly traced to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. See Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 29 (1999). An organization that wishes to intervene in a proceeding may do so either in its own right by demonstrating harm to its organizational interests, or in a representational capacity by demonstrating harm to its members. See Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261, 271 (1998). To intervene in a representational capacity, an organization must show not only that at least one of its members would fulfill the standing requirements, but also that he or she has authorized the organization to represent his or her interests. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 168, aff'd on other grounds, CLI-98-13, 48 NRC 26 (1998).

ATOMIC ENERGY ACT: STANDING (INJURY IN FACT; PRESUMPTION BASED ON GEOGRAPHIC PROXIMITY)

RULES OF PRACTICE: STANDING (INJURY IN FACT; PRESUMPTION BASED ON GEOGRAPHIC PROXIMITY)

In certain types of proceedings, a petitioner may be presumed to have fulfilled the first of the required three standing showings based on geographical proximity to the facility, without having specifically to plead that element, if the petitioner resides within, or frequently comes into contact with, the facility's zone of possible harm. *See Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146, *aff'd*, CLI-01-17, 54 NRC 3 (2001). Whether such a presumption applies depends upon whether there is an "obvious potential for offsite consequences." *See id.* at 148 (quoting *Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 n.22 (1994)).

Moreover, the zone of possible harm varies, depending on the type of proceeding. For instance, although petitioners living within a 50-mile radius of a nuclear facility have been presumed to have standing in reactor construction permit and operating license cases, the requisite proximity may be considerably closer in other proceedings, such as those involving reactor spent fuel pool expansion and reracking. *See Northeast Nuclear Energy Co.* (Millstone Nuclear Power Station, Unit 3), LBP-00-2, 51 NRC 25, 28 (2000).

ATOMIC ENERGY ACT: STANDING (INJURY IN FACT) RULES OF PRACTICE: STANDING (INJURY IN FACT)

There is authority indicated that to establish injury in fact it is not necessary to proffer radiation impacts that amount to a regulatory violation. *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 417 (2001) (citing *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 247-48 (1996)). On the other hand, simply showing the potential for any radiological impact, no matter how trivial, is not sufficient to meet the requirement of showing a "distinct and palpable harm" under standing element one.

RULES OF PRACTICE: STANDING (REPRESENTATIONAL; AUTHORIZATION)

The agency's previous decisions have not required an organization to establish that it has independent litigating authority to represent itself or its members in adjudicatory proceedings, instead requiring only that an organization that wishes to intervene in a representational capacity show that at least one of its members would fulfill the standing requirements and that the organization has been authorized by the member to represent his or her interests. *See, e.g., Private Fuel Storage,* LBP-98-7, 47 NRC at 168. Moreover, even if an organization is required to demonstrate its authority to litigate on behalf of itself or its members, given that section 369.5(a) of the California Code of Civil Procedure provides that "[a] partnership or other unincorporated association, whether organized for profit or not, may sue and be sued in the name it has assumed or by which it is known," Cal. Civ. Proc. Code § 369.5(a) (2002), by virtue of its status as a California unincorporated association the organization in question in this proceeding has independent litigating authority.

ATOMIC ENERGY ACT: STANDING (INJURY IN FACT; TRANSPORTATION ROUTE-RELATED CLAIMS)

RULES OF PRACTICE: STANDING (INJURY IN FACT; TRANSPORTATION ROUTE-RELATED CLAIMS)

As has been noted previously relative to transportation route-related standing claims, mere geographical proximity to potential transportation routes is insufficient to confer standing; instead, the section 2.714 petitioners must demonstrate a causal connection between the licensing action and the injury alleged. *Compare Savannah River*, LBP-01-35, 54 NRC at 419-20 (transportation route-related standing established based on environmental report discussion of transportation impacts) *with Northern States Power Co.* (Pathfinder Atomic Plant), LBP-90-3, 31 NRC 40, 42-43 (1990) (petitioner who resided 1 mile from likely transportation route denied standing) *and Exxon Nuclear Co.* (Nuclear Fuel Recovery and Recycling Center), LBP-77-59, 6 NRC 518, 519-20 (1977) (assertion of injury because spent fuel would travel on railway tracks very near property insufficient to establish standing).

RULES OF PRACTICE: PARTICIPATION BY AN INTERESTED STATE OR LOCAL GOVERNMENT (INDICIA OF STATUS)

Consideration of purported indicia of "governmental entity" status should be done under the Commission's *Yankee Rowe* determination, which declares:

Not all organizations with governmental ties are entitled to participate in our proceedings as governmental ''agencies.'' The federal, state and local governments are replete with numerous boards, commissions, advisory committees, and other organizations — all of which have governmental or quasi-governmental responsibilities. We do not, however, understand section 2.715(c) to authorize automatic participation in our adjudications by each and every subpart of state and local government. [The regional planning board in question] is, by its own admission, an advisory body and lacks executive or legislative responsibilities. We conclude that advisory bodies, by their very nature, are so far removed from having the representative authority to speak and act for the public that they do not qualify as governmental entities for purposes of section 2.715(c).

Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 202-03 (1998) (citation omitted). The essence of the *Yankee Rowe* criterion is whether a purported governmental body has legislative or executive responsibilities, i.e., the authority to impose (by rule, order, or otherwise) or implement/enforce (by order, monetary penalty, or otherwise) requirements.

RULES OF PRACTICE: ATTAINING PARTY STATUS (ESTABLISH STANDING AND ADMISSIBLE CONTENTION); PARTICIPATION BY AN INTERESTED STATE OR LOCAL GOVERNMENT (PROFFERING ISSUES)

To intervene in a proceeding, in addition to establishing standing, an individual or organization seeking party status must also set forth at least one admissible contention. *See* 10 C.F.R. § 2.714(b)(1). Section 2.715(c) participants have the opportunity to interpose issues as well.

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

To be admissible, a contention submitted by a section 2.714 petitioner must state with specificity the issue of law or fact to be raised or controverted. *See* 10 C.F.R. § 2.714(b). Furthermore, each contention must be accompanied by: (1) a brief explanation of the bases for the contention; (2) a concise statement of the alleged facts or expert opinion the petitioner will rely upon to prove the contention, including references to specific sources and documents that will be relied upon to establish those facts and opinions; and (3) sufficient information to show that a genuine dispute on a material issue of law or fact exists with the applicant, which consists of either (a) references to specific portions of the application (including the applicant's environmental and safety reports) that are disputed and the reasons supporting the dispute, or (b) identification of each instance where the application purportedly fails to contain information on a relevant matter as required by law and the reasons supporting the allegation. *See id.* § 2.714(b)(2)(i)-(iii). If the contention fails to satisfy any one of these requirements, the contention must be denied. *See id.* § 2.714(d)(2)(ii).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

In addition to the threshold requirements set forth in section 2.714(b)(2), there are a number of other criteria that govern the admissibility of contentions. For example, a licensing board must reject a contention that, even if proven, would not entitle the petitioner to any relief and would, thus, make no difference in the outcome of the proceeding. See id. A contention will also be deemed inadmissible if it challenges an existing Commission rule or attempts to litigate an issue that is, or clearly is about to become, the subject of a Commission rulemaking. See id. § 2.758; see also Private Fuel Storage, LBP-98-7, 47 NRC at 179 (citing Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974)). Furthermore, contentions that concern matters outside the scope of the proceeding, as defined by the notice of hearing or opportunity for hearing, must also be denied. See, e.g., Public Service Co. of

Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY; CHALLENGE TO REACTOR FACILITY DESIGN EARTHQUAKE IN CONNECTION WITH CO-LOCATED ISFSI)

As was stated in another context, "issues of law or fact raised in a contention must be material to the grant or denial of the license application in question, i.e., they must make a difference in the outcome of the licensing proceeding so as to entitle the petitioner to cognizable relief." Private Fuel Storage, LBP-98-7, 47 NRC at 179. As was also indicated in that instance, "[a]gency case law further suggests this requirement of materiality mandates certain showings in specific contexts." *Id.* at 180. As the applicable 10 C.F.R. Part 72 regulations make clear, see 10 C.F.R. §§ 72.40(c), 72.102(f), for a co-located ISFSI, an applicant does not write on a clean slate relative to any seismic requirements. Absent an exemption or new information sufficient to alter the original site evaluation finding, the design earthquake (DE) for the nuclear facility is what the ISFSI applicant must use. As a consequence, a contention challenging the seismic qualifications of such a co-located ISFSI facility must necessarily provide not only a basis to indicate that there are specific concerns about the elements used to calculate the nuclear power plant seismic design criteria, but also a showing that, given those concerns, the reactor facility DE itself is now inaccurate to some meaningful degree.

RULES OF PRACTICE: PARTICIPATION BY AN INTERESTED STATE OR LOCAL GOVERNMENT (ADMISSIBILITY OF ISSUES)

Regarding the standard to be applied to the admission of issues proffered by a section 2.715(c) interested governmental entity, because the ultimate burden of proof rests with the applicant in a licensing action, it is not clear as a procedural matter against what standard a presiding officer would judge the applicant's response to such an "informal" issue that did not meet the requirements of section 2.714(b). Any party choosing to respond to the issue, including the applicant and the Staff, would be obligated to respond with the same degree of evidence as if it were a contention admitted under section 2.714(b), so that ultimately, permitting section 2.715(c) participants to interject "informal" issues for litigation would not only undermine the issue-sharpening and party-resource-saving purposes of section 2.714(b), but would remove any incentive for governmental entities to participate in the proceedings as full intervenor parties. As was noted recently, "[t]he Commission 'has long recognized the benefits of participation in our proceedings by representatives of interested states, counties,

municipalities, etc.'" Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 345 (2002) (quoting Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Units 1 and 2), CLI-99-30, 50 NRC 333, 344 (1999)). Thus, while presiding officers welcome the input of such section 2.715(c) participants on any section 2.714 contentions that are admitted for litigation in a proceeding, for any new issues an interested governmental entity wishes to raise on its own, it must satisfy the standards for contentions set forth in section 2.714(b).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY; CHALLENGE TO REACTOR FACILITY EMERGENCY PLAN IN CONNECTION WITH CO-LOCATED ISFSI)

Because 10 C.F.R. § 72.32(c) relieves an applicant from having to draft a new emergency plan (EP) or amend an approved EP in seeking authorization to construct and operate an ISFSI co-located at an existing reactor facility, any issues or contentions that seek such relief and do not relate specifically to the proposed ISFSI are essentially a challenge to that regulation and so are inadmissible pursuant to 10 C.F.R. § 2.758.

MEMORANDUM AND ORDER

(Ruling on Standing and Contentions of 10 C.F.R. § 2.714 Petitioners and Admission of 10 C.F.R. § 2.715(c) Interested Governmental Entities and Their Issues)

Pending before the Licensing Board are various requests and petitions filed in connection with the December 21, 2001 application of Pacific Gas and Electric Company (PG&E) under 10 C.F.R. Part 72 for permission to construct and operate an independent spent fuel storage installation (ISFSI) at its Diablo Canyon Power Plant (DCPP) site in San Luis Obispo, California. Responding to an April 2002 notice of opportunity for a hearing, *see* 67 Fed. Reg. 19,600 (Apr. 22, 2002), various Petitioners, including the San Luis Obispo Mothers for Peace (SLOMFP, which by consent is acting as a Lead Petitioner, the Avila Valley Advisory Council (AVAC), Peg Pinard, and nine other organizations (hereinafter referred to collectively as SLOMFP), have filed timely requests for hearing and petitions to intervene in accordance with 10 C.F.R. § 2.714 that, as supplemented, seek to interpose various joint contentions challenging the application. In addition, San Luis Obispo County, California (SLOC), the Port San Luis Harbor District (PSLHD), the California Energy Commission (CEC), the Diablo Canyon Independent Safety Committee (DCISC), and the Avila Beach

Community Services District (ABCSD) have filed requests to participate in any hearing as interested governmental entities in accordance with 10 C.F.R. § 2.715(c) and, in the case of SLOC and PSLHD, proffered particular issues they wish to have litigated in this proceeding. For its part, PG&E opposes (1) the intervention of various of the section 2.714 Petitioners as lacking standing and of all the Petitioners for failing to submit a litigable contention; (2) the section 2.715(c) participation of DCISC; and (3) the admissibility of the SLOC and PSLHD issues. On the other hand, the NRC Staff favors (1) granting SLOMFP and the other section 2.714 Petitioners party status because they have standing and have filed admissible contentions relating to PG&E's financial qualifications to operate its proposed ISFSI facility; and (2) affording section 2.715(c) interested governmental entity status to all those seeking that designation, albeit without admitting the SLOC and PSLHD issues.

For the reasons stated below, although finding that some of the section 2.714 Petitioners lack standing, we conclude that the remainder not only fulfill that jurisprudential requirement, but also have set forth one admissible contention — relating to PG&E's current financial qualifications in light of its pending bankruptcy — so as to warrant admission as parties, with SLOMFP as the Lead Intervenor. Further, we find that, with the exception of DCISC, section 2.715(c) interested government entity status should be afforded to those requesting that designation, but that the SLOC- and PSLHD-proffered issues are dismissed for failing to meet the section 2.714 standards governing contention admissibility.

I. BACKGROUND

A. PG&E ISFSI Application and the Resulting Hearing Requests/Intervention Petitions

The object of the various pending section 2.714 hearing petitions and section 2.715(c) participation requests is the December 2001 application of PG&E for a 20-year 10 C.F.R. Part 72 license that would enable it to build and utilize an ISFSI at which it can store all of the spent fuel and associated nonfuel hardware resulting from the operation of Units 1 and 2 at its DCPP facility over the term of the current operating licenses, which expire in 2021 and 2025, respectively. See [PG&E], [DCPP ISFSI] License Application ¶3.0, at 7-8 (Dec. 21, 2001) (ADAMS Accession No. ML020180153) [hereinafter Application]. Included with the application were a safety analysis report (SAR) and an environmental report (ER). The total spent fuel storage design capacity of the proposed dry cask storage facility is 4400 spent fuel assemblies, or up to 140 casks (i.e., 138 casks with two spare locations). See id. at 8.

As was noted above, the Staff's April 2002 notice indicating this application was being docketed and offering an opportunity for a hearing regarding its contents

evoked a number of timely requests for hearings and petitions to intervene in accordance with 10 C.F.R. § 2.714(a). In its answer to the various filings submitted by the Petitioners, the Staff asserted that SLOMFP and all nine other organizations that initially filed a joint petition, but not Ms. Pinard and AVAC, had satisfactorily demonstrated their standing to intervene. See NRC Staff's Response to Requests for Hearing and Petitions To Intervene Filed by [Kitman, SLOMFP, Pinard, and AVAC] (May 30, 2002) at 6-9 [hereinafter Staff Response to SLOMFP Petition. While taking the same position with respect to Ms. Pinard and AVAC, PG&E, did not agree with the Staff's assertion that SLOMFP and the other nine Petitioners had met the Commission's requirements for standing to intervene. Although PG&E in its initial answers did not challenge the standing of SLOMFP, the Santa Lucia Chapter of the Sierra Club (SLCSC), and San Luis Obispo Cancer Action Now (SLOCAN), it argued that the Cambria Legal Defense Fund (CLDF), the Central Coast Peace and Environmental Council (CCPEC), the Environmental Center of San Luis Obispo (ECSLO), Nuclear Age Peace Foundation (NAPF), the San Luis Obispo Chapter of Grandmothers for Peace International (SLOCGPI), Santa Margarita Area Residents Together (SMART), and the Ventura County Chapter of the Surfrider Foundation (VCCSF) have not demonstrated standing. See Answer of [PG&E] to [SLOMFP] Petition for Leave To Intervene and Request for Hearing (June 3, 2002) at 8-17 [hereinafter PG&E Response to SLOMFP and Kitman Petition]; Answer of [PG&E] to [Pinard and AVAC] Petition for Leave To Intervene and Request for Hearing (June 3, 2002) at 3-8 [hereinafter PG&E Response to Pinard/AVAC Petition].

The Licensing Board issued an initial prehearing order that, among other things, directed that steps be taken to make available to the section 2.714 Petitioners any confidential information relative to the PG&E application and established a July 19, 2002 deadline for each of the Petitioners to submit supplements to their hearing requests/intervention petitions specifying their contentions and labeling them by subject matter areas (e.g., technical, environmental). *See* Licensing Board Memorandum and Order (Initial Prehearing Order) (June 6, 2002) at 2-3 (unpublished). In response, PG&E filed a motion for a protective order requesting that the disclosure of certain confidential proprietary information to SLOMFP counsel and experts be governed by an appropriate protective order

¹ See Letter from Lorraine Kitman to Nuclear Regulatory Commission (May 8, 2002); Request for Hearing and Petition of San Luis Obispo County Supervisor Peg Pinard and Avila Valley Advisory Council for Leave To Intervene and Request for Hearing (May 22, 2002) [hereinafter Pinard/AVAC Petition]; Request for Hearing and Petition for Leave To Intervene of San Luis Obispo Mothers for Peace, et al. (May 22, 2002) [hereinafter SLOMFP Petition].

Relative to the Kitman petition referenced above, by means of an amended hearing request the Board subsequently was informed that, rather than participating as an independent party, Petitioner Lorraine Kitman would take part in this proceeding in her capacity as a SLOMFP member. See Petitioners' Amended Hearing Request and Petition To Intervene (July 8, 2002) at 1 [hereinafter Pinard/AVAC Amended Petition]; see also LBP-02-15, 56 NRC 42, 45-46 n.2 (2002). As a consequence, we dismiss her petition.

and nondisclosure agreement. See [PG&E] Motion for Protective Order (June 17, 2002) at 1-2. There being no objection from SLOMFP, in a June 19, 2002 issuance, the Board granted PG&E's protective order motion.² See Licensing Board Memorandum and Order (Protective Order Governing Disclosure of Proprietary Information) (June 19, 2002) at 1 (unpublished). Additionally, in a series of June and July 2002 issuances, the Board established the time and place for an initial prehearing as the first full week in September in the San Luis Obispo, California area. See Licensing Board Memorandum and Order (Schedule for Initial Prehearing Conference) (June 26, 2002) at 1-2 (unpublished); Licensing Board Memorandum and Order (Initial Prehearing Conference Status and Participation as Interested Governmental Entity) (July 26, 2002) at 1 (unpublished).

Thereafter, Peg Pinard and AVAC declared in an early July 2002 amended joint petition that Ms. Pinard was seeking to intervene as a private citizen, rather than in her capacity as a member of the San Luis Obispo Board of Supervisors, and that AVAC wished to intervene in the proceeding as a private organization rather than a governmental entity. *See* Petitioners' Amended Hearing Request and Petition To Intervene (July 8, 2002) at 2 [hereinafter Pinard/AVAC Amended Petition]. For its part, acting as a Lead Petitioner on behalf of Ms. Pinard, AVAC, and the nine other organizations named above, SLOMFP supplemented its petition by challenging the PG&E license application with five technical and three environmental contentions. *See* Supplemental Request for Hearing and Petition To Intervene by [SLOMFP, AVAC], Peg Pinard, [CLDF, CCPEC, ECSLO, NAPF, SLOCGPI, SLOCAN, SMART, SLCSC, and VCCSF] (July 18, 2002) at 1-40 [hereinafter SLOMFP Contentions].

In response to these supplemental filings, PG&E declared that although it would not challenge Ms. Pinard's standing as an individual, it still believed AVAC had not established its standing to intervene. *See* Answer of [PG&E] to Amended [Pinard and AVAC] Petition for Leave To Intervene and Request for Hearing (July 18, 2002) at 1 [hereinafter PG&E Response to Pinard/AVAC Amended Petition]. In addition, PG&E urged the Board to reject all eight proposed contentions submitted by SLOMFP and thus deny the section 2.714 Petitioner hearing request. *See* Response of [PG&E] to [SLOMFP] Supplemental Request for Hearing and Petition To Intervene (Aug. 19, 2002) at 1-2 [hereinafter PG&E Response to SLOMFP Contentions]. Although agreeing with PG&E relative

² At about the same time, SLOMFP filed with the Board a motion to stay the ISFSI licensing proceeding pending the resolution of ongoing proceedings in connection with PG&E's bankruptcy reorganization in federal bankruptcy court, a California Attorney General's suit against PG&E's parent company in state court, and the DCPP license transfer application before the agency. *See* Petitioners' Motion for Stay of Licensing Proceeding (June 25, 2002) at 1-2. The Board also received two additional requests to stay the ISFSI licensing proceeding from Lorraine Kitman and Klaus Schumann and Mary Jane Adams. *See* E-mail from Lorraine Kitman to Richard Meserve, Chairman, Nuclear Regulatory Commission (June 11, 2002); E-mail from Klaus Schumann to Richard Meserve, Chairman, Nuclear Regulatory Commission (June 12, 2002). Both PG&E and the Staff opposed the motions to stay the proceeding. The Board subsequently denied the three stay requests. *See* LBP-02-15, 56 NRC at 44-45.

to Ms. Pinard's standing, the Staff differed regarding standing for AVAC and the admissibility of certain contentions submitted by SLOMFP, declaring that two of the eight contentions should be admitted into the proceeding. *See* NRC Staff's Response to Amended Petition To Intervene Filed by [Pinard and AVAC] (Aug. 12, 2002) at 2-5 [hereinafter Staff Response to Pinard/AVAC Amended Petition]; NRC Staff's Response to [SLOMFP Contentions] (Aug. 19, 2002) at 1 [hereinafter Staff Response to SLOMFP Contentions].

B. Requests for 10 C.F.R. § 2.715(c) Interested Governmental Entity Status

In addition to the SLOMFP intervention challenge, four purported state and local government organizations — SLOC, PSLHD, CEC, and DCISC — filed requests prior to the scheduled initial prehearing conference to participate in the proceeding as interested governmental entities under 10 C.F.R. § 2.715(c). See [SLOC] Request To Participate as of Right Under 2.715(c) (June 20, 2002) at 1-2; Request of [PSLHD] To Participate as of Right Under 2.715(c) (July 19, 2002) at 1-3; [CEC] Request To Participate as of Right Pursuant to 10 C.F.R. § 2.715(c) (Aug. 16, 2002) at 1-4; [DCISC] Request To Participate as of Right Under 10 C.F.R. 2.715(c) (Aug. 20, 2002) at 1-5 [hereinafter DCISC Request]. Each of the four expressed its intent to participate in the proceeding, although without necessarily taking a position on all of the issues before the Board.

With regard to these potential section 2.715(c) participants, the Staff did not object to the participation of either SLOC, PSLHD, CEC, or DCISC as interested governmental entities. See NRC Staff's Response to [SLOC] Request To Participate as of Right Under 2.715(c) (July 10, 2002) at 1-2; NRC Staff's Response to [PSLHD] Request To Participate as of Right Under 2.715(c) (Aug. 5, 2002) at 1-3; NRC Staff's Response to [CEC and DCISC] Request To Participate as of Right Under 2.715(c) (Aug. 26, 2002) at 1-3 [hereinafter Staff Response to DCISC Request]. Similarly, PG&E did not object to the participation of SLOC, PSLHD, or CEC. See Letter from David A. Repka, Counsel for PG&E, to Licensing Board (July 2, 2002); Response of [PG&E] to Request of [PSLHD] To Participate as of Right Under 10 C.F.R. 2.715(c) (July 29, 2002) at 1-2; Response of [PG&E] to Request of [CEC] To Participate as of Right Under 10 C.F.R. 2.715(c) (Aug. 26, 2002) at 1-2. PG&E did, however, oppose DCISC's participation as an interested governmental entity. See Response of [PG&E] to Request of [DCISC] To Participate as of Right Under 10 C.F.R. 2.715(c) (Aug. 30, 2002) at 1-7 [hereinafter PG&E Response to DCISC Request]. The Board granted the requests of SLOC and PSLHD, see Licensing Board Memorandum and Order (Establishing Schedule for Identification of Issues by Interested Governmental Entities; Limited Appearance Participation) (Aug. 7, 2002) at 1 (unpublished), but scheduled argument on the question of DCISC participation, see Licensing Board

Memorandum and Order (Initial Prehearing Conference Argument Schedule) (Sept. 3, 2002) at 1 (unpublished).

Further, in accord with a Licensing Board order establishing a deadline for the timely submission of issues by potential interested governmental entities, see Licensing Board Memorandum and Order (Establishing Schedule for Identification of Issues by Interested Governmental Entities; Limited Appearance Participation) (Aug. 7, 2002) at 1-2 (Aug. 7, 2002) (unpublished) [hereinafter Board Order on Interested Governmental Entity Issue Identification, PSLHD has sought to raise an issue of its own regarding DCPP's emergency response plan (ERP), see Response of [PSLHD] to [Licensing Board] Order of August 7, 2002 (Aug. 19, 2002) at 2-4 [hereinafter PSLHD Issues]. SLOC also submitted one environmental and two technical issues it seeks to litigate in the proceeding. See Subject Matter Upon Which [SLOC] Desires To Participate Pursuant to 10 C.F.R. § 2.715(c) (Aug. 21, 2002) at 3-11 [hereinafter SLOC Issues]. PG&E and the Staff, however, have objected to the admission of all four issues proffered independently by SLOC and PSLHD. See Response of [PG&E] to Issues Proffered by [SLOC] and [PSLHD] (Sept. 4, 2002) at 3-17 [hereinafter PG&E Response to SLOC and PSLHD Issues]; Response of NRC Staff to [PSLHD Issues] (Sept. 4, 2002) at 2-4 [hereinafter Staff Response to PSLHD Issues]; Response of NRC Staff to [SLOC Issues] (Sept. 5, 2002) at 2-8 [hereinafter Staff Response to SLOC Issues].

C. Initial Prehearing Conference and Post-Conference Filings

Beginning on September 10, 2002, the Board conducted a 2-day initial prehearing conference, during which it heard oral presentations regarding the standing of each of the Petitioners, the participation of DCISC as an interested governmental entity, and the admissibility of the eight contentions and four issues raised by Petitioners and the interested governmental entities. See Tr. at 1-419. Also, during the initial prehearing conference a representative from the Avila Beach Community Services District appeared and advised the Board that by letter dated August 16, 2002, addressed to the "Nuclear Regulatory Commission," ABCSD had requested section 2.715(c) participant status, but had received no response to its inquiry. See Tr. at 68-70. The Board Chairman advised ABCSD that its request had not been received by the Board, but that ABCSD could submit such a request directly to the Board and the participants then would have an opportunity to comment on its request. See id. at 70-72. Following the initial prehearing conference, ABCSD resubmitted its request for section 2.715(c) participant status and stated that it did not have any new issues it wished to raise on its own. See Letter from John L. Wallace, ABCSD General Manager, to Licensing Board Chairman Bollwerk (Sept. 17, 2002); Letter from John L. Wallace, ABCSD General Manager, to Licensing Board Chairman Judge Bollwerk (Oct. 7, 2002). Further, neither PG&E nor the Staff objected to ABCSD's participation as a section 2.715(c) interested governmental entity, *see* NRC Staff's Response to [ABCSD] Request To Participate Under 2.715(c) (Oct. 10, 2002) at 1-3; Response of [PG&E] to Request of [ABCSD] To Participate as an ''Interested Party'' Pursuant to 10 C.F.R. § 2.715(c) (Oct. 15, 2002) at 2, which also is supported by SLOC, *see* Response of [SLOC] to Request of [ABCSD] to Participate as an ''Interested Government'' Pursuant to 10 C.F.R. 2.715(c) (Oct. 18, 2002) at 1-3.

Also during the initial prehearing conference, there was substantial discussion concerning whether issues submitted by section 2.715(c) participants must meet the same contention admissibility requirements set forth in 10 C.F.R. § 2.714(b)(2) or something less rigorous. See generally Tr. at 119-69. The Board accepted the Staff's offer to brief the issue more thoroughly and afforded all of the participants an opportunity to respond to the Staff's comments. See id. at 169-72; see also Licensing Board Memorandum and Order (Schedules for Submissions Regarding Issues Proffered by 10 C.F.R. § 2.715(c) Interested Governmental Entities; Forwarding Additional Participant Submissions for Record Inclusion) (Sept. 17, 2002) at 1 (unpublished). In its filing, the Staff has argued that the section 2.714(b)(2) standard for contentions also applies to issues submitted by interested governmental entities. See NRC Staff's Position Regarding Issues Proffered by 10 C.F.R. § 2.715(c) Interested Governmental Entities (Sept. 25, 2002) at 2-9 [hereinafter Staff Position on Section 2.715(c) Participant Issues]. PG&E and, seemingly, ABCSD agree with the Staff's position. See Position of [PG&E] Regarding Issues Proffered by 10 C.F.R. § 2.715(c) Interested Governmental Entities (Oct. 9, 2002) at 4-14 [hereinafter PG&E Position on Section 2.715(c) Participant Issues]; Letter from John L. Wallace, ABCSD General Manager, to Licensing Board Chairman Bollwerk (Oct. 7, 2002) at 2. SLOC, CEC, and PSLHD, on the other hand, have opposed this Staff interpretation of the regulations as applied to interested governmental entities. See Position of [SLOC] Regarding the Criteria for Considering Issues Raised by Governmental Entities under 10 C.F.R. § 2.715(c) (Oct. 9, 2002) at 5-12 [hereinafter SLOC Position on Section 2.715(c) Participant Issues]; [CEC] Response to [Staff's] Position Regarding Issues Proffered by 10 C.F.R. § 2.715(c) Interested Governmental Participants (Oct. 9, 2002) at 1-8 [hereinafter CEC Position on Section 2.715(c) Participant Issues]; Position of [PSLHD] Regarding the Criteria for Considering Issues Raised by Governmental Entities Under 10 C.F.R. § 2.715(c) (Oct. 9, 2002) at 2-3 [hereinafter PSLHD Position on Section 2.715(c) Participant Issues].

Against this background, we now address the standing of each of the Petitioners; the participation of entities seeking section 2.715(c) participant status; and the admissibility of the proffered contentions/issues, including the question of the appropriate admission standard applicable to issues introduced by section 2.715(c) participants.

II. ANALYSIS

A. Standing of Section 2.714 Organizational and Individual Petitioners

DISCUSSION: Pinard/AVAC Petition at 3-7; SLOMFP Petition at 2-5; Staff Response to SLOMFP Petition at 6-9; PG&E Response to SLOMFP Petition at 8-17; PG&E Response to Pinard/AVAC Petition at 3-8; Pinard/AVAC Amended Petition at 2; PG&E Response to Pinard/AVAC Amended Petition at 3-6; Staff Response to Pinard/AVAC Amended Petition at 2-5; Tr. at 20-32, 38-43, 45-56, 62-68.

RULING: A person who wishes to intervene in a Commission proceeding must file a petition that

set[s] forth with particularity the interest of the petitioner in the proceeding, how that interest may be affected by the results of the proceeding, including the reasons why petitioner should be permitted to intervene, with particular reference to the factors in [§ 2.714(d)(1)], and the specific aspect or aspects of the subject matter of the proceeding as to which petitioner wishes to intervene.

10 C.F.R. § 2.714(a)(1)-(2). In determining whether a petitioner has sufficient interest to intervene in a proceeding, the Commission has traditionally applied judicial concepts of standing. See Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-83-25, 18 NRC 327, 332 (1983) (citing *Portland* General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610 (1976)). Contemporaneous judicial standards for standing require a petitioner to demonstrate that (1) it has suffered or will suffer a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statutes (e.g., the Atomic Energy Act of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury can be fairly traced to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. See Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 29 (1999). An organization that wishes to intervene in a proceeding may do so either in its own right by demonstrating harm to its organizational interests, or in a representational capacity by demonstrating harm to its members. See Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261, 271 (1998). To intervene in a representational capacity, an organization must show not only that at least one of its members would fulfill the standing requirements, but also that he or she has authorized the organization to represent his or her interests. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 168, aff'd on other grounds, CLI-98-13, 48 NRC 26 (1998).

In certain types of proceedings, a petitioner may be presumed to have fulfilled the first of the required three standing showings based on geographical proximity to the facility, without having specifically to plead that element, if the petitioner resides within, or frequently comes into contact with, the facility's zone of possible harm. See Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146, aff'd, CLI-01-17, 54 NRC 3 (2001). Whether such a presumption applies depends upon whether there is an "obvious potential for offsite consequences." See id. at 148 (quoting Sequoyah Fuels Corp. (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 n.22 (1994)). Moreover, the zone of possible harm varies, depending on the type of proceeding. For instance, although Petitioners living within a 50-mile radius of a nuclear facility have been presumed to have standing in reactor construction permit and operating license cases, the requisite proximity may be considerably closer in other proceedings, such as those involving reactor spent fuel pool expansion and reracking. See Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), LBP-00-2, 51 NRC 25, 28 (2000). Although in the *Private Fuel* Storage ISFSI licensing proceeding, standing was granted to a petitioner based on geographical proximity, the Licensing Board in that case did not specify the limits of the required proximity to the facility. See Private Fuel Storage, LBP-98-7, 47 NRC at 169 (granting standing to petitioners residing less than 4 miles from proposed ISFSI).

1. Geographic Proximity to DCPP

In the instant case, although there appears to be no dispute relative to the various section 2.714 Petitioners' compliance with standing elements two and three, various of the organizational Petitioners represented by SLOMFP base their conformity with standing element one solely on the geographic proximity of members' residences to DCPP and/or to potential transportation routes that may be used to transport spent fuel away from the DCPP site. Referencing Table H-7 of the Department of Energy's draft environmental impact statement (Draft EIS) for the proposed Yucca Mountain high-level waste (HLW) geologic repository, they argue that health impacts from radiation doses resulting from cask-handling accidents can occur up to 50 miles. See SLOMFP Petition at 2-3 (citing Office of Civilian Radioactive Waste Management, U.S. Dep't of Energy, [Draft EIS] for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada, DOE/EIS-250D, Vol. 2, App. H, at H-29 (July 1999)). Although these section 2.714 Petitioners do not necessarily seek to establish a presumption of 50 miles, see Tr. at 26, they nonetheless assert that even small environmental impacts such as those reflected in that table can be sufficient to confer standing. For its part, as was noted in Section I.A above and discussed in more detail below, PG&E contests the standing of certain of these Petitioners. The Staff, however, does not oppose the grant of standing to any of the twelve section 2.714 Petitioners.

All the parties seemingly are in agreement that, in the context of our standing determination, prior agency rulings regarding spent fuel pool expansion proceedings provide at least some guidance to the Board here, in particular the Shearon Harris case in which the Licensing Board found that the closest boundary of a section 2.714 governmental petitioner 17 miles from the facility at issue provided it with standing. See Shearon Harris, LBP-99-25, 50 NRC at 29-31; see also Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), LBP-87-7, 25 NRC 116, 118-19 (1987); id., LBP-87-17, 25 NRC 838, 842, aff'd in part and rev'd in part on other grounds, ALAB-869, 26 NRC 13 (1987) (residence within 10 miles of facility found sufficient for standing); Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Unit 1), LBP-88-10A, 27 NRC 452, 454-55 (1988), aff'd, ALAB-893, 27 NRC 627 (1988) (standing of individual living within 10 miles of facility conceded by parties); Millstone, LBP-00-02, 51 NRC at 28 (granting standing to individual with parttime residence located 10 miles from facility). Nonetheless, in referencing the DOE draft EIS table, SLOMFP would more than double the largest expanse of the area that to date has been found to encompass individuals who would be considered potentially subject to an spent nuclear fuel (SNF) storage-related impact that would be sufficient to fulfill the "injury in fact" component of the standing equation. We are unable to accept this expansion, however.

Assuming that the cask handling accidents that are the benchmark for that table equate fairly to the cask handling aspects of operations at the DCPP facility, the impacts set forth by the table nonetheless are not sufficient to show standing. To be sure, there is authority indicated that to establish injury in fact it is not necessary to proffer radiation impacts that amount to a regulatory violation. See Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 417 (2001) (citing Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 247-48 (1996)). On the other hand, simply showing the potential for any radiological impact, no matter how trivial, is not sufficient to meet the requirement of showing a "distinct and palpable harm" under standing element one. As it is relevant here, bearing in mind that the radiological consequences set forth in the table are those for the entire 2000 census population of 28,000 estimated to live within a 50-mile radius of the facility, and utilizing the cask handling event from the table that has the maximum dose consequences (i.e., a 7.1-meter drop of pressurized water reactor fuel assemblies), for any individual member of that population, the average dose consequences are in the neighborhood of 3×10^{-3} (0.003) millirem. This is a number that, in addition to being an average for the population of the entire area so as likely to be considerably less at the 50-mile area's outer boundary, is four or five orders of magnitude below average natural background radiation levels. To whatever extent a "minor" radiological exposure arising from an applicant's

proposed activities is sufficient to afford standing, this clearly falls below the level that can be considered substantial enough for standing purposes.

Accordingly, based on the showing now before us,³ in considering each of the Petitioners' claims of standing based on geographical proximity to DCPP, we utilize the 17-mile mark established in the *Shearon Harris* proceeding as our guide.

a. San Luis Obispo Mothers for Peace

SLOMFP bases its standing on the affidavits of four of its members, Susan Biesek, Elaine Holder, Nancy Walker, and Jill ZamEk. All four members have authorized SLOMFP to represent their interests in this proceeding. *See* SLOMFP Petition, Exh. 1-4. In their affidavits, Ms. Biesek and Ms. Walker both state that they reside within 10 miles of DCPP, and Ms. Holder and Ms. ZamEk both state that they reside within 20 miles of the facility. *Id.* PG&E does not contest the standing of SLOMFP to intervene, based on its representation of members Ms. Biesek and Ms. Walker. The Staff, as noted above, does not object to the standing of any of the twelve section 2.714 Petitioners.

Regarding SLOMFP we find that, as is the case with the rest of the section 2.714 Petitioners, standing elements two and three have been fulfilled and that, with respect to element one, SLOMFP has established its standing to intervene in this proceeding based on its representation of members Ms. Biesek and Ms. Walker, who both reside well within 17 miles of DCPP.

b. Santa Lucia Chapter of the Sierra Club

SLCSC asserts standing through its member, Peter Wagner. Mr. Wagner states that he lives within 15 miles of DCPP and authorizes SLCSC to represent his interests in this proceeding. *See* SLOMFP Petition, Exh. 6. PG&E does not oppose this Petitioner's standing.

Based on its representation of Mr. Wagner, who resides within 17 miles of DCPP, we find that SLCSC has sufficiently demonstrated its standing to intervene in this proceeding.

c. San Luis Obispo Cancer Action Now

SLOCAN seeks standing through representation of its member, Virginia Monteen. In her declaration, Ms. Monteen states that she resides and works in the

³ As we noted above, the participant claiming standing has the burden of demonstrating it meets the requisite three-factor test, and so our determination here is based on the showing made by the Petitioners, who failed to carry their burden relative to establishing that there should be a 50-mile benchmark for ISFSI standing claims.

town of San Luis Obispo, which is located 10 miles from DCPP. See SLOMFP Petition, Exh. 7. She also states that she travels the roads of San Luis Obispo on a daily basis, including U.S. Highway 101 that could serve as a potential transportation route for SNF away from DCPP. See id. She has authorized SLOCAN to intervene on her behalf in this proceeding. See id. PG&E does not challenge this Petitioner's standing to intervene, based on the geographical proximity of Ms. Monteen's residence and place of work to DCPP.

We conclude that SLOCAN has established its standing through Ms. Monteen, who lives and works within 17 miles of the facility.

d. Peg Pinard

Ms. Pinard seeks to intervene in this proceeding as an individual citizen on her own behalf. She states that her home lies within 10 to 15 miles of DCPP. *See* Amended Petition, Decl. of Peg Pinard. PG&E does not contest Ms. Pinard's standing.

We find that Ms. Pinard has standing to intervene in this proceeding based on the location of her residence within 17 miles of DCPP.

e. Avila Valley Advisory Council

AVAC asserts standing as the representative of its member, Seamus Slattery. Mr. Slattery resides within 10 miles of DCPP and has authorized AVAC to represent him in this proceeding. See Amended Petition, Decl. of Seamus Slattery. Although there was some initial confusion as to whether AVAC sought to participate in the proceeding as an interested governmental entity under 10 C.F.R. § 2.715(c), in its amended petition, AVAC clarified that it was seeking to intervene as a private organization under section 2.714. See id. at 2. AVAC is an unincorporated association, whose purposes include the advocation for the interests of Avila Valley residents through intervention in legal proceedings. See Amended Petition, AVAC Bylaws art. III, § 5; Tr. at 31. PG&E contests AVAC's standing on the basis that apart from its bylaws, AVAC has not demonstrated that it has the independent authority to represent itself or others in legal proceedings as a private organization. PG&E maintains that AVAC has failed to show that it has any authority to act beyond its capacity as a quasi-governmental advisory body.

We do not find PG&E's argument on this point persuasive. We are not aware of any legal authority that requires an organization to establish that it has independent litigating authority to represent itself or its members in adjudicatory proceedings, and PG&E has not proffered any such support for its assertion. This agency's previous decisions have only required organizations who wish to intervene in a

representational capacity to show that at least one of its members would fulfill the standing requirements and that the organization has been authorized by the member to represent his or her interests. *See, e.g., Private Fuel Storage, LBP-98-7, 47 NRC* at 168. Here, Mr. Slattery resides within 10 miles of DCPP, which is sufficient to confer standing on him individually if he wanted to participate in that capacity, and he has authorized AVAC to represent his interests in this proceeding. Moreover, even if PG&E is correct in arguing that AVAC is required to demonstrate its authority to litigate on behalf of itself or its members, section 369.5(a) of the California Code of Civil Procedure provides that "[a] partnership or other unincorporated association, whether organized for profit or not, may sue and be sued in the name it has assumed or by which it is known." Cal. Civ. Proc. Code § 369.5(a) (2002). Thus, by virtue of its status as an unincorporated association, California Code section 369.5(a) provides AVAC with independent litigating authority.

Consequently, we find that AVAC has established its standing to intervene in this proceeding.

f. Environmental Center of San Luis Obispo

The ECSLO asserts standing through its member, Pamela Heatherington. Ms. Heatherington resides within 30 miles of the facility and has authorized ECSLO to intervene on her behalf in this proceeding. *See* SLOMFP Petition, Exh. 5. Her affidavit states that she is concerned for her and her family's health and safety and the value of her property. *Id.* PG&E challenges this Petitioner's standing based on the distance of Ms. Heatherington's home from DCPP.

Ms. Heatherington's home lies well beyond the 17-mile mark that we have established as our benchmark here. Because her affidavit does not present any additional information aside from her stated concerns, we have no basis to extend that zone of cognizable injury beyond 17 miles. Therefore, we find that the ECSLO has not demonstrated its standing to intervene in this proceeding.

g. Central Coast Peace and Environmental Council

CCPEC bases its standing on the geographical proximity of its member, Bruce Miller. Mr. Miller resides in San Luis Obispo, within one-quarter mile of U.S. Highway 101, which is the main evacuation route for DCPP through the city, and the Union Pacific railroad tracks. See SLOMFP Petition, Exh. 14. He also travels the highway on a daily basis and regularly travels near the railroad tracks. See id. According to his affidavit, Mr. Miller has authorized the CCPEC to represent him in this proceeding and is concerned that his health and safety may be injured

by his proximity to spent fuel casks that may be shipped from DCPP through San Luis Obispo en route to Yucca Mountain. *Id*.

Although Mr. Miller presents his claimed injuries in terms of his concern about transportation, it is facially apparent from the description in his affidavit that he resides well within 17 miles of DCPP. Therefore, we find that CCPEC has established standing to intervene in this proceeding.

h. Cambria Legal Defense Fund

The CLDF seeks to establish its standing through the geographical proximity of its founder and director, Suzy Ficker, to DCPP. Ms. Ficker resides 27 miles from the facility. See SLOMFP Petition, Exh. 9. She also states that the organization is concerned that construction of the ISFSI would jeopardize the health and safety of its members and their families, as well as the value of their properties. See id. PG&E opposes CLDF's standing on the basis of Ms. Ficker's distance from DCPP.

Ms. Ficker resides more than 17 miles from the facility. As was the case with Ms. Heatherington above, Ms. Ficker's affidavit fails to show why the zone of possible harm should be extended in this proceeding. We conclude, therefore, that the CLDF has not established its standing to intervene in this proceeding.

i. Santa Margarita Area Residents Together

SMART asserts standing through the representation of its member, Jude Ann Rock, whose home is represented to lie within 20 miles of DCPP. See SLOMFP Petition, Exh. 8. Ms. Rock states that the organization is concerned for the health and safety of its members and their families and the value of their properties. See id. PG&E contests the standing of SMART based on the distance of Ms. Rock's home from the plant.

Based on her affidavit, it appears Ms. Rock's residence is located more than 17 miles from DCPP. Although her home lies only 3 miles beyond the distance previously acknowledged as conferring standing, this Petitioner has made no showing as to why the zone of possible harm should be extended. Statements consisting only of generic, unsubstantiated concerns for health, safety, and property devaluation are insufficient to expand the zone of possible harm beyond 17 miles. Without more, we cannot grant SMART standing to intervene in this proceeding.

2. Geographical Proximity to Transportation Routes

Three other Petitioner organizations — San Luis Obispo County Chapter of the Grandmothers for Peace International, Nuclear Age Peace Foundation, and

Ventura County Chapter of the Surfrider Foundation — base their argument regarding standing element one solely on the geographical proximity of their members' homes to transportation routes that could potentially be used to transport spent fuel away from DCPP to the proposed Yucca Mountain HLW repository facility or the proposed Private Fuel Storage ISFSI in Skull Valley, Utah. Specifically, SLOCGPI asserts standing in this regard through its member Molly Johnson. Although Ms. Johnson lives and works more than 25 miles from DCPP, she does reside within 3 miles of Highway 46, which she asserts is a major road over which spent fuel from DCPP may be transported to the proposed Yucca Mountain facility or the proposed Private Fuel Storage facility in Utah. See SLOMFP Petition, Exh. 11. For its part, NAPF contends it has standing through its member David Kreiger, a resident of Santa Barbara, California, which is some 100 miles to the south of the DCPP. According to Mr. Kreiger, he regularly travels on and lives within 5 miles of U.S. Highway 101, a main area highway, and regularly walks or drives near area railroad tracks, either of which could be a spent fuel transportation route. See id., Exh. 12. Finally, VCCSF claims to have standing through its member, Paul Jenkin. In addition to residing within three-quarter mile of both U.S. Highway 101 and the railroad tracks in Ventura, California, which is more than 100 miles from the DCPP, Mr. Jenkin purportedly regularly travels on Highway 101 and walks or drives near the area railroad tracks.

In response, PG&E argues that any transportation issues are purely conjectural and speculative at this time and, moreover, are beyond the scope of this ISFSI licensing proceeding. Thus, PG&E contests the standing of any petitioner asserting standing based upon proximity to potential transportation routes. The Staff, as noted above, does not oppose the standing of any of the Petitioner organizations.

Citing the Licensing Board's decision in *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61 (1996), as support, the Petitioners argue that even if the Board were to deny admission of a transportation-related contention because it is beyond the scope of the proceeding, the Board could nonetheless grant Petitioners standing to raise the contention. *See* Tr. at 66. While the Petitioners accurately describe the *Yankee Rowe* Board's order as stating that the findings of standing and admissibility of contentions are discrete determinations, *Yankee Rowe* is not altogether helpful to their case. The petitioners in *Yankee Rowe* were able to establish standing to intervene based on their members who not only used potential transportation routes, but also lived within 10 miles of the facility and recreated along waterways that received effluent discharges from the plant. *Yankee Rowe*, LBP-96-2, 43 NRC at 69. In that case, the Licensing Board held that once the petitioners had established their standing to intervene, they consequently had standing to pursue any contention they wished to raise. *See id.* at 69-70.

Here, the section 2.714 Petitioners' transportation route-related standing claims fall short. As has been noted previously relative to transportation route-related standing claims, mere geographical proximity to potential transportation routes is insufficient to confer standing; instead, the section 2.714 Petitioners must demonstrate a causal connection between the licensing action and the injury alleged. Compare Savannah River, LBP-01-35, 54 NRC at 419-20 (transportation route-related standing established based on environmental report discussion of transportation impacts) with Northern States Power Co. (Pathfinder Atomic Plant), LBP-90-3, 31 NRC 40, 42-43 (1990) (petitioner who resided 1 mile from likely transportation route denied standing) and Exxon Nuclear Co. (Nuclear Fuel Recovery and Recycling Center), LBP-77-59, 6 NRC 518, 519-20 (1977) (assertion of injury because spent fuel would travel on railway tracks very near property insufficient to establish standing). Although the Petitioners cite Savannah River as support for their standing, that case can be distinguished from the one here. In Savannah River, the petitioners did not base their standing solely on geographical proximity to likely transportation routes. Rather, they were able to demonstrate a nexus between the licensing proceeding and the risk of injury. See Savannah River, LBP-01-35, 54 NRC at 419. Any person traveling alongside a truck shipment of mixed oxide (MOX) fuel would receive a small, but unwanted, dose of ionizing radiation, even in the absence of a vehicular accident. See id. at 420. Here, the substance of what these Petitioners have claimed in the declarations of the individuals whose interests they would represent is more akin to what the petitioners in the above-cited *Pathfinder* and *Exxon* cases asserted. ⁴ In both cases, the Licensing Boards denied standing, in part because the injuries alleged were too speculative in nature and in part for lack of a causal relationship between the injury claimed and the proceeding. See Pathfinder, LBP-90-3, 31 NRC at 43; Exxon, LBP-77-59, 6 NRC at 520.

B. Participation by Section 2.715(c) Interested Governmental Entities

DISCUSSION: DCISC Request at 1-4; PG&E Response to DCISC Request at 3-7; Staff Response to DCISC Request at 2-3; Tr. at 32-37, 43-47, 56-61.

RULING: As we noted earlier in Section I.B, in addition to the individual and organizational Petitioners seeking to intervene in this proceeding pursuant to section 2.714, five proclaimed state or local governmental bodies — San Luis Obispo County, California, the Port San Luis Harbor District, the California

⁴ In *Exxon*, LBP-77-59, 6 NRC at 519, a petitioner who sought to intervene claimed that if the license for the proposed reprocessing facility were approved, it was likely that spent fuel would be shipped by way of the railroad located very near her home and rental property. In addition, if an accident were to occur in that vicinity, it could result in bodily harm, loss of life, or loss of income to her. *See id.* In *Pathfinder*, LBP-90-3, 31 NRC at 42, a petitioner who lived 1 mile from a likely transportation route claimed that an accident involving a truck shipment of radioactive waste could result in, among other things, an increased risk of contracting cancer or other debilitative disease.

Energy Commission, the Diablo Canyon Independent Safety Committee, and the Avila Beach Community Services District — have sought leave to participate as interested governmental entities under the dictates of 10 C.F.R. § 2.715(c). Previously, the Board had granted that status to SLOC and PSLHD. With this issuance, we do the same for CEC and ABCSD, whose requests for section 2.715(c) status are unopposed. With respect to DCISC, however, as also was noted above, PG&E has objected to its denomination as a section 2.715(c) participant. Relying principally on the Commission's decision in *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 202-03 (1998), PG&E asserts that DCISC is the type of "advisory body" that the Commission there made clear does not merit such a designation.

In its initial filing, DCISC described its origin and responsibilities as follows:

The Safety Committee was initially created by the California Public Utilities Commission ("CPUC") under the terms of the Diablo Canyon Settlement Agreement (CPUC Decision D.88-12-083) as an independent three-member committee specifically to monitor the safety of PG&E's operation of Diablo Canyon.

"An Independent Safety Committee shall be established consisting of three members, one each appointed by the Governor of the State of California, the Attorney General and the Chairperson of the [CEC], respectively, serving staggered three-year terms. The Committee shall review Diablo Canyon operations for the purpose of assessing the safety of operations and suggesting any recommendations for safe operations. Neither the Committee nor its members shall have any responsibility or authority for plant operations, and they shall have no direct authority to direct PG&E personnel. The Committee shall conform in all respects to applicable federal laws, regulations and Nuclear Regulatory Commission ("NRC") policies."

As stated by the CPUC in its decision, the Safety Committee was intended by the parties to the Settlement Agreement to provide an "added level of assurance to the public that Diablo Canyon will continue to operate safely."

DCISC Request at 2-3 (footnotes omitted). Further, during the initial prehearing conference, in support of its assertion that it should be granted section 2.715(c) status, DCISC made the point that:

I can assure you that the [DCISC], pursuant to California law, is a state agency, an agency of the state and is a governmental agency. It's appointed by state officials.

It's open — it's subject to the open meeting laws for state agencies, that was just referenced, the Brown Act or the Bagley-Keene Act. The members file conflict-of-interest statements, like all public officials, state and federal, do.

And, again, it's the position of the — of DCISC is clearly distinguishable from that of a general, regional planning agency and, in fact, was created specifically to oversee the safety of operations at this plant, which is integral to what you have before you in these proceedings.

Tr. at 58. And in this regard, the DCISC-cited Bagley-Keene Open Meeting Act, Cal. Gov. Code § 11121(c), which imposes open meeting requirements on any

"state body," defines that term as "[a]ny advisory board, advisory commission, advisory committee, advisory subcommittee, or similar multimember advisory body of a state body, if created by formal action of the state body or of any member of the state body, and if the advisory body so created consists of three or more persons."

In considering these purported indicia of "governmental entity" status, we do so under the Commission's *Yankee Rowe* determination, which declares:

Not all organizations with governmental ties are entitled to participate in our proceedings as governmental "agencies." The federal, state and local governments are replete with numerous boards, commissions, advisory committees, and other organizations — all of which have governmental or quasi-governmental responsibilities. We do not, however, understand section 2.715(c) to authorize automatic participation in our adjudications by each and every subpart of state and local government. [The regional planning board in question] is, by its own admission, an advisory body and lacks executive or legislative responsibilities. We conclude that advisory bodies, by their very nature, are so far removed from having the representative authority to speak and act for the public that they do not qualify as governmental entities for purposes of section 2.715(c).

Yankee Rowe, CLI-98-21, 48 NRC at 202-03 (citation omitted). The essence of the Yankee Rowe criterion is whether a purported governmental body has legislative or executive responsibilities, i.e., the authority to impose (by rule, order, or otherwise) or implement/enforce (by order, monetary penalty, or otherwise) requirements. In this instance, as the DCISC describes its functions, responsibility, and authority, it does not appear to embrace either of these necessary elements. Nor do we think that the California state open meeting statute and its definition of a "state body" compel a different result. To be sure, the NRC affords deference to bona fide executive, statutory, or judicial declarations regarding the status of a particular entity as being part of a state or local governmental system, see Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-862, 25 NRC 144, 148-49 (1987), but in this instance, the definition itself, while imposing certain "sunshine" requirements on DCISC, also recognizes that the body upon which these requirements are being levied is an "advisory committee," exactly the type of entity the Commission has made clear is not encompassed within section 2.715(c). Accordingly, we deny the DCISC request for section 2.715(c) status.

This is not to say the DCISC is hereafter precluded from any meaningful participation in this proceeding. As has been noted in a similar situation, *see id.* at 149-51, DCISC may continue to have input into this proceeding through participation as an *amicus curiae*. In this regard, we will direct that it remain on the agency service list for this proceeding and that all participants continue to provide its representative with electronic and hard copies of their filings in this proceeding. To the extent DCISC finds there are any matters about which it

wishes to provide its written, or in appropriate circumstances, oral comments, it can do so by requesting leave of the Board to file or provide those comments. In any instance in which it wishes to file written comments regarding a particular filing, it must submit those comments, along with a motion for leave to file, within the time frame provided for a response to that pleading or, if there is no time established for a response, within 7 days of the filing. Thereafter, in the absence of a Board directive establishing a different schedule, any other participant to the proceeding shall have 7 days to file a response to the DCISC motion for leave to file and to the substance of the proposed DCISC *amicus curiae* submission.

C. Contentions/Issues

To intervene in a proceeding, in addition to establishing standing, an individual or organization seeking party status must also set forth at least one admissible contention. See 10 C.F.R. § 2.714(b)(1). Section 2.715(c) participants have the opportunity to interpose issues as well. Having found that a number of Petitioners have standing and that several of the governmental entities come within the ambit of section 2.715(c), we next consider the admissibility of each contention/issue proffered by the Petitioners and the section 2.715(c) interested governmental entities.

1. Section 2.714 Contention Admissibility Standards

To be admissible, a contention submitted by a section 2.714 petitioner must state with specificity the issue of law or fact to be raised or controverted. *See* 10 C.F.R. § 2.714(b). Furthermore, each contention must be accompanied by: (1) a brief explanation of the bases for the contention; (2) a concise statement of the alleged facts or expert opinion the petitioner will rely upon to prove the contention, including references to specific sources and documents that will be relied upon to establish those facts and opinions; and (3) sufficient information to show that a genuine dispute on a material issue of law or fact exists with the applicant, which consists of either (a) references to specific portions of the application (including the applicant's environmental and safety reports) that are disputed and the reasons supporting the dispute, or (b) identification of each instance where the application purportedly fails to contain information on a relevant matter as required by law and the reasons supporting the allegation. *See id.* § 2.714(b)(2)(i)-(iii). If the contention fails to satisfy any one of these requirements, the contention must be denied. *See id.* § 2.714(d)(2)(ii).

In addition to the threshold requirements set forth in section 2.714(b)(2), there are a number of other criteria that govern the admissibility of contentions. For example, a licensing board must reject a contention that, even if proven, would not entitle the petitioner to any relief and would, thus, make no difference in the

outcome of the proceeding. *See id.* A contention will also be deemed inadmissible if it challenges an existing Commission rule or attempts to litigate an issue that is, or clearly is about to become, the subject of a Commission rulemaking. *See id.* § 2.758; *see also Private Fuel Storage*, LBP-98-7, 47 NRC at 179 (citing *Potomac Electric Power Co.* (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974)). Furthermore, contentions that concern matters outside the scope of the proceeding, as defined by the notice of hearing or opportunity for hearing, must also be denied. *See, e.g., Public Service Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976).

With these general principles in mind, we consider each of the contentions and issues submitted by the Petitioners.

2. Admissibility of SLOMFP Contentions

As was noted in Section I.A above, the Board requested that contentions be labeled by general subject matter area, a framework we utilize in discussing the admissibility of each of the proffered SLOMFP issue statements. Further, in reiterating and discussing these contentions,⁵ we refer to Lead Intervenor SLOMFP as their sponsor, although they were proffered jointly by all the section 2.714 Petitioners.

a. SLOMFP Technical Contentions

SLOMFP Technical Contention (TC)-1: Inadequate Seismic Analysis

CONTENTION: In Section 2.6 of the SAR, PG&E claims to satisfy Appendix A of 10 C.F.R. Part 100 and 10 C.F.R. § 72.102, which provide criteria for seismic design of nuclear facilities and ISFSIs. However, the seismic analysis presented by PG&E does not consider a number of significant seismic features in the area of the Diablo Canyon plant. As a result, the design basis earthquake for the proposed ISFSI cannot be considered reasonable or conservative for purposes of protecting public health and safety against the effects of earthquakes.

DISCUSSION: SLOMFP Contentions at 2-11; PG&E Response to SLOMFP Contentions at 5-19; Staff Response to SLOMFP Contentions at 7-9; Tr. at 347-418.

RULING: In proffering this contention, which it supports with the affidavit of Dr. Mark R. Legg, SLOMFP asserts there are a number of "serious shortcomings" in the SAR and the ER for the Diablo Canyon ISFSI that bring into question

⁵The language of the SLOMFP contentions is replicated from the July 2002 SLOMFP supplemental petition, albeit without the internal footnotes.

the design basis earthquake utilized for the ISFSI. SLOMFP Contentions at 2. According to SLOMFP, these include PG&E's failure to consider the threat posed by large reverse or thrust fault earthquakes in the vicinity of the site as well as its reliance on the incorrect assumptions that the Hosgri fault zone is purely strike-slip and is vertical rather than east dipping, which could cause PG&E to place the fault in a nonconservative position. Although various of the interested governmental entities support admission of this issue statement, both PG&E and the Staff challenge its admissibility on the basis that SLOMFP has failed to assert how, even if true, the alleged deficiencies create a health and safety issue for the facility.

PG&E indicates that the matters upon which SLOMFP seeks to rely were, in fact, considered in accordance with 10 C.F.R. Part 100, Appendix A, as part of (1) the operating licensing review for the DCPP, during which the safe shutdown earthquake (SSE) was postulated based on an earthquake with a magnitude of 7.5 on the Richter Scale; and/or (2) the subsequent 1984-1991 Diablo Canyon Long Term Seismic Program that sought to confirm the seismic design bases for the facility, which resulted in a determination that the maximum or controlling earthquake associated with the Hosgri fault would have a magnitude of 7.2. Further in this regard, both PG&E and the Staff direct the Board's attention to 10 C.F.R. §§ 72.40(c), 72.102(f), which provide, respectively:

(c) For facilities that have been covered under previous licensing actions including the issuance of a construction permit under Part 50 of this chapter, a reevaluation of the site is not required except where new information is discovered which could alter the original site evaluation findings.

* * * *

- (f) The design earthquake (DE) for use in the design of structures must be determined as follows:
- (1) For sites that have been evaluated under the criteria of Appendix A of 10 CFR Part 100, the DE must be equivalent to the [SSE] for a nuclear power plant.

Both PG&E and the Staff argue that these regulations bar the admission of contention SLOMFPTC-1 given SLOMFP has not provided sufficient information to alter the original site evaluation to the degree it has not provided a basis to establish that the SSE or maximum/controlling earthquake number should be something other than what was previously established. In response, although acknowledging "it's true that we don't have a number at this point," Tr. at 413, SLOMFP nonetheless maintains it has provided enough information to meet its burden as to the admission of this contention.

As the members of this Board have indicated in another context, "issues of law or fact raised in a contention must be material to the grant or denial of the license application in question, i.e., they must make a difference in the outcome of the licensing proceeding so as to entitle the petitioner to cognizable relief."

Private Fuel Storage, LBP-98-7, 47 NRC at 179. As we also indicated in that instance, "[a]gency case law further suggests this requirement of materiality mandates certain showings in specific contexts." *Id.* at 180. While in other circumstances, the showing made by SLOMFP regarding its contention TC-1 might be sufficient to establish the requisite materiality, and so an admissible contention, it falls short here. As the Part 72 regulations quoted above make clear, for a co-located ISFSI, the applicant does not write on a clean slate relative to any seismic requirements. Absent an exemption or new information sufficient to alter the original site evaluation finding, the DE for the nuclear facility is what the ISFSI applicant must use. As a consequence, a contention challenging the seismic qualifications of such a co-located ISFSI facility must necessarily provide

In comparison with a NPP, an operating dry cask ISFSI or MRS facility, storing [SNF], is a passive facility in which the primary activities are waste receipt, handling, and storage. An ISFSI or MRS facility does not have the variety and complexity of active systems necessary to support safe operations at a NPP Further, the robust cask design required for non-seismic considerations (e.g., drop event, shielding), assure low probabilities of failure from seismic events. In the unlikely occurrence of a radiological release as a result of a seismic event, the radiological consequences to workers and the public are significantly lower than those that could arise at a NPP. This is because the conditions required for release and dispersal of significant quantities of radioactive material, such as high temperatures or pressures, are not present in an ISFSI or MRS. This is primarily due to the low heat-generation rate of spent fuel that has undergone more than one year of decay before storage in an ISFSI or MRS, and to the low inventory of volatile radioactive materials readily available for release to the environment. The long-lived nuclides present in spent fuel are tightly bound in the fuel materials and are not readily dispersible. Short-lived volatile nuclides, such as [Iodine]-131, are no longer present in aged spent fuel. Furthermore, even if the short-lived nuclides were present during a fuel assembly rupture, the canister surrounding the fuel assemblies is designed to confine these nuclides. Hence, the Commission believes that the seismically induced risk from the operation of an ISFSI or MRS is less than at an operating NPP. Therefore, the Commission proposes to revise the DE requirements for ISFSI and MRS facilities from the current part 72 requirements, which are equivalent to the SSE for a NPP.

The Commission does not intend to require new ISFSI or MRS applicants that are co-located with a NPP to address uncertainties because the criteria used to evaluate existing NPPs are considered to be adequate for ISFSIs, in that the criteria have been determined to be safe for NPP licensing, and the seismically induced risk of an ISFSI or MRS is significantly lower than that of a NPP

If an ISFSI or MRS is located at a NPP site, the existing geological and seismological design criteria for the NPP may be used instead of [probabilistic seismic hazards analysis (PSHA)] techniques or suitable sensitivity analysis because the risk due to a seismic event at an ISFSI or MRS is less than that of a NPP. If the existing design criteria for the NPP is used and the site has multiple NPPs, then the criteria for the most recent NPP must be used to ensure that the seismic design criteria used is based on the latest seismic hazard information at the site.

67 Fed. Reg. at 47,746, 47,748, 47,751 (emphasis supplied). Thus, the language of the proposed rule is intended to reflect an additional option for a co-located ISFSI applicant, i.e., it can use appropriate analyses, such as a PSHA or suitable sensitivity analyses, for determining the DE in lieu of using the SSE for the co-located NPP, which is the only avenue afforded under the existing rule.

⁶Contrasting the existing language of section 72.102(f)(1), which states that an ISFSI DE must be equivalent to the SSE "for a nuclear power plant," and the language of a pending proposed rule that would add a new section 72.103(b) that declares that for a site west of the Rocky Mountains "[i]f an ISFSI or [monitored retrievable storage installation (MRS)] is located on a [nuclear power plant (NPP)] site, the existing geological and seismological design criteria for the NPP may be used," 67 Fed. Reg. 47,745, 47,754 (July 22, 2002), SLOMFP argues that the specificity of the new section 72.103(b) language creates the inference that the existing rule was not intended to provide for incorporation of the co-located NPP's SSE. See Tr. at 351-52. We do not agree. In connection with this new provision, as the statement of considerations accompanying the proposed rule explains at several different junctures:

not only a basis to indicate that there are specific concerns about the elements used to calculate the nuclear power plant seismic design criteria, but also a showing that, given those concerns, the reactor facility DE itself is now inaccurate to some meaningful degree.⁷ In this instance, despite having provided information concerning the first consideration, by failing to make any showing regarding the latter point, SLOMFP has failed to put forth an admissible contention.

SLOMFP TC-2: PG&E's Financial Qualifications Not Demonstrated

CONTENTION: PG&E has failed to demonstrate that it meets the financial qualifications requirements of 10 C.F.R. § 72.22(e).

DISCUSSION: SLOMFP Contentions at 11-19; PG&E Response to SLOMFP Contentions at 19-32; Staff Response to SLOMFP Contentions at 9; Tr. at 251-90; 294-319, 327-39, 342-43.

RULING: Supported by the declaration of Dr. Michael F. Sheehan, SLOMFP claims that PG&E has failed to demonstrate that it is financially qualified to cover the costs of construction, operation, and decommissioning of the proposed ISFSI. SLOMFP argues that because PG&E is currently involved in a contested bankruptcy, it is questionable whether PG&E will emerge from the bankruptcy proceedings as a viable entity, and if so, with what resources. SLOMFP further asserts that PG&E reliance on PG&E's ability to recover its costs from the California Public Utilities Commission (CPUC) as a regulated electric utility is not only insufficient to establish reasonable assurance of financial qualification, but also disingenuous. This is so, according to SLOMFP, because under PG&E's proposed reorganization plan PG&E would no longer own or operate DCPP or the ISFSI, but would transfer those functions to a new generating company, Electric Generation LLC (Gen), rendering PG&E's ability to recover operating costs from the rate base irrelevant. SLOMFP also declares that PG&E has not demonstrated its ability to cover the costs of construction and operation of the ISFSI through borrowing sufficient funds or through incoming revenue. Finally, SLOMFP claims that PG&E's financial qualifications are further compromised by the California Attorney General's pending billion-dollar lawsuit against PG&E's parent company, PG&E Corporation, and the consequences the lawsuit could have for PG&E.

The Staff, PSLHD, and CEC support the admission of all or part of contention SLOMFP TC-2. In this regard, although the Staff did not find all of SLOMFP's proffered bases to be appropriate for litigation in this proceeding, the Staff

Although SLOMFP counsel declared SLOMFP's concerns would change the DCPP DE/SSE figure, see Tr. at 401, that certainly is not self-evident nor are we willing to assume that is the case absent some specific, adequately supported technical showing by SLOMFP.

submits that the contention is admissible relative to the SLOMFP concerns about PG&E's access to credit and its ability to recover costs through rates. PG&E, on the other hand, opposes the admission of this contention arguing that the mere fact of bankruptcy does not alone establish a basis for this contention. PG&E asserts that it remains a viable going concern and that the NRC is satisfied that PG&E has adequate operating and decommissioning funds safely to operate and decommission DCPP. According to PG&E, any expenses it incurs, including the costs of the proposed ISFSI, are recoverable from the rate base, regardless of its past debts. Thus, PG&E contends its access to credit is irrelevant. Similarly irrelevant to this proceeding, PG&E asserts, are the financial qualifications of Gen, assuming that PG&E's reorganization plan is approved by the bankruptcy court and the Commission then approves the DCPP license transfer to Gen, as well as the pending California Attorney General lawsuit against PG&E's parent company.

An ISFSI applicant is required by 10 C.F.R. § 72.22(e) to demonstrate in its application its financial qualifications to carry out the activities for which the license is sought. In pertinent part, section 72.22(e) provides:

- (e) . . . The [submitted financial qualifications] information must show that the applicant either possesses the necessary funds, or that the applicant has reasonable assurance of obtaining the necessary funds or that by a combination of the two, the applicant will have the necessary funds available to cover the following:
 - (1) Estimated construction costs;
 - (2) Estimated operating costs over the planned life of the ISFSI; and
 - (3) Estimated decommissioning costs

We agree with PG&E that the mere fact of PG&E's filing for bankruptcy does not by itself indicate that it is no longer financially qualified to continue day-to-day operations at the DCPP facility. In fact, when the petition for bankruptcy was first filed in April 2001, NRC Chairman Meserve assured California Governor Davis that the Commission was closely monitoring the operations at DCPP and was satisfied that PG&E's financial situation had no impact on its ability to operate the facility safely and in accordance with agency regulations. See PG&E Response to SLOMFP Contentions, Attach. 1 (Letter from Richard A. Meserve, NRC Chairman, to Governor Gray Davis (Apr. 6, 2001)). Yet, notwithstanding PG&E's financial qualifications to conduct day-to-day DCPP operations, in its bases two and three SLOMFP has raised relevant and material concerns regarding the impact of PG&E's bankruptcy on its continuing ability to undertake the new activity of constructing, operating, and decommissioning an ISFSI by reason of its access to continued funding as a regulated entity or through credit markets. See SLOMFP Contentions at 14-17; id., Exh. 3, at 127 (PG&E Corp. 2001 Annual Report). We, therefore, admit contention SLOMFP TC-2 to this proceeding as supported by these bases establishing a genuine material dispute adequate to warrant further inquiry, but with the caveat that neither the unresolved California Attorney General's lawsuit against PG&E Corporation for alleged fraud nor the financial qualifications of any entities that may in the future construct or operate the ISFSI are litigable matters under this contention as irrelevant to and/or outside the scope of this proceeding.

SLOMFP TC-3: PG&E May Not Apply for a License for a Third Party

CONTENTION: In its License Application, PG&E first asserts that it, as the applicant, is financially qualified. It then goes on to assert, however, that it has applied to transfer its Part 50 operating license to a yet-to-be-created limited liability company, Electric Generation LLC (''Gen''), which will then transfer it further to yet another yet-to-be-created entity, Diablo Canyon LLC. License Application at 5. ''Gen'' is one of the proposed offsprings of a restructuring proposal being considered in the bankruptcy proceeding. See Application for Consent to License Transfers and Conforming License Amendments for Diablo Canyon Power Plant, Units 1 and 2, at 4 (November 30, 2001) (hereinafter ''License Transfer Application''). The License Transfer Application and Enclosure 8 are attached as Exhibit 5. PG&E also asserts that revenue and income projections for Gen, ''as well as the substantial assets of the company,'' demonstrate Gen's financial qualifications to construct and operate the Diablo Canyon ISFSI. Id.

As discussed in Contention TC-4 below, it is not all clear whether Gen or some other entity will be the owner and licensee of the proposed ISFSI under PG&E's reorganization plan, even if that reorganization plan is approved, which it may well not be.

The crux of the problem is that PG&E may not apply for a license for a third party that does not constitute the "applicant." There is no corporate entity, other than PG&E, that has applied for a license to build and operate the proposed ISFSI. In the absence of an alternative applicant, PG&E's attempt to demonstrate the financial qualifications of a third-party shell corporation that is a non-applicant must fail.

DISCUSSION: SLOMFP Contentions at 19-20; PG&E Response to SLOMFP Contentions at 32-34; Staff Response to SLOMFP Contentions at 10-12; Tr. at 260-63, 275-78, 290, 299, 312-13, 327-39, 342-43.

RULING: In this contention, which also is supported by the declaration of Dr. Michael F. Sheehan, SLOMFP argues that PG&E is attempting to apply for the ISFSI license on behalf of an entity that would be created to operate DCPP if and when the bankruptcy court approves PG&E's reorganization plan. SLOMFP asserts that because section 72.22 requires the Applicant to demonstrate its financial qualifications, PG&E must demonstrate that it — and not a non-existent "third-party shell corporation" — is financially qualified to construct and operate the ISFSI. SLOMFP Contentions at 20.

Although the PG&E and the Staff both contest the admissibility of this contention, SLOC, CEC, and PSLHD support its admissibility. PG&E and the Staff maintain that the Applicant for the license application before the Commission is PG&E in its existing corporate form, not Gen or any other entity that may or may not be created in the future. Thus, they argue, the application that has been

submitted by PG&E is factually accurate, and any inquiries into the financial qualifications of Gen are beyond the scope of this proceeding and would be more appropriately raised in the license transfer proceeding before the Commission concurrently.

As we explained in our discussion above regarding contention SLOMFP TC-2, we find that SLOMFP's concerns relative to the bankruptcy reorganization proceedings and its effects on PG&E's financial capacity to construct, operate, and decommission the proposed ISFSI are relevant to this proceeding and warrant further inquiry. However, as PG&E itself has recognized, Petitioner concerns regarding entities that may or may not be created in the future to take over operations at DCPP, depending on whether PG&E's reorganization plan is approved by the bankruptcy court, are irrelevant to and/or outside of the scope of this proceeding at this point.⁸ Therefore, as it seeks to challenge the efficacy of the PG&E application on the basis of the information that application provides on these matters, contention SLOMFP TC-3 is not admitted either.

SLOMFP TC-4: Failure To Establish Financial Relationships Between Parties Involved in Construction and Operation of ISFSI

CONTENTION: Newly formed entities that seek ISFSI licenses must conform to the requirements of 10 C.F.R. § 72.22, and also follow the Commission's guidance in 10 C.F.R. Part 50, including 10 C.F.R. § 50.33(f) and Appendix C. See Private Fuel Storage Facility (Independent Spent Fuel Storage Facility), LBP-98-7, 47 NRC 142, 187 (1998), citing Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-97-15, 46 NRC 294, 302 (1997). Assuming that PG&E lawfully can seek to demonstrate the financial qualifications of a third party that does not constitute the license applicant for an ISFSI (see Contention TC-3 above), PG&E has failed to satisfy these requirements, because it has not provided an adequate description of the financial relationships between the corporate entities that will own, operate, and lease the proposed ISFSI.

DISCUSSION: SLOMFP Contentions at 20-23; PG&E Response to SLOMFP Contentions at 34-40; Staff Response to SLOMFP Contentions at 12; Tr. at 260-63, 275-78, 290-91, 299, 312-13, 327-39, 342-43.

RULING: With its contention TC-4, which is supported by the declaration of Dr. Michael F. Sheehan, SLOMFP argues that PG&E has failed to demonstrate that Gen, the proposed DCPP license transferee, is financially qualified to construct and operate the proposed ISFSI. SLOMFP further contends that the financial relationships between Gen and several other corporate entities that may

⁸ In this regard, assuming that the bankruptcy court confirms PG&E's reorganization plan, and that the Commission approves the license transfer of DCPP from PG&E to Gen, PG&E would then be required to amend its ISFSI license application to reflect the change in applicant. If this chain of events is in fact realized, then issues regarding Gen's financial qualifications would be ripe for litigation, and SLOMFP seemingly would be free to submit any concerns about GEN or other newly accountable entities as a late-filed contention.

have an interest in DCPP and the proposed ISFSI are not clearly defined, leaving it uncertain which entity would be liable or financially accountable in the event of an accident or other problem. PG&E and the Staff oppose the admission of this contention, generally echoing their replies to contention SLOMFP TC-3, while SLOC, CEC, and PSLHD support the issue statement's admission.

For the reasons we rejected contention SLOMFP TC-3 above, we similarly deny the admission of contention SLOMFP TC-4. SLOMFP's concerns center on Gen's financial qualifications and relationships between Gen and other entities that may be created as part of PG&E's bankruptcy reorganization plan, if confirmed. Indeed, SLOMFP's disputes appear to be based on information largely found in PG&E's license transfer application, which is currently being considered by the Commission in a separate proceeding. As such, in terms of providing a basis for denying the PG&E application, at this time those concerns are irrelevant to and/or beyond the scope of this ISFSI licensing proceeding, in which PG&E is the sole applicant. Contention SLOMFP TC-4 thus is rejected as inadmissible.

SLOMFP TC-5: Failure To Provide Sufficient Description of Construction and Operation Costs

CONTENTION: PG&E has failed to provide a sufficient description or breakdown of costs for construction, and operation, and therefore it does not satisfy 10 C.F.R. § 72.22.

DISCUSSION: SLOMFP Contentions at 23; PG&E Response to SLOMFP Contentions at 40-43; Staff Response to SLOMFP Contentions at 12; Tr. at 292, 298-300, 320-21.

RULING: In proffering contention SLOMFP TC-5, which is supported by the declaration of Dr. Michael F. Sheehan as well, SLOMFP asserts it is impossible to evaluate the reasonableness of PG&E's cost estimates for building and operating the ISFSI because PG&E has failed to provide any detailed description of the associated costs, in violation of 10 C.F.R. Part 50, Appendix C, § II, and 10 C.F.R. § 72.22. PG&E opposes the admission of this contention, arguing that Part 50, Appendix C does not apply in this proceeding and that it has complied with the requirements set forth in section 72.22. The Staff, on the other hand, asserts that because SLOMFP has identified a specific regulatory requirement and a perceived deficiency in PG&E's ISFSI license application, the Board should admit contention SLOMFP TC-5. SLOC, CEC, and PSLHD also support admitting the contention.

Appendix C of Part 50 describes the financial data, including estimated costs of construction, that must be provided by applicants who wish to construct

⁹ As we noted above, *see supra* note 8, any concerns relating to the financial qualifications of Gen, or of any other entities other than PG&E, are not yet ripe for litigation in the instant proceeding.

nuclear production, utilization, or testing facilities. In the context of this ISFSI licensing proceeding, however, Appendix C is not directly applicable. *See Private Fuel Storage*, *L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 30 (2000) (finding that outside the reactor context, the requisite showing of financial qualifications under Part 72 is considerably more flexible than under Part 50 and that Part 72 applicants are not required to meet the detailed requirements of Part 50). Instead, section 72.22 is more pertinent for our purposes.

As we noted in connection with our discussion of contention SLOMFP TC-2 above, with regard to the necessary financial disclosures, section 72.22(e) requires an applicant to demonstrate that it either possesses or has reasonable assurance of obtaining sufficient funds to cover the ISFSI's estimated construction, operating, and decommissioning costs. See 10 C.F.R. § 72.22(e). In addition, an applicant must "state the place at which the activity is to be performed, the general plan for carrying out the activity, and the period of time for which the license is requested." Id. Beside the fact that section 72.22(e) does not require PG&E to itemize or break down the estimated costs of construction or operation, the only specific problem identified by SLOMFP with the information provided — the purported PG&E failure to provide income information for years 4 and 5 of possible ISFSI operation in the November 30, 2001 license transfer application enclosure eight materials that are referenced on page five of the December 21, 2001 Part 72 license application, see SLOMFP Contentions at 23 — is really not a PG&E failure at all. As the license transfer application materials included as exhibit five to the July 2002 SLOMFP supplemental petition indicate, enclosure eight contained proprietary material that was not included in the publically available version of the application. See SLOMFP Contentions, Exh. 5, at 4 (Nov. 30, 2001 Letter from Gregory M. Rueger, PG&E Senior Vice President-Generation and Chief Nuclear Officer, to NRC Commission and Staff). Although we provided SLOMFP an opportunity to seek any Part 72 license application associated-proprietary materials it wanted, as far as we are aware it made no request relative to this particular document. See Memorandum and Order (Protective Order Governing Disclosure of Proprietary Information) (June 19, 2002), Attach. A, at 1-2 (unpublished). As a consequence, this purported missing information does not, in our estimation, provide a legitimate basis for the contention. SLOMFP thus having failed to establish purported material deficiencies in the application, we deny the admission of contention SLOMFP TC-5.

b. SLOMFP Environmental Contentions

SLOMFP Environmental Contention (EC)-1: Failure To Address Environmental Impacts of Destructive Acts of Malice or Insanity

CONTENTION: The Environmental Report's discussion of environmental impacts is inadequate because it does not include the consequences of destructive acts of malice or insanity against the proposed ISFSI.

DISCUSSION: SLOMFP Contentions at 24-28; PG&E Response to SLOMFP Contentions at 43-50; Staff Response to SLOMFP Contentions at 13-14; Tr. at 76-114.

RULING: Supported by the declaration of Dr. Gordon R. Thompson, SLOMFP argues that the ER is inadequate because it does not contain any discussion of the environmental impacts of destructive acts of malice or insanity. While conceding that this omission is consistent with the Commission's practice of not considering the environmental impacts of such acts, SLOMFP argues that in light of the events surrounding September 11, 2001, there is a "demonstrable need" for the Commission to revisit its policy. SLOMFP Contentions at 25. Specifically, SLOMFP points to interviews with terrorists who candidly admit that nuclear power stations are top targets for attacks in the United States. SLOMFP also cites the agency's 1994 vehicle bomb rulemaking, 59 Fed. Reg. 38,889 (1994), as evidence that the Commission has begun to acknowledge the foreseeability of destructive acts of malice or insanity.

While PSLHD and SLOC support admitting contention SLOMFP EC-1, both PG&E and the Staff oppose its admission. PG&E and the Staff assert contention SLOMFP EC-1 is inadmissible as a matter of law because it challenges existing NRC regulations governing ISFSI physical security. In addition, they declare that, in light of the agency's current reevaluation of its security requirements and programs, contention SLOMFP EC-1 concerns matters that are, or are about to become, the subject of general rulemaking by the Commission.

Current NRC regulations do not require licensees to plan for or to design their facilities to protect against all acts of destruction or sabotage. Pursuant to 10 C.F.R. §§ 72.24(o), 72.180, an applicant, such as PG&E, is required to describe physical security protection plans for its ISFSI, which must meet the requirements set forth in 10 C.F.R. § 73.51. Section 73.51 requires a licensee to implement plans that will provide "high assurance that activities involving [SNF] and high-level radioactive waste do not constitute an unreasonable risk to public health and safety." 10 C.F.R. § 73.51(b)(1). When section 73.51 was adopted in 1998, the Commission specifically rejected a proposal that would have required ISFSIs to be protected against malevolent attacks by either land-based or airborne vehicles. See 63 Fed. Reg. 26,955, 26,956 (May 15, 1998). In doing so, the Commission acknowledged that spent fuel storage installations carried with them a lower potential for offsite consequences as compared to other types of facilities, and thus would not be held to the same stringent safety requirements as production facilities, for example. See id. Moreover, pursuant to 10 C.F.R. § 50.13, even applicants who wish to construct and operate a power reactor facility are

not required to provide for design features or other measures for the specific purpose of protection against the effects of (a) attacks and destructive acts, including sabotage, directed against the facility by an enemy of the United States, whether a foreign government or other person, or (b) use or deployment of weapons incident to U.S. defense activities.

See also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 379 (2001).

Contention SLOMFP EC-1 thus appears to directly challenge the Commission's rules regarding destructive acts of malice or insanity by enemies of the United As we have noted above, contentions that question existing NRC regulations are inadmissible as a matter of law. SLOMFP does argue that because its contention EC-1 is an environmental contention based on the National Environmental Policy Act (NEPA), rather than a safety contention based on the Atomic Energy Act and implementing NRC regulations, 10 C.F.R. § 2.758 does not apply and this Board may admit the contention. In our view, however, whether contention SLOMFP EC-1 is characterized as a safety contention or as an environmental issue statement is of no moment, because "the rationale for 10 CFR § 50.13 [is] as applicable to the Commission's NEPA responsibilities as it is to its health and safety responsibilities." Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 851 (1973); see also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-37, 54 NRC 476, 487 (2001), referral accepted, CLI-02-3, 55 NRC 155 (2002). Therefore, we find that contention SLOMFP EC-1 is inadmissible.

However, in light of the Commission's ongoing "top to bottom" review of the agency's safeguards and physical security programs, including those related to ISFSIs, which was commenced following the events of September 11,¹⁰ we will refer our ruling on contention SLOMFP EC-1 to the Commission for its consideration.

SLOMFP EC-2: Failure To Fully Describe Purposes of Proposed Action or To Evaluate All Reasonably Associated Environmental Impacts and Alternatives

CONTENTION: NRC regulations at 10 C.F.R. § 51.45(b) require a license applicant to describe, among other things, a statement of the purposes of the proposed action. PG&E's Environmental Report fails to meet this requirement because it does not completely disclose the purposes of the proposed ISFSI. In describing the need for the facility, the ER states that additional spent fuel storage capacity is needed at Diablo Canyon to accommodate the additional spent fuel that will be generated through the operating life of each unit. ER at 1.2-1. Yet, the capacity of the proposed ISFSI would be two or three times greater than what is needed to fulfill that purpose.

¹⁰ See CLI-02-23, 56 NRC 230, 236 (2002) (in denying request by SLOMFP and other Petitioners to suspend this proceeding, discussing ongoing comprehensive security review).

It appears that PG&E may have an additional, unstated purpose, i.e., to provide spent fuel storage capacity during a license renewal term. PG&E implies, in setting forth its financial qualifications in Section 1.5 of the License Application, that the proposed ISFSI could be used to accommodate spent fuel offloaded from the spent fuel pools after the present license terms of Diablo Canyon Units 1 and 2 have expired. However, if PG&E proceeds with its publicly stated plan to obtain license renewals for these units, the capacity of the proposed ISFSI would accommodate spent fuel generated during a substantial part of the license renewal term. Thus, the excess capacity of the proposed ISFSI — beyond that needed to accommodate the additional spent fuel that will be generated during the remaining license terms of the two Diablo Canyon units — could serve two different purposes. Neither purpose is discussed explicitly in the ER, and the License Application discusses only one of the purposes — namely, offloading the pools. Moreover, the discussion in the License Application is so oblique that PG&E's true purpose cannot be divined. Accordingly, the ER must be revised to fully disclose the purposes of the proposed facility.

A revision of the statement of purpose for the proposed ISFSI would require significant changes to the ER. As the courts have recognized, the statement of purpose and need in an EIS determines the range of alternatives that must be considered. *City of Carmel-by-the-Sea v. U.S. Department of Transportation*, 123 F.3d 1142, 1155 (9th Cir. 1995); *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991); *City of New York v. United States Department of Transportation*, 715 F.2d 732, 743 (2nd Cir. 1983). As the Court observed in [*Citizens] Against Burlington*, "an agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality." 938 F.2d at 196.

If, as it appears, the purposes of the proposed ISFSI could include providing for spent fuel storage during an extended or renewed license term, then it is appropriate to consider whether previous environmental analyses support renewed authorization to continue storing spent fuel at the Diablo Canyon site in the manner currently provided. In particular, the ER must "contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." 10 C.F.R. § 51.53(c)(3)(iv). The intervenors recognize that consideration of environmental impacts of spent fuel storage in a license renewal term is generally precluded in license renewal cases, because these environmental impacts were previously addressed in NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants (1996). See, in particular, Section 6.4.6.3. However, the NRC's NEPA regulations create an exception to this prohibition, by requiring consideration of "new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." 10 C.F.R. § 51.53(c)(iv).

In this case, the ER should address new information showing that (a) previous NRC environmental analyses of the risks of high-density pool storage of spent fuel considerably underestimate the risk of a spent fuel pool fire; and (b) in light of the terrorist attacks of September 11, 2001, and other events, the adequacy of design for both pool storage and dry storage has been demonstrated to be inadequate to protect against the potentially catastrophic effects of destructive acts of malice or insanity. The ER should consider a range of alternatives for extended spent fuel storage that will avoid or mitigate these risks.

DISCUSSION: SLOMFP Contentions at 28-38; PG&E Response to SLOMFP Contentions at 50-58; Staff Response to SLOMFP Contentions at 15-16; Tr. at 174-219.

RULING: SLOMFP proffers a number of bases in connection with its contention EC-2, which is supported by the declaration of Dr. Gordon R. Thompson. SLOMFP submits that the ER understates the ISFSI's capacity relative to the storage needed during the current DCPP operating license terms and, as a result, the statement of purpose must be revised to incorporate a discussion of storage during an extended term following license renewal. SLOMFP also contends that there is new information that shows not only that the risks of spent fuel pool fires are higher than previously estimated, but also that pools and casks alike are vulnerable to destructive acts of malice or insanity. In addition, according to SLOMFP, the NRC has acknowledged the potential for sabotage-induced pool fires. SLOMFP further argues that previous environmental analyses are inadequate and that the ER needs fully to address impacts and alternatives. Both PG&E and the Staff oppose the admission of this contention, while SLOC and PSLHD support its admission.

SLOMFP calculates, based on the remaining fuel cycles at DCPP, that the capacity of the ISFSI should be two to three times smaller than what has been proposed by PG&E and infers that PG&E most likely is contemplating license renewal. PG&E, however, has very plainly stated that the proposed ISFSI "is designed to store all of the spent fuel and associated nonfuel hardware resulting from the operation of the Diablo Canyon Power Plant Units 1 and 2 through 2021 and 2025 respectively," Application ¶3.0, at 8, and supplied calculations that confirm that statement, see PG&E Response to SLOMFP Contentions at 53-54. The Staff too has concluded that the proposed storage capacity is mathematically consistent with what would be needed to store all of the spent fuel generated over the lifetimes of DCPP Units 1 and 2, including capacity needed to support decommissioning at that juncture. Notwithstanding SLOMFP's assertion that PG&E could use the decommissioning-related capacity for storage during a renewal term, see Tr. at 177, we fail to see how an application that accurately describes what the proposed capacity will be and provides a logical basis for that capacity is deficient so as to create a material dispute for contention admission purposes.¹¹ Cf. Shearon Harris, LBP-99-25, 50 NRC at 34 (particularized showing needed to demonstrate applicant will act contrary to terms of regulatory requirement). Consequently, we find that revision of the ER's statement of purpose is unnecessary, as is further consideration of other alternatives.

Further, in response to the information proffered by SLOMFP regarding the risks of spent fuel pool fires, PG&E and the Staff counter that this new information

¹¹ This is particularly so in this instance, given that the 20-year term of the proposed DCPP ISFSI license would need to be extended prior to the beginning of any DCPP operating license renewal period, thus seemingly affording an opportunity for hearing consideration of the impacts upon the ISFSI renewal of any reactor-renewal-driven expansion.

is beyond the scope of this proceeding. As we observed in Section II.C.1 above, contentions that concern matters outside the scope of the proceeding, as defined by the notice of hearing or opportunity for hearing, must be denied. The notice of opportunity for hearing for this proceeding indicated that at issue is PG&E's application for a Part 72 license to possess SNF and other radioactive materials associated with an SNF dry cask storage system at an ISFSI. See 67 Fed. Reg. at 19,600. Environmental impacts regarding spent fuel pool fires thus are, on their face, beyond the scope of this licensing proceeding, at least absent a demonstration of how an issue associated with wet storage is applicable here, which SLOMFP has not provided.

In several of the contention's bases, SLOMFP also rehashes arguments concerning acts of destruction or sabotage that were advanced in support of contention SLOMFP EC-1. Because we have previously addressed these arguments in our discussion of that contention above, we will not repeat our reasons for rejecting them here. At the same time, we also will refer our ruling on this contention to the Commission to the extent destruction and sabotage matters are proffered in support of admission of this contention.

Finally, SLOMFP argues that the previous analyses conducted in NUREG-0575, Final Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel (Aug. 1979) and NUREG-1437, Generic Environmental Impact Statement for License Renewal, Vol. 1 (May 1996), are inadequate because they do not consider the potential for spent fuel pool accidents. SLOMFP further challenges other technical studies reviewed by the NRC on the basis they do not consider the more severe consequences of a partial pool drainage in addition to total and instantaneous pool drainage. PG&E and the Staff once again assert that this basis be rejected on the grounds that impacts associated with spent fuel pool accidents are beyond the scope of this proceeding and that it is an impermissible challenge to NRC regulations.

As we noted in our earlier discussion of this contention, SLOMFP has not demonstrated how environmental impacts of spent fuel pool accidents are relevant to this ISFSI licensing proceeding. Without such a showing, we find that these additional concerns relative to spent fuel pool accidents are beyond the scope of this proceeding. Because SLOMFP has failed to provide any basis for contention SLOMFP EC-2 that satisfies the requirements of section 2.714(b) for this contention, we must deny its admission.

SLOMFP EC-3: Failure To Evaluate Environmental Impacts of Transportation

CONTENTION: In violation of NEPA, PG&E's ER completely fails to evaluate the reasonably foreseeable environmental impacts of transporting spent fuel away from the Diablo Canyon ISFSI at the end of the license term of the ISFSI, either to a repository or another

interim storage site. In failing to address these reasonably foreseeable impacts, PG&E violates [NEPA], and NRC implementing regulations at 10 C.F.R. § 51.45(b)(1) (requiring ER to address the impacts of the proposed action on the environment) and 10 C.F.R. § 72.108 (requiring the applicant to address the impacts of spent fuel transportation within the "region" of the proposed ISFSI).

DISCUSSION: SLOMFP Contentions at 39-40; PG&E Response to SLOMFP Contentions at 58-67; Staff Response to SLOMFP Contentions at 16-18; Tr. at 219-37.

RULING: Again relying on the support of Dr. Gordon Thompson, with this contention SLOMFP challenges the adequacy of the PG&E ER's discussion of transportation-related impacts, specifically those that would arise from the transport of any spent fuel to a final geologic repository, such as the proposed Yucca Mountain, Nevada facility, or an interim storage facility, such as the proposed Skull Valley, Utah Private Fuel Storage ISFSI. According to SLOMFP, such SNF transportation is reasonably foreseeable at the end of the proposed DCPP ISFSI's 20-year license. As such, SLOMFP claims its impacts must be considered in the ER, including a discussion of impacts arising from normal conditions, reasonably foreseeable severe and beyond-design-basis accidents, and sabotage/terrorist attacks and an analysis of transportation alternatives, including transportation deferral. Alternatively, according to SLOMFP, if there is some generic EIS that already addresses these matters, then the PG&E ER must identify that source and explain why and to what extent it applies. SLOC, PSLHD, and CEC support admission of this contention as well.

Admission of contention SLOMFP EC-3 is opposed by PG&E and the Staff on a number of grounds. According to the Staff, the hearing notice for this proceeding limits its subject matter to ISFSI facility construction and operation, so that subsequent transportation activities are outside its scope. Further, citing 10 C.F.R. § 72.108 and its regulatory history, both PG&E and the Staff maintain the NEPA responsibility arising under that provision to address regional transportation impacts is inapplicable to this proceeding. This is so, PG&E asserts, because section 72.108 was intended only to encompass impacts of transporting SNF into a region, and so in this instance the proposed action covers only onsite, rather than offsite, transportation impacts in that fuel is not moved offsite in connection with this co-located ISFSI. Similarly, the Staff declares that no section 72.108 evaluation is necessary consistent with 10 C.F.R. § 72.40(a), (c), which indicate that absent new information any Part 72, Subpart E siting evaluation requirement, including section 72.108, need not be revisited if covered by a prior licensing action, including a Part 50 construction permit. Further, according to PG&E, any offsite transportation impacts, including accidents, are considered in either the Department of Energy's EIS for the proposed Yucca Mountain HLW repository or the NRC EIS for the proposed Skull Valley, Utah ISFSI facility. Moreover, PG&E

asserts that any transportation impacts are reasonably foreseeable impacts arising from operation of the DCPP, not the ISFSI, as is reflected in operation-related generic analyses of such impacts in Table S-4, 10 C.F.R. § 51.52, and WASH-1238/NUREG-75/038, Environmental Survey of Transportation of Radioactive Materials to and from Nuclear Power Plants (Dec. 1972 & Supp. 1, Apr. 1975). Finally, PG&E declares that neither sabotage/terror/warfare impacts nor transportation alternatives, such as deferral, need be addressed, the former for the reasons discussed above regarding contention SLOMFP EC-1, and the latter because the alternatives suggested by SLOMFP would not serve the purpose of the proposed action, which is SNF storage.

The applicability of section 72.108 requirement to assess regional transportation impacts under section 72.40(a)(2) is subject to the section 72.40(c) caveat that, in the absence of new information, such a Subpart E siting analysis that has been provided as part of a previous licensing action need not be reevaluated. Although the DCPP construction permit analysis of transportation impacts appears to predate Table S-4's applicability, PG&E had indicated such analysis nonetheless was done in the licensing documents, *see* Tr. at 230, and, with the exception of its already rejected assertion that sabotage/terror/warfare impacts need be included, nothing provided by SLOMFP has challenged that analysis. Accordingly, we find this contention inadmissible as failing to show a material factual or legal dispute, although we once again will refer our ruling in this regard to the Commission to the extent terrorism and sabotage matters are proffered in support of its admission.

3. Interested Governmental Entity Issues

a. Admission Requirements for Issues Raised by Section 2.715(c) Participants

DISCUSSION: Staff Position on Section 2.715(c) Participant Issues at 2-9; PG&E Position on Section 2.715(c) Participant Issues at 4-14; SLOC Position on Section 2.715(c) Participant Issues at 5-12; PSLHD Position on Section 2.715(c) Participant Issues at 2-3; CEC Position on Section 2.715(c) Participant Issues at 1-7; Tr. at 119-21, 125-29, 131-33, 146-48, 150-60, 165, 167-68.

RULING: Before ruling on the admissibility of the issues raised by PSLHD and SLOC, we first address the question of whether issues submitted by 10 C.F.R. § 2.715(c) participants must meet the same stringent requirements as contentions proffered by section 2.714 Intervenors. Both PG&E and the Staff argue that any new issues interested governmental entities wish to raise should be held to the same standard as contentions submitted by section 2.714 Intervenors. SLOC, on the other hand, asserts that the standard should be less rigorous. According to SLOC, given the unique role that interested governmental entities play in

protecting the public's health and safety, they should be permitted to bring their own issues of concern to the Board's attention, even if those issues would not qualify as contentions under section 2.714(b). For its part, PSLHD adopts the position and arguments of SLOC, while CEC argues that it is within the Board's discretion to permit a more flexible standard than the section 2.714(b) requirements when considering the admission of issues submitted by interested governmental entities.

For the reasons set forth below, we find that subjecting new issues submitted by section 2.715(c) interested governmental entities to the requirements set forth in section 2.714(b) is most consistent with agency case law and the purposes of sections 2.714 and 2.715(c).

On their face, sections 2.714(b) and 2.715(c) do not indicate with what level of specificity interested governmental entities must plead their issues. Section 2.714(b)(2) delineates only what "the petitioner" must provide with respect to each contention and nowhere mentions "interested governmental entities" or "section 2.715(c) participants." Section 2.715(c) states that a qualifying interested governmental entity will be given a reasonable opportunity to participate in the proceedings, including the ability to introduce evidence, interrogate witnesses, and advise the Commission without requiring it to take a position with respect to the issues being litigated. With respect to the issues that an interested governmental entity does take a position on, the provision indicates the presiding officer may require the entity, prior to the hearing, to indicate with "reasonable specificity" on which issues it wishes to participate. Section 2.715(c) does not, therefore, explicitly address how new issues raised independently by an interested governmental entity — as opposed to mere participation in discussions regarding contentions submitted by a section 2.714 petitioner — are to be pled. Because the text of the regulations leaves this question essentially unanswered, we turn to the agency's case law and regulatory history for guidance.

Prior to 1989, section 2.714(b) merely required petitioners to submit a list of contentions along with a statement of the basis for each contention with reasonable specificity. See 51 Fed. Reg. 24,365, 24,366 (July 3, 1986) (statement of considerations for proposed rule to raise contentions admission threshold). In practice, a petitioner could meet this low threshold by simply copying the contentions submitted by another petitioner in a completely unrelated proceeding involving a different facility. See id. At the same time, in connection with interested governmental entities, Appeal Board and Licensing Board decisions preceding the 1989 revisions to section 2.714(b) recognized that interested governmental entities could participate in a proceeding without offering contentions of their own. See Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760, 768 (1977); Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-81-5, 13 NRC 226, 246-47 (1981). They also determined, however, that once admitted as

a section 2.715(c) participant, "an 'interested state' must observe the procedural requirements applicable to other participants." River Bend, ALAB-444, 6 NRC at 768. Thus, with respect to late-filed contentions, the Licensing Board in Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-83-30, 17 NRC 1132, 1139-40 (1983), held that a county, notwithstanding its status as a section 2.715(c) participant, could not interject new issues into the case more than 1 year after the hearing without satisfying section 2.714(a)(1)'s test for late-filed contentions. Even more directly on point is the Licensing Board's decision in the above-cited *Diablo Canyon* operating license proceeding, in which the Governor of California sought to participate in the proceeding as an interested governmental entity on certain subject matters. Diablo Canyon, LBP-81-5, 13 NRC at 246. The Licensing Board there stated that while the Governor was not required to proffer contentions of his own and was free to participate in the litigation of any admitted contentions, "if the Governor wishes to raise specific issues not otherwise accepted by the Board he must comply with the requirements of 10 CFR 2.714(b) for acceptable contentions, just as any other party must." Id. at 246-47 (citing River Bend, ALAB-444, 6 NRC 760 (1977)). Thus, prior to 1989, once admitted to the proceeding as an interested governmental entity, a section 2.715(c) participant that wished to file timely or untimely contentions of its own was required to meet the same procedural standards as those required of a section 2.714 intervenor.

The 1989 revisions to section 2.714(b) substantially raised the threshold for the admissibility of petitioner contentions. Section 2.715(c) was not amended, however, leaving it unclear what effect the 1989 revisions were intended to have on issues submitted by section 2.715(c) participants. Relying on the existing case law prior to 1989 that held section 2.715(c) participants to section 2.714's procedural requirements when they wished to interject new issues into the proceeding, the Staff argues that the revised section 2.714 contention admission requirements also apply to section 2.715(c) participants and that there is no evidence that indicates otherwise.

Although there seems to be little case law on this issue, at least one Licensing Board decision after the effective date of the 1989 rule change appears to support the Staff's position. In *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LBP-90-12, 31 NRC 427 (1990), the Commonwealth of Massachusetts was admitted to the proceeding as a section 2.714 intervenor. After another intervenor withdrew, the Commonwealth attempted to adopt the withdrawn party's contention as its own and continue litigating it. The Licensing Board held that once a sponsoring intervenor drops out of the proceeding, its contention does not have a life of its own, and not even "the Commonwealth's avowed status as an 'interested state' avail[s] to it any special power to pick up issues dropped by other intervenors. *If it wishes to have issues heard in an NRC proceeding, it 'must observe the procedural requirements applicable to other*

participants." Id. at 430-31 (quoting River Bend, ALAB-444, 6 NRC at 768-69 (1977)) (emphasis added). This post-1989 rule change determination provides some support for holding interested governmental entities to the contention admissibility standards of section 2.714(b) for any new issues they wish to litigate.

Consideration of the policy rationales underlying sections 2.714(b) and 2.715(c) further support this conclusion. As proposed, the purpose of the 1989 amendments to section 2.714 was to "sharpen the issues in dispute throughout the prehearing and hearing phases and ensure that the resources of all parties are focused on real rather than imaginary issues." 51 Fed. Reg. at 24,366. Section 2.715(c) and its statutory source, section 274(*l*) of the Atomic Energy Act, 42 U.S.C. § 2021(*l*), were designed "to accord to States the privilege of fully participating in licensing proceedings and advising the Commission on the resolution of issues considered therein without being obliged in advance to set forth any affirmative contentions of its own (as is required of private intervenors)." Project Management Corp. (Clinch River Breeder Reactor Plant), ALAB-354, 4 NRC 383, 393 (1976). As a consequence, requiring interested governmental entities to conform to the requirements of section 2.714(b) for any new issues they wish to litigate is in no way contrary to the intent of section 2.715(c), nor does it hold them "hostage" to the issues raised by private parties, as SLOC argues. SLOC Position on Section 2.715(c) Participant Issues at 12. Rather, it preserves the underlying purposes of both provisions by preventing parties from having to expend resources on litigating unsubstantiated issues, while at the same time affording interested governmental entities a full opportunity to be heard on the issues being litigated without imposing on them the burden of having to submit a formal contention just to be able to participate in the proceedings.

Moreover, because the ultimate burden of proof rests with the applicant in this type of action, it is not clear as a procedural matter against what standard we would judge the applicant's response to an "informal" issue that did not meet the requirements of section 2.714(b). In other words, if interested governmental entities were allowed to introduce issues under a standard less rigorous than section 2.714(b), is the applicant then to be permitted to respond to the issue with a less comprehensive showing? The Staff has indicated that any party choosing to respond to the issue, including the Applicant and the Staff, would be obligated to respond to any issue raised with the same degree of evidence as if it were a contention admitted under section 2.714(b). Ultimately, permitting section 2.715(c) participants to interject "informal" issues for litigation would not only undermine the purposes of section 2.714(b), but would remove any incentive for governmental entities to participate in the proceedings as full intervenor parties.

As was noted very recently in the previously referenced PG&E license transfer case, "[t]he Commission 'has long recognized the benefits of participation in our proceedings by representatives of interested states, counties, municipalities,

etc.'" Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 345 (2002) (quoting Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Units 1 and 2), CLI-99-30, 50 NRC 333, 344 (1999)). We thus welcome the input of SLOC, PSLHD, CEC, and ABCSD (as well as DCISC, albeit under a different procedural regime) on any contentions that are admitted for litigation in this proceeding. For any new issues these interested governmental entities wish to raise on their own, however, they must satisfy the standards for contentions set forth in section 2.714(b).

Having thus established the standard for admissibility of issues proffered by section 2.715(c) participants, we turn to the issues independently submitted by PSLHD and SLOC.

b. PSLHD Issue

PSLHD Emergency Planning (EP-1): Emergency Response Plan Adequacy

CONTENTION: Although PSLHD is aware of 10 C.F.R. § 72.32(c), PSLHD has significant concerns regarding the adequacy of the San Luis Obispo County Nuclear Power Plant Emergency Response Plan (ERP) and believes the ERP should be considered in PG&E's current application.

DISCUSSION: PSLHD Issues at 14; Staff Response to PSLHD Issues at 2-4; PG&E Response to SLOC and PSLHD Issues at 3-7; Tr. at 129-30, 137-41, 144-46, 164-66.

RULING: PSLHD submits only one issue for consideration, which we refer to as Emergency Planning (EP)-1.¹² PSLHD argues that the existing ERP is more than 20 years old and does not reflect significant demographic and physical changes to the Diablo Canyon area that have occurred since its drafting. PSLHD outlines five areas of particular concern: (1) radio reception for local emergency alert system stations is poor or non-existent in Avila Valley; (2) evacuation time estimates would be more accurate if the latest technology were used; (3) risk factors such as terrorist attacks, human error, and seismic events may have been downplayed in the ERP; (4) population estimates and established emergency escape routes for Avila Valley contained in the ERP are outdated; and (5) the ERP does not accurately recognize population shifts in the emergency planning zones, particularly during summer weekend holidays.

While SLOC, CEC, and SLOMFP support admitting issue PSLHD EP-1, both PG&E and the Staff oppose its admission. In their pleadings, PG&E and the Staff both cite 10 C.F.R. § 72.32(c), which provides:

¹² Although the Board directed otherwise, *see* Board Order on Interested Governmental Entity Issue Identification at 2, because PSLHD did not provide a concise statement outlining its concern, this issue statement is the Board's paraphrase of PSLHD's summary discussion regarding its issue.

- (c) For an ISFSI that is:
- (1) located on the site, or
- (2) located within the exclusion area as defined in 10 CFR part 100, of a nuclear power reactor licensed for operation by the Commission, the emergency plan required by 10 CFR 50.47 shall be deemed to satisfy the requirements of this section.

The Staff points out that because the emergency planning requirements set forth in section 50.47, which apply to reactors, are much more demanding than those pertaining to ISFSIs, the existing EP for the reactor is sufficient for ISFSIs that will be located on the site of a previously licensed reactor, such as the one being proposed by PG&E. In addition, PG&E argues that PSLHD's challenges to the ERP are beyond the scope of this proceeding because they only concern general ongoing operational matters, and not matters directly related to the proposed ISFSI.

Because section 72.32(c) relieves PG&E of having to draft a new EP or amend an existing EP, any issues or contentions that seek such relief are essentially a challenge to that regulation and so are inadmissible pursuant to 10 C.F.R. § 2.758. They seemingly are outside the scope of this proceeding as well. Although concerns regarding the EP approved for DCPP are beyond the scope of this proceeding and are not open to relitigation at this time, arguably an emergency planning concern that relates specifically to the proposed ISFSI might be admissible. PSLHD, however, has failed to demonstrate in its pleading how its concerns about changes to the demographics and physical characteristics of Avila Valley within the past 20 years would specifically impact emergency planning as it relates to the possession of spent fuel in the proposed ISFSI. For these reasons, we find that issue PSLHD EP-1 is inadmissible.

c. SLOC Issues

(i) SLOC TECHNICAL ISSUES

SLOC TC-1: The Corporate Identity and Structure of the Applicant Are Not Adequately Identified

DISCUSSION: SLOC Issues at 3-5; PG&E Response to SLOC Issues at 7-9; Staff Response to SLOC Issues at 3-5; Tr. at 271-74, 290, 298-314, 323-27, 339-42, 344-47.

RULING: With this issue, SLOC seeks to challenge the adequacy of the PG&E application to the extent that it identifies other corporate entities that would be created in the event the pending bankruptcy reorganization gains judicial approval. According to SLOC, the possibility exists that with such approval, one or more of these new entities would be responsible for the construction, operation, and decommissioning the ISFSI. As a consequence, SLOC maintains, until the

reorganization is approved, any financial qualifications evaluation relative to this application must be postponed. SLOMFP, PSLHD, and CEC support the admission of this issue. Both PG&E and the Staff, however, oppose accepting this issue, asserting it is essentially identical to contention SLOMFP TC-3 and should be rejected for the same reasons.

For the reasons we have provided above relative to contention SLOMFP TC-3, this issue is not admitted for further consideration at this time.¹³

SLOC TC-2: The Financial Qualifications of the Applicant Are Not Adequately Demonstrated

DISCUSSION: SLOC Issues at 5-6; PG&E Response to SLOC Issues at 9-12; Staff Response to SLOC Issues at 5; Tr. at 271-74, 292-93, 298-314, 323-27, 339-42, 344-47.

RULING: With this issue, SLOC challenges the adequacy of the financial qualifications information provided by PG&E in its Part 72 application to the extent it relies upon the creditworthiness/borrowing capabilities and the electric utility status of its bankruptcy reorganization successor. SLOMFP, CEC, and PSLHD support its admission. PG&E and the Staff oppose admission of this issue, the former essentially for the reasons it gave in response to contention SLOMFP TC-2, while the latter contends that it is inadmissible because of its post-bankruptcy reorganization focus.

Although this issue is similar to contention SLOMFP TC-2 in its concerns about PG&E assertions about creditworthiness and utility status as a financial qualifications basis in light of the pending bankruptcy proceeding, we agree with the Staff that, in contrast to the admitted portions of issue SLOMFP TC-2, its post-bankruptcy reorganization focus renders it inadmissible at this juncture.

(ii) SLOC ENVIRONMENTAL ISSUE

SLOC EC-1: The ER does not contain an adequate analysis of alternatives: the ER fails to adequately consider and analyze (A) alternative sites and associated security measures, and (B) alternative security plans.

DISCUSSION: SLOC Issues at 7-11; PG&E Response to SLOC and PSLHD Issues at 12-17; Staff Response to SLOC Issues at 6-8; Tr. at 121-24, 130-31, 133-46, 160-66.

RULING: Although bearing a general introduction regarding the need to discuss alternatives, the crux of this issue is provided in subissues (A) and (B).

¹³ Moreover, to the extent the basis of this contention appears to mirror the concerns about the continuation of this proceeding expressed as grounds for the request to stay this proceeding previously ruled on by the Board, it likewise fails to provide grounds for further consideration in this proceeding. See supra note 2.

With regard to its subissue EC-1.A, SLOC argues that PG&E failed to consider important factors, such as vulnerability to offshore attacks post-September 11, when selecting the site for its ISFSI. SLOC also asserts that the ER's failure to evaluate security-related features for alternative sites and failure to consider reasonable alternatives violates 10 C.F.R. § 72.94 and NEPA, respectively. SLOC contends in subissue SLOC EC-1.B that PG&E's cost-benefit analysis may have failed to take into account the costs SLOC would bear in training its security personnel and implementing the ERP. Moreover, SLOC argues, because failure of the ISFSI's physical security plan could have substantial environmental consequences for the county's citizens, PG&E should be required to evaluate whether alternative security measures would reduce the ISFSI's exposure to offshore attack. Finally, SLOC asserts that review of the ERP is necessary so that SLOC can better understand and prepare for its increased responsibilities under the ERP.

While SLOMFP, CED, and PSLHD support the acceptance of SLOC EC-1 in its entirety, both PG&E and the Staff oppose the admission of any part of the issue into this proceeding. In their view, subissue SLOC EC-1.A largely incorporates the same post-September 11 security arguments advanced in contention SLOMFP EC-1. As we noted in our discussion of SLOMFP's contention EC-1 above, current NRC regulations do not require licensees to plan for or to design their facilities to protect against attacks by enemies of the United States. *See also* 10 C.F.R. §§ 50.13, 73.51(b)(1). Because subissue SLOC EC-1.A appears to challenge the Commission's rules regarding acts of destruction and sabotage, it must be denied as a matter of law, regardless of whether the issue is characterized as a safety issue or as an environmental one under NEPA. As was the case previously, however, we make this aspect of this issue a part of our referral to the Commission.

Likewise, for the reasons that we found issue PSLHD EP-1 to be inadmissible, we find subissue SLOC EC-1.B to be inadmissible. As we discussed relative to issue PSLHD EP-1 above, for ISFSIs that will be located on the site of a previously licensed reactor, section 72.32(c) relieves a licensee of having to create a new ERP or amend an existing ERP. SLOC's concern about the adequacy of the existing DCPP ERP is, therefore, a challenge to an agency regulation that renders issue SLOC EC-1.B inadmissible. Furthermore, the subject of emergency planning is outside the scope of this proceeding, unless it can be demonstrated that there are specific concerns with the ERP that are directly related to the proposed

ISFSI. SLOC has raised none that provide an adequate basis for its issues. ¹⁴ We, therefore, deny the admission of subissue SLOC EC-1.B as well.

III. ADMINISTRATIVE MATTERS

As we observed during the initial prehearing conference, *see* Tr. at 245, this ISFSI licensing proceeding is subject to the hybrid hearing process delineated in 10 C.F.R. Part 2, Subpart K, if any party wishes to invoke those procedures. *See also* 67 Fed. Reg. at 19,602. Pursuant to Subpart K, following a discovery period of up to 90 days, which can be extended upon a showing of exceptional circumstances, the parties simultaneously submit a detailed written summary of all facts, data, and arguments upon which each party intends to rely to support or refute the existence of a genuine and substantial dispute of fact regarding any admitted contentions. *See* 10 C.F.R. §§ 2.1111, 2.1113(a). Subsequently, the presiding officer conducts an oral argument, in which the parties address whether an adjudicatory proceeding is warranted because there are specific facts in genuine and substantial dispute that can be resolved with sufficient accuracy only by the introduction of evidence. *See id.* § 2.1115(b). Thereafter, the presiding officer issues a decision that designates the disputed issues of fact for an evidentiary hearing and resolves any other issues. *See id.* § 2.1115(a).

Within 10 days of an order granting a hearing request in a proceeding such as this one, a party may invoke Subpart K procedures by filing a written request for oral argument. *See id.* § 2.1109(a)(1). Accordingly, if PG&E, SLOMFP, or the Staff wishes to invoke the Subpart K procedures, it must file a request within 10 days of the date of this Order, or on or before *Thursday, December 12*, 2002. If such a request is received, the Licensing Board thereafter will issue an order regarding further scheduling.

IV. CONCLUSION

We find that Petitioners SLOMFP, SLCSC, SLOCAN, CCPEC, AVAC, and Ms. Peg Pinard have made showings sufficient to establish their standing to intervene as of right in this proceeding. Further, we find that one of these six Petitioners' eight contentions — SLOMFP TC-2 — is supported by bases adequate to warrant further inquiry so as to be admitted for litigation in this proceeding. Accordingly, pursuant to 10 C.F.R. § 2.714, we grant the hearing

¹⁴The only concern that SLOC has voiced that even comes close to being specific to the ISFSI is its statement that it does not understand what increased responsibilities it may bear once the ISFSI is operational. Although, as the Board suggested during the prehearing conference, this certainly should be the subject of additional consultation between PG&E and SLOC, see Tr. at 162-63, as presented it is not a matter that establishes the basis for an admissible issue.

requests/intervention petitions of these Petitioners and admit them as parties to this proceeding. We also grant SLOC, PSLHD, CEC, and ABCSD interested governmental entity participant status in accord with 10 C.F.R. § 2.715(c). However, because the issues raised by SLOC and PSLHD do not satisfy the section 2.714 contention admissibility standards, we do not admit any issues raised independently by these interested governmental entities for litigation in this proceeding.

For the foregoing reasons, it is, this second day of December 2002, ORDERED that:

- 1. Relative to the contention specified in paragraph three below, the hearing requests/intervention petitions of SLOMFP, SLCSC, SLOCAN, CCPEC, AVAC, and Peg Pinard are *granted* and they are *admitted* as parties to this proceeding, with SLOMFP acting as Lead Intervenor.
- 2. The hearing request/intervention petitions of ECSLO, CLDF, SMART, SLOCGPI, NAPF, and VCCSF are *denied* and the hearing request/intervention petition of Lorraine Kitman is *dismissed* as withdrawn.
- 3. Contention SLOMFP TC-2 is *admitted* for litigation in this proceeding as outlined in Section II.C.2.a above.
- 4. The following SLOMFP contentions are *rejected* as inadmissible for litigation in this proceeding: TC-1, TC-3, TC-4, TC-5, EC-1, EC-2, and EC-3.
- 5. The SLOC, PSLHD, CEC, and ABCSD requests for interested governmental entity participant status under 10 C.F.R. § 2.715(c) are *granted*.
- 6. The DCISC request for interested governmental entity participant status under 10 C.F.R. § 2.715(c) is *denied*, although DCISC may participate in this proceeding as an *amicus curiae* in accordance with the procedures set forth in Section II.B above.
- 7. The following issues submitted by interested governmental entities are *rejected* as inadmissible for litigation in this proceeding: issue PSLHD EP-1 and issues SLOC TC-1, SLOC TC-2, and SLOC EC-1.
- 8. In accordance with 10 C.F.R. § 2.730(f), the Licensing Board's rulings in Sections II.C.2.b and II.C.3.c(ii) above regarding the post-9/11sabotage/terrorism aspects of contentions SLOMFP EC-1, SLOMFP EC-2, SLOMFP EC-3, and issue SLOC EC-1 are *referred* to the Commission for further consideration and action, as appropriate.
- 9. The parties are to file any request for oral argument under 10 C.F.R. § 2.1109(a)(1) in accordance with the schedule established in Section III above.

10. Pursuant to the provisions of 10 C.F.R. § 2.714a(a), as it rules upon an intervention petition, this Memorandum and Order may be appealed to the Commission within 10 days after it is served.

THE ATOMIC SAFETY AND LICENSING BOARD¹⁵

G. Paul Bollwerk, III, Chairman ADMINISTRATIVE JUDGE

Jerry R. Kline ADMINISTRATIVE JUDGE

Peter S. Lam ADMINISTRATIVE JUDGE

Rockville, Maryland December 2, 2002

¹⁵Copies of this Memorandum and Order were sent this date by Internet e-mail transmission to counsel or the representative for (1) Applicant PG&E; (2) Petitioners SLOMFP, *et al.*; (3) SLOC, PSLHD, CEC, DCISC, and ABCSD; and (4) the Staff.

Opinion of Judge Lam Dissenting in Part and Concurring in Part with Respect to Licensing Board Rulings Rejecting SLOMFP Contentions EC-1, EC-2 and EC-3, and SLOC Issue EC-1

I join in this Memorandum and Order in all respects except for the Licensing Board's determination to deny admission of SLOMFP's contentions EC-1, EC-2, and EC-3, and SLOC issue EC-1 as they relate to the need for consideration of acts of terrorism and sabotage in the PG&E ER for its proposed ISFSI. I would admit this aspect of these NEPA-based contentions for further litigation. *See Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 444-47 (2001), *petition for interlocutory review granted*, CLI-02-4, 55 NRC 158 (2002). Nonetheless, given the significance of the matter involved, I concur in the Board's determination to refer its rulings rejecting this facet of these contentions to the Commission for its further consideration.

Cite as 56 NRC 465 (2002)

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Alan S. Rosenthal, Chairman Dr. Richard F. Cole Dr. Charles N. Kelber

In the Matter of

Docket Nos. 50-456-CO, 50-457-CO
50-454-CO, 50-455-CO
50-461-CO, 50-010-CO
50-237-CO, 50-249-CO
50-373-CO, 50-374-CO
50-342-CO, 50-353-CO
50-219-CO, 50-171-CO
50-277-CO, 50-278-CO
50-254-CO, 50-265-CO
50-289-CO, 50-295-CO
(ASLBP No. 03-806-01-CO)

EXELON GENERATION COMPANY, LLC and AMERGEN ENERGY COMPANY, LLC

(Braidwood Station, Units 1 and 2; Byron Station, Units 1 and 2; Clinton Power Station; Dresden Nuclear Power Station, Station, Units 1, 2, and 3; LaSalle County Station, Units 1 and 2; Limerick Generating Station, Units 1 and 2; Oyster Creek Nuclear Generating Station; Peach Bottom Atomic Power Station, Units 1, 2, and 3; Quad Cities Nuclear Power Station, Units 1 and 2; Three Mile Island, Unit 1; Zion Nuclear Power Station, Units 1 and 2)

December 4, 2002

MEMORANDUM AND ORDER

(Granting Motion To Withdraw Intervention Petition and Dismissing Proceeding)

Before the Board is Barry Quigley's December 2, 2002 motion seeking to withdraw his November 4, 2002 petition for leave to intervene and request for a hearing in this enforcement proceeding. The motion is *granted*. Because there are no other intervention petitions on file, the proceeding is hereby *dismissed*. It is so ORDERED.

THE ATOMIC SAFETY AND LICENSING BOARD¹

Alan S. Rosenthal, Chairman ADMINISTRATIVE JUDGE

Richard F. Cole ADMINISTRATIVE JUDGE

Charles N. Kelber ADMINISTRATIVE JUDGE

Rockville, Maryland December 4, 2002

 $^{^1}$ Copies of this Memorandum and Order were sent this date by e-mail transmission to Petitioner and to counsel for the Licensees and the NRC Staff.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman Dr. Jerry R. Kline Dr. Peter S. Lam

In the Matter of

Docket No. 72-26-ISFSI (ASLBP No. 02-801-01-ISFSI)

PACIFIC GAS AND ELECTRIC COMPANY (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)

December 26, 2002

In this proceeding concerning the application of Pacific Gas & Electric Company (PG&E) under 10 C.F.R. Part 72 to construct and operate an independent spent fuel storage installation (ISFSI) at the Diablo Canyon Power Plant, the Licensing Board rules on the requests of (1) a 10 C.F.R. § 2.715(c) interested governmental entity for Commission referral pursuant to 10 C.F.R. § 2.730 of the Board's determination in LBP-02-23, 56 NRC 413, 453-57 (2002), that an issue proffered by a section 2.715(c) participant is subject to the admission standards applicable to a petitioner contention under 10 C.F.R. § 2.714; and (2) a section 2.714 Intervenor for reconsideration of that portion of the Board's December 2 ruling that found it lacked standing, LBP-02-23, 56 NRC at 431. In addition, the Board grants requests by PG&E and the NRC Staff to have the proceeding conducted pursuant to 10 C.F.R. Part 2, Subpart K, and establishes an initial schedule for the proceeding in accord with the procedural dictates of Subpart K.

RULES OF PRACTICE: INTERLOCUTORY APPEALS (REFERRAL OF RULING); REFERRAL OF RULING

The agency's regulations governing motions for interlocutory appeals to the Commission are set forth in 10 C.F.R. § 2.730(f), which affords a presiding officer considerable discretion in choosing whether or not to refer a licensing board ruling to the Commission. The regulation provides, in pertinent part:

No interlocutory appeal may be taken to the Commission from a ruling of the presiding officer. When in the judgment of the presiding officer prompt decision is necessary to prevent detriment to the public interest or unusual delay or expense, the presiding officer may refer the ruling promptly to the Commission

10 C.F.R. § 2.730(f). In addition, section 2.786(g) describes the standards under which Commission review of a presiding officer referral is warranted as "immediate and serious irreparable impact" that cannot be alleviated through petition for review of a final presiding officer determination or a "pervasive or unusual" effect on the basic structure of the proceeding.

RULES OF PRACTICE: INTERLOCUTORY APPEALS (CONTENTION ADMISSION); REFERRAL OF RULING (CONTENTION ADMISSION)

In terms of the public interest and delay/expense concerns in section 2.730(f), the contention admission standard previously found applicable is rooted in the Commission-recognized public interest in ensuring that participants present well-substantiated issue statements for litigation so as to ensure that the resources and time expended by the parties and the agency in resolving those issues are well founded. *See* LBP-02-23, 56 NRC at 456. Additionally, denial of a referral request will not affect a licensing proceeding in a pervasive and unusual manner if the ruling was essentially an issue statement admissibility determination, which in due course is subject to Commission review. *See Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-838, 23 NRC 585, 592 (1986) (dismissing an interlocutory appeal by interested governmental entity whose sole proffered issue was rejected by Licensing Board because "[n]either test [under section 2.786(g)] ordinarily is satisfied where a licensing board simply admits or rejects particular issues for consideration in a case").

RULES OF PRACTICE: INTERLOCUTORY APPEALS (CONTENTION ADMISSION); REFERRAL OF RULING (CONTENTION ADMISSION)

Even though a section 2.715(c) interested governmental entity will not be able to litigate its own issues following a presiding officer ruling denying admission to those issues, it nonetheless is in a better position than a similarly situated section 2.714 petitioner. A section 2.714 petitioner without an admissible contention would not be permitted to participate in the proceeding, but as a section 2.715(c) interested governmental entity, it can still actively participate through discovery, introducing evidence, interrogating witnesses, and advising the presiding officer board on its position relative to any admitted contention. *See Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-731, 17 NRC 1073, 1074-75 (1983) (even if erroneous, Licensing Board's grant of summary disposition on intervenor's sole contention did not affect proceeding in pervasive and unusual manner because intervenor was still participant in proceeding in connection with another intervenor's contention).

RULES OF PRACTICE: DISCOVERY (INTERESTED STATE OR LOCAL GOVERNMENT); PARTICIPATION BY AN INTERESTED STATE OR LOCAL GOVERNMENT (DISCOVERY)

Agency case law indicates that section 2.715(c) participants are permitted discovery relative to admitted contentions. *See, e.g., Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-83-26, 17 NRC 945, 947 (1983).

RULES OF PRACTICE: INTERLOCUTORY APPEALS (10 C.F.R. § 2.786(b)(4) CRITERIA); REFERRAL OF RULING (10 C.F.R. § 2.786(b)(4) CRITERIA)

The Commission "may consider the criteria listed in [10 C.F.R. §] 2.786(b)(4) when reviewing interlocutory matters on the merits, but when determining whether to undertake such review the standards in section 2.786(g) control [its] determination." *Oncology Services Corp.*, CLI-93-13, 37 NRC 419, 421 (1993). Similarly, the section 2.786(b)(4) criteria are not relevant to a presiding officer's determination whether to refer a ruling to the Commission.

RULES OF PRACTICE: INTERLOCUTORY APPEALS (CONTENTION ADMISSION); REFERRAL OF RULING (CONTENTION ADMISSION)

A presiding officer's determination not to admit issues proffered by a section 2.715(c) interested governmental entity is not the type of novel issue regarding a

proposed contention that will not abide the end of the proceeding so as to warrant referral to the Commission. *See Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 23 (1998).

RULES OF PRACTICE: MOTIONS FOR RECONSIDERATION

Properly supported motions to reconsider request the correction of an erroneous presiding officer decision resulting from a misapprehension or disregard of a critical fact or controlling legal principle or decision. *See Private Fuel Storage*, *L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 264 (2000). Such a motion is not an opportunity to present new arguments or evidence, unless the proponent can show that the new material addresses a presiding officer ruling that could not reasonably have been anticipated. *See Louisiana Energy Services*, *L.P.* (Claiborne Enrichment Center), CLI-97-2, 45 NRC 3, 4 (1997); *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-84-10, 19 NRC 509, 517-18 (1984).

RULES OF PRACTICE: STANDING (WORKPLACE PROXIMITY)

The agency has clearly recognized that the proximity of a petitioner's workplace to a facility can be sufficient to establish standing in other types of licensing proceedings. *See, e.g., Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), LBP-98-33, 48 NRC 381, 385 n.1 (1998), *aff'd*, CLI-99-11, 49 NRC 328 (1999); *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 287, *aff'd*, CLI-95-12, 42 NRC 111 (1995); *General Public Utilities Nuclear Corp.* (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 158-59 (1996).

RULES OF PRACTICE: MOTIONS FOR RECONSIDERATION (RAISING MATTERS FOR THE FIRST TIME)

Although the agency generally does not grant motions to reconsider based on new information, to the degree the Licensing Board in *Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), LBP-93-21, 38 NRC 143, 145 (1993), departed from the general practice and decided such a motion on its merits because (1) no party objected to the motion, and (2) the Board was not under any time pressure as a result of having previously granted the Staff a delay in the proceeding, that case is distinguishable when there is an objection to the reconsideration motion.

MEMORANDUM AND ORDER

(Denying Motions for Commission Referral and Reconsideration of Portions of LBP-02-23; Granting Requests To Invoke 10 C.F.R. Part 2, Subpart K Procedures and Establishing Schedule)

Pending are several different items relating to the Licensing Board's December 2, 2002 memorandum and order, LBP-02-23, 56 NRC 413 (2002), admitting (1) the San Luis Obispo Mothers for Peace (SLOMFP) and several other 10 C.F.R. § 2.714 Petitioners as parties to this proceeding because they had established standing and proffered an admissible contention; and (2) San Luis Obispo County, California (SLOC), the Port San Luis Harbor District (PSLHD), the California Energy Commission (CEC), and the Avila Beach Community Services District (ABCSD) as 10 C.F.R. § 2.715(c) interested governmental entities, albeit without accepting certain issues proffered by SLOC and PSLHD. In a December 11, 2002 filing, SLOC requests that the Board, pursuant to 10 C.F.R. § 2.730(a), refer to the Commission that portion of its December 2 ruling that held SLOC's issues subject to the admission standards applicable to petitioner contentions under 10 C.F.R. § 2.714. Additionally, on December 12, acting as the lead section 2.714 intervenor, SLOMFP filed on behalf of Petitioner Environmental Center of San Luis Obispo (ECSLO) a request for reconsideration of that portion of the Board's December 2 ruling that found ECSLO lacked standing. Finally, on that same day both Applicant Pacific Gas and Electric Company (PG&E) and the NRC Staff requested that this proceeding be conducted in accordance with the hybrid hearing procedures of 10 C.F.R. Part 2, Subpart K.

For the reasons set forth below, we deny the SLOC referral request and the SLOMFP/ECSLO reconsideration request. Further, we grant the PG&E and Staff requests to utilize Subpart K procedures and, in accord with those procedural dictates, establish a schedule for the next phase of this proceeding.

I. SLOC REFERRAL REQUEST

In its December 11 filing, SLOC asserts that referral of that portion of LBP-02-23 that applied the 10 C.F.R. § 2.714 contention admissibility standards to issues raised by section 2.715(c) participants to the Commission is warranted because the Board's decision 'will have a pervasive effect on the participation by governmental entities in all future NRC proceedings.' Brief in Support of Motion by [SLOC] under 10 C.F.R. § 2.730(a) for Referral to the Commission of That Part of LBP-02-23 That Amended 10 C.F.R. § 2.715(c) to Improperly Apply to Issues Proffered by Interested Governmental Entities the Criteria in 10 C.F.R. § 2.714(b) for the Admissibility of Contentions Proffered by Private Litigants (Dec. 11, 2002) at 2 [hereinafter SLOC Brief]. SLOC further argues

that Commission review of the Board's decision is merited at this point in the proceeding based on the Commission's criteria for interlocutory and discretionary review. *See id.* at 5.

Although section 2.715(c) participants CEC and PSLHD support the motion for referral, see Response of the [CEC] to Motion Filed by [SLOC] on December 11, 2002 (Dec. 18, 2002) at 2; Position of [PSLHD] Regarding [SLOC] Motion Requesting Referral of the Licensing Board's Ruling in Section II.C.3.a of LBP-02-23, 56 NRC (Dec. 2, 2002) Regarding the Criteria for Considering Issues Raised by Governmental Entities Under 10 C.F.R. § 2.715(c) (Dec. 18, 2002) at 1, both PG&E and the Staff oppose it. PG&E argues that the Board should reject the SLOC motion because SLOC has neither satisfied the Commission's requirements for interlocutory review nor submitted a basis to reconsider or reverse the Board's December 2 ruling. See Answer of [PG&E] to Motion of [SLOC] for Partial Referral to the Commission of LBP-02-23 (Dec. 18, 2002) at 2. For its part, the Staff asserts that the SLOC motion, while styled as a motion for referral, is more appropriately classified as either "a motion for reconsideration of the Board's presumed decision not to refer its ruling or certify the question to the Commission" or as a petition to the Commission for interlocutory review. Response of NRC Staff to Motion Filed by [SLOC] for Referral of the 2.715(c) Issues to the Commission (Dec. 18, 2002) at 3. In either event, the Staff contends, the Board should deny SLOC's motion because SLOC has failed to show any error on the Board's part in not exercising its discretionary authority to refer its ruling to the Commission and, alternatively, the SLOC motion is procedurally deficient and lacks substantive merit to the degree that it seeks to rely upon NRC regulations governing petitions seeking discretionary Commission review. See id. at 4-10.

We consider SLOC's motion as it was presented to the Board — as a request for referral to the Commission — rather than as a motion for reconsideration.¹ The agency's regulations governing motions for interlocutory appeals to the Commission are set forth in 10 C.F.R. § 2.730(f), which affords a presiding officer considerable discretion in choosing whether or not to refer a licensing board ruling to the Commission. The regulation provides, in pertinent part:

No interlocutory appeal may be taken to the Commission from a ruling of the presiding officer. When in the judgment of the presiding officer prompt decision is necessary to prevent detriment to the public interest or unusual delay or expense, the presiding officer may refer the ruling promptly to the Commission

¹ In addition to requesting referral, SLOC makes several substantive arguments, namely, that the Board erred by (1) overruling longstanding Commission policy of encouraging interested governmental entity participation in NRC proceedings; (2) usurping the Commission's rulemaking authority by substantially amending section 2.715(c); and (3) ignoring controlling Atomic Safety and Licensing Appeal Board precedent. *See* Motion at 6-15. Because we view SLOC's motion as one requesting referral rather than reconsideration, we need not address these SLOC allegations of substantive error.

10 C.F.R. § 2.730(f). In addition, section 2.786(g) describes the standards under which Commission review of a presiding officer referral is warranted as "immediate and serious irreparable impact" that cannot be alleviated through petition for review of a final presiding officer determination or a "pervasive or unusual" effect on the basic structure of the proceeding.

In the context of both sections 2.730(f) and 2.786(g), the Board finds no basis for referring the section 2.715(c) participant issue admission standard portion of our ruling (i.e., section II.C.3.a) to the Commission. In terms of the public interest and delay/expense concerns in section 2.730(f), as was noted in our December 2 ruling, the contention admission standard we found applicable is rooted in the Commission-recognized public interest in ensuring that participants present well-substantiated issue statements for litigation so as to ensure that the resources and time expended by the parties and the agency in resolving those issues are well founded. See LBP-02-23, 56 NRC at 456. Additionally, denial of SLOC's referral request will not affect this ISFSI licensing proceeding in a pervasive and unusual manner given that our ruling was essentially an issue statement admissibility determination, which in due course is subject to Commission review.² See Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-838, 23 NRC 585, 592 (1986) (dismissing an interlocutory appeal by interested governmental entity whose sole proffered issue was rejected by Licensing Board because "[n]either test [under section 2.786(g)] ordinarily is satisfied where a licensing board simply admits or rejects particular issues for consideration in a case"). Moreover, although SLOC will not be able to litigate its own issues, it nonetheless is in a better position than a similarly situated section 2.714 petitioner. A section 2.714 petitioner without an admissible contention would not be permitted to participate in the proceeding, but as a section 2.715(c) interested governmental entity, SLOC can still actively participate through discovery,³ introducing evidence, interrogating witnesses, and advising the Board on its position relative to the admitted SLOMFP contention. See id., ALAB-731, 17 NRC 1073, 1074-75 (1983) (even if erroneous, Licensing Board's grant of summary disposition on intervenor's sole contention did not affect proceeding in pervasive and unusual manner because intervenor was still participant in proceeding in connection with another intervenor's contention).

Accordingly, nothing presented by SLOC has convinced the Board that a section 2.730(f) referral of that portion of LBP-02-23 regarding the standard for

² SLOC has not sought to establish, as we think it could not, that it is threatened with immediate and serious irreparable impact, the first item under the more recently adopted section 2.786(g) standard for Commission review of presiding officer section 2.730(f) ruling referrals and section 2.718(i) question certifications.

³ Although SLOC declares that section 2.715(c) participants are not permitted discovery relative to admitted contentions, see SLOC Brief at 8, agency case law indicates otherwise, see, e.g., Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), LBP-83-26, 17 NRC 945, 947 (1983). Accordingly, as is outlined in Section III of this issuance, we afford SLOC and the other section 2.715(c) participants the opportunity for discovery relative to admitted contention SLOMFP TC-2, PG&E's Financial Qualifications Not Demonstrated.

admission of issues proffered by section 2.715(c) participants is warranted at this time, whether as a matter of discretion or otherwise.⁴

II. SLOMFP/ECSLO RECONSIDERATION REQUEST

In a December 12 filing, acting on behalf of Petitioner ECSLO, Lead Intervenor SLOMFP requested that the Board reconsider its ruling that ECSLO lacked standing. See Motion for Partial Reconsideration of LBP-02-23 by [SLOMFP] and [ECSLO] (Dec. 12, 2002) [hereinafter SLOMFP/ECSLO Motion] at 1-2. In LBP-02-23, the Board recognized that Petitioners who resided within 17 miles of the Diablo Canyon Power Plant (DCPP) could establish standing to intervene in the proceeding based on the geographic proximity of their homes to the facility. See 56 NRC at 427-29. We concluded that ECSLO failed to establish representational standing because its standing was based solely on the geographic proximity of its member, Pamela Heatherington, whose supporting declaration only stated that she resides within 30 miles of DCPP. See id. at 431. Although SLOMFP does not directly contest the Board's 17-mile geographic proximity finding, it requests reconsideration based on new information it has received from Ms. Heatherington. According to SLOMFP, Ms. Heatherington recently informed SLOMFP that her office, where she spends approximately 9 hours per day, is located within 10 miles of DCPP, but that she had not volunteered this information to SLOMFP earlier because she believed the location of her workplace could not be used to establish standing. See SLOMFP/ECSLO Motion at 1-2; id., Decl. of Pamela Heatherington.

PG&E objects to the SLOMFP/ECSLO request, arguing that a motion to reconsider based on new information relevant to a matter that could easily have been anticipated is improper. *See* Answer of [PG&E] to Motion of [SLOMFP] and [ECSLO] for Partial Reconsideration of LBP-02-23 (Dec. 19, 2002) at 2. On the other hand, PSLHD supports the request as does the Staff, which did not object to the standing of ECSLO or any of the other section 2.714 Petitioners initially. *See* Position of [PSLHD] Regarding Reconsideration of the Board's Ruling Denying Party Status to [ECSLO] for Lack of Standing (Dec. 19, 2002)

⁴ As was noted above, SLOC avers that the criteria in 10 C.F.R. § 2.786(b)(4) under which the Commission decides to accept petitions for discretionary review support Commission referral of our December 2 ruling as well. See SLOC Brief at 5. As the Commission has noted, however, it "may consider the criteria listed in section 2.786(b)(4) when reviewing interlocutory matters on the merits, but when determining whether to undertake such review the standards in section 2.786(g) control our determination." Oncology Services Corp., CLI-93-13, 37 NRC 419, 421 (1993). Similarly, the section 2.786(b)(4) criteria are not relevant to our determination whether to refer.

Additionally, for the reasons noted above, this matter is not the type of novel issue regarding a proposed contention that will not abide the end of the proceeding. *See Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 23 (1998).

at 1; Response of NRC Staff to Motion Regarding Board's Ruling on Standing of [ECSLO] (Dec. 19, 2002) at 1-2.

Properly supported motions to reconsider request the correction of an erroneous presiding officer decision resulting from a misapprehension or disregard of a critical fact or controlling legal principle or decision. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 264 (2000). Such a motion is not an opportunity to present new arguments or evidence, unless the proponent can show that the new material addresses a presiding officer ruling that could not reasonably have been anticipated. See Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-97-2, 45 NRC 3, 4 (1997); Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-84-10, 19 NRC 509, 517-18 (1984). Nowhere in its December 12 motion does SLOMFP question the substantive merits of the Board's order denying standing to ECSLO. Moreover, the "new" evidence that SLOMFP and ECSLO wish to bring to the Board's attention is information that Petitioner ECSLO apparently knew, or should have known, at the time that it submitted the documentation in support of its standing claims, but did not disclose. Indeed, the agency has clearly recognized that the proximity of a petitioner's workplace to a facility can be sufficient to establish standing in other types of licensing proceedings. See, e.g., Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), LBP-98-33, 48 NRC 381, 385 n.1 (1998), aff'd, CLI-99-11, 49 NRC 328 (1999); Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 287, aff'd, CLI-95-12, 42 NRC 111 (1995); General Public Utilities Nuclear Corp. (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 158-59 (1996), Based on existing NRC case law, therefore, ECSLO could have readily anticipated that the proximity of a member's workplace to DCPP would be very relevant to a determination of standing. In this context, the fact the Petitioner mistakenly did not believe the information was relevant at the time does not provide grounds for a motion to reconsider.

Seemingly anticipating a ruling that the agency generally does not grant motions to reconsider based on new information, SLOMFP/ECSLO cites *Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), LBP-93-21, 38 NRC 143, 145 (1993), in arguing that there may be an exception to the NRC's general practice if reconsideration would not cause an unwarranted delay in the proceedings. *See* SLOMFP/ECSLO Motion at 2. In *Vogtle*, the Licensing Board departed from the general practice outlined above and considered a motion to reconsider that raised new arguments. *See* LBP-93-21, 38 NRC at 145. The *Vogtle* Board noted that despite the "extraordinary nature" of the motion, it would nonetheless decide the motion on its merits because (1) no party objected to the motion; and (2) the Board was not under any time pressure as a result of having previously granted the Staff a delay in the proceeding. *Id.* In this instance,

however, although consideration of the SLOMFP/ECSLO request may not cause a significant delay in the instant proceeding, PG&E has objected to the motion, distinguishing *Vogtle* from the case at bar.

Thus, because SLOMFP and ECSLO had sufficient opportunity to present information concerning the proximity of Ms. Heatherington's workplace to DCPP prior to our December 2 ruling, and because a party to the proceeding has objected to the motion, we deny the SLOMFP/ECSLO request for reconsideration.

III. SCHEDULE FOR UTILIZING SUBPART K PROCEDURES

Under 10 C.F.R. § 2.1109(a)(1), a timely request by any party to a spent fuel storage expansion proceeding to invoke the Subpart K hybrid hearing procedures must be approved. Accordingly, we *grant* the December 12, 2002 PG&E and Staff requests to proceed under Subpart K. Further, bearing in mind that we have admitted only a single issue in this proceeding, we establish the following timetable for utilizing the Subpart K procedures:

Discovery Begins	Monday, January 6, 2003
Discovery Ends	Friday, March 7, 2003
Initial Written Summaries Filed	Friday, April 11, 2003
Written Summary Responses Filed ⁵	Monday, April 28, 2003
Oral Argument	Week of May 12, 2003

Also, in connection with the discovery process, the parties (SLOMFP, as lead section 2.714 Intervenor, PG&E, and the Staff) and section 2.715(c) Participants are advised of the following limitations and guidelines:

1. Absent prior leave of the Board or written stipulation, relative to admitted contention SLOMFP TC-2, SLOMFP, PG&E, and the Staff may serve on the other two parties not more than 15 interrogatories per party, including all discrete subparts, and not more than two deposition notices per party. Each section 2.715(c) interested governmental entity may serve on each of these three parties not more than five interrogatories per party, including all discrete subparts, and not more than one deposition notice per party. In turn, each of the parties may serve upon each of the four section 2.715(c) participants not more than five

⁵ Based on previous experience in Subpart K proceedings, the Board believes providing for a responsive filing will ensure that the subsequent section 2.1113 oral session is, as Subpart K seems to contemplate, an argument rather than a quasi-evidentiary presentation.

⁶ In this regard, the Board anticipates that any of the section 2.715(c) interested governmental entities will be able to participate in any of the party depositions noticed by SLOMFP, PG&E, or the Staff.

interrogatories per participant, including all discrete subparts, and not more than one deposition notice per section 2.715(c) participant.⁷

- 2. Absent some other agreement of the parties/section 2.715(c) participants, all discovery responses shall be provided within 10 days of the filing of the discovery request. All discovery requests (including requests for admissions) and responses (other than document production responses, which need be provided only to the requesting party/section 2.715(c) participant) should be provided to the requesting party/section 2.715(c) participant, the Board, and the other parties/section 2.715(c) participants by e-mail, facsimile transmission, or other means that will ensure receipt on the day of filing, with conforming paper copies to follow.
- 3. To be timely, a discovery request must permit a timely response on or before the day the discovery period closes.⁸ Likewise, depositions should be scheduled to conclude on or before the date discovery closes.
- 4. Any motion to compel shall be filed within 7 days of the date the discovery response at issue is, or should have been, provided. Responses to a motion to compel or a motion for protective order shall be filed within 7 days of the date the motion is filed. As part of any motion to compel/motion for protective order, counsel for the moving party/section 2.715(c) participant shall provide a certification that he or she previously has (a) provided the party/section 2.715(c) participant to whom the motion is directed with a clear and concise written statement of the asserted deficiencies or objections and the requested action relative to the discovery request; and (b) after providing this statement, consulted with counsel for that party/section 2.715(c) participant in an attempt to resolve all the disputed matters without Board action.

Finally, for planning purposes, the parties/section 2.715(c) participants should be aware that the Board intends to conduct the Subpart K oral argument in the San Luis Obispo, California area. In addition, the parties/section 2.715(c) participants are advised that the Board intends to conduct one or more sessions to receive 10 C.F.R. § 2.715(a) limited appearance statements in the vicinity of the Diablo Canyon facility during March or April 2003. Additional details on these sessions will be provided at a later time.

⁷For any section 2.715(c) participant deposition noticed by SLOMFP, PG&E, or the Staff, the Board likewise anticipates that the other two parties will be able to participate in such a deposition.

⁸ As was noted above, the filing deadlines specified for interrogatory, admission, and document production responses can be extended by agreement of the parties involved so long as the response does not run beyond the scheduled discovery cutoff date. The filing deadline for motions to compel can be extended only by leave of the Board.

IV. CONCLUSION

Finding insufficient justification to warrant Commission referral of our ruling in LBP-02-23 regarding the standard applicable to the admission of section 2.715(c) participant issues, we deny the SLOC request for such action pursuant to section 2.730(f). Finding also that the SLOMFP request, on behalf of ECSLO, for reexamination of our ruling in LBP-02-23 regarding ECSLO's standing to intervene fails to meet the applicable reconsideration standards, we deny that motion as well. We do, however, grant the PG&E and Staff requests to invoke the procedural scheme in Part 2, Subpart K, and establish a schedule for utilizing that process.

For the foregoing reasons, it is, this twenty-sixth day of December 2002, ORDERED that:

- 1. The December 11, 2002 SLOC request pursuant to 10 C.F.R. § 2.730(a) for referral to the Commission of the Licensing Board's ruling in section II.C.3.a of LBP-02-23, 56 NRC 413, 453-57 (2002) is *denied*.
- 2. The December 12, 2002 request of Lead section 2.714 Intervenor SLOMFP, on behalf of Petitioner ECSLO, for reconsideration of that portion of LBP-02-23, 56 NRC at 431 regarding ECSLO's standing to intervene is *denied*.
- 3. The December 12, 2002 PG&E and Staff requests to conduct this proceeding in accordance with the provisions of 10 C.F.R. Part 2, Subpart K are *granted* and a further schedule for the proceeding is set forth in Section III of this Memorandum and Order.

THE ATOMIC SAFETY AND LICENSING BOARD⁹

G. Paul Bollwerk, III, Chairman ADMINISTRATIVE JUDGE

Peter S. Lam ADMINISTRATIVE JUDGE

Rockville, Maryland December 26, 2002

⁹Copies of this Memorandum and Order were sent this date by Internet e-mail transmission to counsel for (1) Applicant PG&E; (2) Intervenors SLOMFP, *et al.*; (3) SLOC, PSLHD, CEC, ABCSD, and the Diablo Canyon Independent Safety Committee; and (4) the Staff.

Although Judge Kline was not available to sign this Memorandum and Order, he reviewed its contents and agrees with the determinations reached herein.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ann Marshall Young, Chair Dr. Richard F. Cole Thomas D. Murphy

In the Matter of

Docket No. 50-528-OLA (ASLBP No. 03-804-01-OLA)

ARIZONA PUBLIC SERVICE COMPANY (Palo Verde Nuclear Generating Station, Unit 1)

December 30, 2002

ORDER

(Terminating Proceeding)

This proceeding was initiated after the National Environmental Protection Center (NEPC) filed a Request for Hearing and Petition To Intervene on October 14, 2002, in response to an October 3, 2002, notice of opportunity for hearing, 67 Fed. Reg. 62,079 (Oct. 3, 2002), regarding the Arizona Public Service (APS) Company's September 26, 2002, request to amend the operating license for the Palo Verde Nuclear Generating Station, Unit 1 (Palo Verde), by changing a facility technical specification to revise the scope of the required inspection of the tubes in the steam generator tubesheet region. APS filed a motion to terminate the proceeding on November 22, 2002, based upon its November 19 withdrawal of its license amendment request (LAR), and the NRC Staff's November 22 approval of the withdrawal. Argument on this motion was heard during a telephone conference held November 25, 2002, after discussion of various circumstances

preceding and leading up to the LAR withdrawal and filing of the motion to terminate. See Tr. 1-30.

The regulation governing withdrawal of applications, 10 C.F.R. § 2.107(a),¹ draws a distinction between withdrawals filed prior to and after issuance of a notice of hearing, with the Commission retaining authority to permit withdrawals prior to issuance of a notice of hearing but delegating to presiding officers authority to prescribe terms of any withdrawal after issuance of a notice of hearing. The Commission has delegated its own authority to the Staff to address withdrawals of applications prior to issuance of a notice of hearing. *See Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-93-20, 38 NRC 83, 85 n.2 (1993); *GPU Nuclear Corp.* (Oyster Creek Nuclear Generating Station), CLI-99-29, 50 NRC 331, 332 (1999).² The Commission has also indicated that, in such circumstances, presiding officers and licensing boards have a duty to terminate cases in which a withdrawal has rendered a case moot. *Vermont Yankee*, 38 NRC at 85.

In light of this controlling precedent, and given that we have not granted or issued a notice of hearing in this proceeding, we find unpersuasive various arguments made by the Petitioner, *see* Tr. 17-24, that this Board should take upon ourselves the authority to disapprove the LAR withdrawal in this case. We note the Petitioner's assertion of "significant public policy safety issues," *id.* at 24, and of "an issue outstanding... which should go to hearing" involving alleged ambiguity in relevant technical specifications and alleged questions about the operability of the Palo Verde Unit 1 steam generator. *Id.* at 17-18. The triggering factor that provided an opportunity to request a hearing in this case was, however, the LAR, which has now been withdrawn. The Staff has approved this withdrawal under the authority delegated to it by the Commission, and under the precedent cited above this Board has no jurisdiction to overrule the Staff's approval. The result is that there is no LAR to contest at this point.

The appropriate avenue for raising the safety issues argued by the Petitioner, which have not demonstrated to us that *this case* should not be regarded as moot as a result of the approved LAR withdrawal, is through NEPC's petition to the Commission under 10 C.F.R. § 2.206, which is an ongoing matter. *See* Tr. 26-28. In addition, the Staff has indicated that it will be addressing some of the underlying issues related to the original LAR generically. *See id.* at 27-28; NRC

¹ Section 2.107(a) provides as follows:

⁽a) The Commission may permit an applicant to withdraw an application prior to the issuance of a notice of hearing on such terms and conditions as it may prescribe, or may, on receiving a request for withdrawal of an application, deny the application or dismiss it with prejudice. Withdrawal of an application after the issuance of a notice of hearing shall be on such terms as the presiding officer may prescribe.

² During the November 25 conference, the Staff, in response to questioning from the Board, indicated that the Commission delegation to the Staff of authority to address withdrawals prior to issuance of notices of hearing is a standing and current delegation. Tr. 1155.

Staff's Response to Request for Hearing and Petition for Leave To Intervene filed by the National Environmental Protection Center, Nov. 4, 2002, Attachment 1.

For the foregoing reasons and based upon the preceding analysis, it is, this 30th day of December 2002, ORDERED that:

- 1. This proceeding is *terminated*, the approved withdrawal of the LAR that triggered it having rendered the case moot.
- 2. Within fifteen (15) days of this Decision, any party may file a petition for review with the Commission on the grounds specified in 10 C.F.R. § 2.786(b)(4). The filing of a petition for review is mandatory in order for a party to have exhausted its administrative remedies before seeking judicial review. Within ten (10) days after service of a petition for review any party to the proceeding may file an answer supporting or opposing Commission review. Any petition for review and any answers shall conform to the requirements of 10 C.F.R. § 2.786(b)(2)-(3).

THE ATOMIC SAFETY AND LICENSING BOARD³

Ann Marshall Young, Chair ADMINISTRATIVE JUDGE

Dr. Richard F. Cole ADMINISTRATIVE JUDGE

Thomas D. Murphy ADMINISTRATIVE JUDGE

Rockville, Maryland December 30, 2002

³Copies of this Order were sent this date by Internet e-mail or facsimile transmission, if available, to all participants or counsel for participants.

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 - to establish injury in fact, it is not necessary to proffer radiation impacts that amount to a regulatory violation; LBP-02-23, 56 NRC 428 (2002)
- Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 419 (2001)
 - need to demonstrate nexus between licensing proceeding and risk of injury; LBP-02-23, 56 NRC 434 (2002)
- Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 419-20 (2001)
 - transportation route-related standing established on the basis of environmental report discussion of transportation impacts; LBP-02-23, 56 NRC 434 (2002)
- Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 420 (2001)
 - dose to a person traveling alongside a truck shipment of mixed oxide fuel; LBP-02-23, 56 NRC 434 (2002)
- Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 444-47 (2001), petition for interlocutory review granted, CLI-02-4, 55 NRC 158 (2002) admissibility of terrorism-related contentions; LBP-02-23, 56 NRC 464 (2002)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-20, 54 NRC 211, 212-13 (2001)
 - scope of a license renewal proceeding is limited to a review of plant structures, systems, and components that will require an aging management review for the extended period of operation; CLI-02-26, 56 NRC 364 (2002)
 - scope of a proceeding is defined by the Commission in its referral order and relevant regulatory provisions; CLI-02-26, 56 NRC 363 (2002)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 389-90 (2001)
 - considerations applied to pending licensing proceedings to decide whether to postpone them to await ongoing review of the agency's terrorism-related policies; CLI-02-23, 56 NRC 238 (2002)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-01-27, 54 NRC 385, 391 (2001)
 - Commission supervises its adjudicatory docket with a view toward sound case management; CLI-02-23, 56 NRC 239 (2002)
 - license renewal, by its very nature, contemplates a limited inquiry into the safety and environmental consequences of an additional 20-year operating period; CLI-02-26, 56 NRC 364 (2002)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-6, 55 NRC 164 (2002)
 - accepting certified question on terrorism-related contentions; CLI-02-24, 56 NRC 338 (2002); CLI-02-25, 56 NRC 343 (2002); CLI-02-27, 56 NRC 369 n.5 (2002)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 295 n.41 (2002)
 - NEPA process is governed by a rule of reason; CLI-02-25, 56 NRC 347 (2002)

- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 NRC 358 (2002)
 - NRC has no obligation under NEPA to consider intentional malevolent acts; CLI-02-24, 56 NRC 338 (2002); CLI-02-25, 56 NRC 343 (2002); CLI-02-27, 56 NRC 371 (2002)
- Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), LBP-02-4, 55 NRC 49, 112-13 (2002), review pending, CLI-02-6, 55 NRC 164 (2002) bar on terrorism-related contentions that postulate a beyond-design-basis accident; LBP-02-14, 56 NRC
- 33 (2002)

 Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-35 (1999)

 Commission consideration of specificity, factual support, and legal basis in analysis of admitted
 - contention; CLI-02-17, 56 NRC 6 n.10 (2002)
 language of the basis may be examined to determine a contention's scope; CLI-02-28, 56 NRC 383 n.45 (2002)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999) litigability of contentions that proffer additional or stricter requirements than those imposed by regulation; LBP-02-14, 56 NRC 30 (2002)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334, 338 (1999) purpose of contention pleading requirements of 10 C.F.R. 2.714(b)(2); LBP-02-14, 56 NRC 30 (2002)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 335 (1999) rejection of contentions for failure to meet any of the pleading criteria of 10 C.F.R. 2.714(b)(2); LBP-02-14, 56 NRC 30 (2002)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 336 (1999) contentions challenging how specific substantive information is discussed in an application or EIS must identify each such failure; CLI-02-28, 56 NRC 383 (2002)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 337-38 (1999) anticipatory contention based on generalized suspicions is not admissible; CLI-02-28, 56 NRC 387 (2002)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 345-46 (1999) remedy for petitioners dissatisfied with Commission's generic approach lies in rulemaking process, not specific adjudication; CLI-02-23, 56 NRC 237 n.13 (2002)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), LBP-98-33, 48 NRC 381, 385 n.1 (1998), aff d, CLI-99-11, 49 NRC 328 (1999)
 - proximity of a person's workplace is sufficient to establish standing; LBP-02-25, 56 NRC 475 (2002)
- Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), LBP-98-33, 48 NRC 381, 393-94 (1998), aff'd on other grounds, CLI-99-11, 49 NRC 328 (1999) public-interest considerations in determining whether to grant stay motions; LBP-02-15, 56 NRC 50
 - (2002)
- Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983) filing of vague, unparticularized contention, followed by an endeavor to flesh it out through discovery,
- is not permitted; CLI-02-28, 56 NRC 387 (2002) *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790 (1985)
- scope of licensing board jurisdiction over subject matter of a hearing; LBP-02-14, 56 NRC 30 (2002) Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1050 (1983)
- a contention that is superceded by subsequent issuance of licensing-related documents must be disposed of or modified; CLI-02-28, 56 NRC 382 (2002)
 - intervenors are required to examine available documents and formulate contentions as early as possible; CLI-02-28, 56 NRC 382 n.42 (2002)
- Duke Power Co. (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623, 625 (1973) responsibility of parties to advise adjudicator of new information that is relevant and material to matters being adjudicated; LBP-02-16, 56 NRC 94 (2002)

- Duke Power Co. (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623, 625 n.15 (1973)
 - responsibility of adjudicator to determine relevance and materiality of new information from parties; LBP-02-16, 56 NRC 94 (2002)
- Edelman v. Lynchburg College, 122 S. Ct. 1145, 1151-52 (2002)
 - presumption that Congress knows the state of the law when it enacts legislation; CLI-02-29, 56 NRC 401 (2002)
- Edwardsen v. U.S. Department of the Interior, 268 F.3d 781, 785 (9th Cir. 2001) worst-case scenarios excluded from NEPA analysis; CLI-02-25, 56 NRC 349 (2002)
- Elephant Butte Irrigation District v. U.S. Department of the Interior, 269 F.3d 1158, 1164 (10th Cir. 2001) in statutory interpretation, the law disfavors implied repeals; CLI-02-29, 56 NRC 401 (2002)
- Exxon Nuclear Co. (Nuclear Fuel Recovery and Recycling Center), LBP-77-59, 6 NRC 518, 519-20 (1977) assertion of injury because spent fuel would travel on railway tracks very near property is insufficient to establish standing; LBP-02-23, 56 NRC 434 (2002)
- Exxon Nuclear Co. (Nuclear Fuel Recovery and Recycling Center), LBP-77-59, 6 NRC 518, 520 (1977) denial of standing because alleged injuries are too speculative and lack a causal relationship between the injury claimed and the proceeding; LBP-02-23, 56 NRC 434 (2002)
- FDA v. Brown & Williamson Tobacco Corp., 120 S. Ct. 1291, 1300-01 (2000) in statutory construction, words and phrases should be considered in context; DD-00-6, 56 NRC 63 nn.16&17 (2002)
- Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329-30 (1989)
- standard for appropriate application of proximity presumption; LBP-02-14, 56 NRC 23-24 (2002)
- Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Unit 1), LBP-88-10A, 27 NRC 452, 454-55 (1988), aff'd, ALAB-893, 27 NRC 627 (1988)
 - standing of individual living within 10 miles of facility conceded by parties; LBP-02-23, 56 NRC 428 (2002)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), 4 AEC 9, 12 (Commission 1967), aff'd sub nom. Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968)
 - NRC review of security regulations and programs as part of its duty to protect public health and safety and the common defense and security; CLI-02-25, 56 NRC 343 n.5 (2002)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), 4 AEC 9, 13-14 (Commission 1967), aff'd sub nom. Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968)
 - consideration of enemy attack or sabotage in the hearing process rejected as speculative and too security-sensitive; CLI-02-25, 56 NRC 355 (2002)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000)
 - scope of a proceeding is defined by the Commission in its referral order and relevant regulatory provisions; CLI-02-26, 56 NRC 363 (2002)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 6-13 (2001)
 - license renewal focuses on aging issues, not on everyday operating issues; CLI-02-26, 56 NRC 364 (2002)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 11 (2001)
 - circumstances appropriate for plant-specific assessment of severity of environmental assessment for license renewal; CLI-02-17, 56 NRC 4 (2002)
- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146 (2001), aff'd on other grounds, CLI-01-17, 54 NRC 3 (2001)
 - standing to intervene on basis of geographical proximity; LBP-02-14, 56 NRC 23 (2002); *LBP-02-23, 56 NRC 427 (2002)

- Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 148, aff'd, CLI-01-17, 54 NRC 3 (2001)
 - application of proximity presumption for standing depends on whether there is an obvious potential for offsite consequences; LBP-02-23, 56 NRC 427 (2002)
- Fort Gratiot Sanitary Landfill, Inc. v. Michigan Department of Natural Resources, 504 U.S. 353, 359 (1992)

 Constitution's Commerce Clause operates to preclude states from unduly burdening, and discriminating against, interstate commerce; LBP-02-20, 56 NRC 178 n.4 (2002)
- Friends of the River v. Federal Energy Regulatory Comission, 720 F.2d 93, 106-08 (D.C. Cir. 1983) even if terrorism were a matter cognizable under NEPA, it would elevate form over substance to insist that the agency supplement its comprehensive review with a duplicative or formalistic NEPA study; CLI-02-25, 56 NRC 357 (2002)
- FTC v. Ken Roberts Co., 276 F.3d 583, 592-93 (D.C. Cir. 2001)
 - in statutory interpretation, the law disfavors implied repeals; CLI-02-29, 56 NRC 401 (2002)
- General Public Utilities Nuclear Corp. (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 158-59 (1996)
- proximity of a person's workplace is sufficient to establish standing; LBP-02-25, 56 NRC 475 (2002)
- General Public Utilities Nuclear Corp. (Three Mile Island Nuclear Station, Units 1 and 2; Oyster Creek Nuclear Generating Station), CLI-85-4, 21 NRC 561, 563-64 (1985)
 - rule requiring worst-case analyses caused agencies to devote substantial effort to limitless analyses; CLI-02-25, 56 NRC 354 (2002)
- Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995)
 - authorization by individual member who has standing as basis for organizational standing; LBP-02-14, 56 NRC 23 (2002)
- injury-in-fact standard for standing to intervene in NRC proceedings; LBP-02-14, 56 NRC 23 (2002) Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC
 - appropriate focus of proximity presumption; LBP-02-14, 56 NRC 24 (2002)
- Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 116-17 (1995)
 - determination of zone of harm of the proposed actions; LBP-02-14, 56 NRC 24, 25, 26 (2002) frequency of contact with a zone of harm that is sufficient to establish standing to intervene; LBP-02-14, 56 NRC 26 (2002)
- Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 287, aff d, CLI-95-12, 42 NRC 111 (1995)
 - proximity of a person's workplace is sufficient to establish standing; LBP-02-25, 56 NRC 475 (2002)
- Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 42 (1993) an intervenor may not freely change an admitted contention's focus at will as litigation progresses; CLI-02-28, 56 NRC 386 n.65 (2002)
- Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), LBP-93-21, 38 NRC 143, 145 (1993) consideration of motions to reconsider that raise new arguments if they will not cause unwarranted delay in the proceedings; LBP-02-25, 56 NRC 475 (2002)
- GPU Nuclear Corp. (Oyster Creek Nuclear Generating Station), CLI-99-29, 50 NRC 331, 332 (1999)
 Commission delegation of authority to Staff to address withdrawals of applications prior to issuance of notice of hearing; LBP-02-26, 56 NRC 480 (2002)
- Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, 226 (1974) frequency of contact with a zone of harm that is sufficient to establish standing to intervene; LBP-02-14, 56 NRC 26 (2002)
- Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760 (1977) pleading requirements for contentions that are sponsored by interested governmental entities; LBP-02-23, 56 NRC 455 (2002)

- Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760, 768 (1977) participation of interested governmental entities without submitting contentions; LBP-02-23, 56 NRC 454 (2002)
 - procedural requirements applicable to interested governmental entities; LBP-02-23, 56 NRC 455, 456 (2002)
- Hall v. Norton, 266 F.3d 969 (9th Cir. 2001)
 - sufficiency of similar but altogether new alleged harm, associated with a new licensing action, to establish standing; CLI-02-21, 56 NRC 166 (2002)
- Holmes v. SIPC, 503 U.S. 258, 268 (1992)
 - notion of proximate cause reflects ideas of what justice demands, or of what is administratively possible and convenient; CLI-02-25, 56 NRC 349 n.33 (2002)
- Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), ALAB-731, 17 NRC 1073, 1074-75 (1983)
 - even if erroneous, a licensing board's grant of summary disposition on intervenor's sole contention did not affect proceeding in pervasive and unusual manner because intervenor was still participant in proceeding in connection with another intervenor's contention; LBP-02-25, 56 NRC 473 (2002)
- Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), LBP-79-27, 10 NRC 563, 574-75 (1979)
 - public policy considerations can outweigh the jurisprudential policy reasons for applying the doctrine of collateral estoppel; LBP-02-20, 56 NRC 182 (2002)
- Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), LBP-83-26, 17 NRC 945, 947 (1983)
 - discovery permitted for section 2.715(c) petitioners relative to admitted contentions; LBP-02-25, 56 NRC 473 n.3 (2002)
- Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261, 271 (1998)
 - organizational standing is achieved by demonstrating harm to the organization's interests or individual members; LBP-02-23, 56 NRC 426 (2002)
- Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 40 (2001) Commission supervision of its adjudicatory docket is with a view toward sound case management; CLI-02-23, 56 NRC 239 (2002)
- Illinois v. General Electric Co., 683 F.2d 206, 214-15 (7th Cir. 1982), cert. denied, 461 U.S. 913 (1983) federal preemption of state law prohibiting storage and transportation of spent nuclear fuel to a privately owned, away-from-reactor facility, CLI-02-29, 56 NRC 396 (2002)
- Illinois v. Kerr-McGee Chemical Corp., 677 F.2d 571, 581 (7th Cir.), cert. denied, 459 U.S. 1049 (1982)
 Commission authority to regulate radiation hazards is limited to materials and activities covered by the Atomic Energy Act; DD-00-6, 56 NRC 74 (2002)
- International Uranium (USA) Corp., CLI-00-1, 51 NRC 9, 14 (2000)
 - proper designation of ore processing residuals; DD-00-6, 56 NRC 63 n.14 (2002)
- International Uranium (USA) Corp. (Receipt of Additional Material from Tonawanda, New York), LBP-99-8, 49 NRC 131, 134 (1999)
 - in license amendment cases, petitioners must allege a distinct new harm or threat apart from the activities already licensed; CLI-02-21, 56 NRC 166 (2002)
- Iraola & CIA v. Kimberly-Clark Corp., 2000 U.S. App. LEXIS 27989, at * 6 (11th Cir. Nov. 9, 2000) source of ambiguity in statutes; DD-00-6, 56 NRC 64 n.18 (2002)
 - use of legislative history to interpret a statute when the plain language of the statute is obscured by ambiguity; DD-00-6, 56 NRC 64 n.19 (2002)
- J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred International, Inc., 122 S. Ct. 593, 604-05 (2001) in statutory interpretation, the law disfavors implied repeals; CLI-02-29, 56 NRC 401 (2002)
- J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred International, Inc., 122 S. Ct. 593, 605 (2001) positive repugnancy test for incompatibility in laws; CLI-02-29, 56 NRC 405 (2002)
- Jersey Central Power & Light Co. v. Lacey Township, 772 F.2d 1103, 1111 (3d Cir. 1985)

 NRC authority to regulate shipment and storage of radioactive materials; CLI-02-29, 56 NRC 396 (2002)

- Jones v. United States, 526 U.S. 227, 238 (1999)
 - views of a subsequent Congress form a hazardous basis for inferring the statutory intent of an earlier one; CLI-02-29, 56 NRC 410 (2002)
- Kansas Gas and Electric Co. (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441, 463 (1999) rule requiring worst-case analyses caused agencies to devote substantial effort to limitless analyses; CLI-02-25, 56 NRC 354 (2002)
- Kelley v. Selin, 42 F.3d 1501 (6th Cir. 1995), cert. denied, 515 U.S. 1159 (1995)
 NRC authority to regulate shipment and storage of radioactive materials; CLI-02-29, 56 NRC 396 (2002)
- Kerr-McGee Chemical Corp. v. NRC, 903 F.2d 1 (D.C. Cir. 1990)
 - definition of "ore" in context of residual radioactive material bearing source material; LBP-02-19, 56 NRC 120 n.20 (2002)
- Lexecon Inc. v. Milberg Weiss Bershad Hynes & Lerach, 523 U.S. 26, 36 (1998) in statutory construction, a statute is to be considered in all its parts; DD-00-6, 56 NRC 63 n.15 (2002)
- Limerick Ecology Action v. NRC, 869 F.2d 719, 739 (3d Cir. 1989) remote and speculative impacts excluded from NEPA analysis; CLI-02-25, 56 NRC 349 (2002)
- Limerick Ecology Action v. NRC, 869 F.2d 719, 743 (3d Cir. 1989)
 - deference given by NRC to CEQ regulations that it has not expressly adopted; CLI-02-25, 56 NRC 348 n.22 (2002)
- Limerick Ecology Action v. NRC, 869 F.2d 719, 743-44 (3d Cir. 1989)
 - NRC has no duty to perform a probabilistic risk assessment on sabotage in an environmental impact statement; CLI-02-25, 56 NRC 346 (2002)
- Limerick Ecology Action v. NRC, 869 F.2d 719, 744 (3d Cir. 1989)
 - in licensing a nuclear power reactor, NRC can decline to consider the effects of terrorism in an EIS if intervenors do not show any way to predict or analyze the risk meaningfully; CLI-02-25, 56 NRC 349, 351 (2002)
- Limerick Ecology Action v. NRC, 869 F.2d 719, 745 (3d Cir. 1989)
 - NEPA's rule of reasonableness requires only a discussion of reasonably foreseeable impacts; CLI-02-25, 56 NRC 348 (2002)
- Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 851 (1973) applicability of rationale for excluding acts of war in safety analysis applies equally to NEPA analysis; CLI-02-25, 56 NRC 345 (2002)
 - bar on terrorism-related contentions that postulate a beyond-design-basis accident; LBP-02-14, 56 NRC 33 (2002); *LBP-02-23, 56 NRC 448 (2002)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 395 (1987) litigability of contentions that proffer additional or stricter requirements than those imposed by regulation; LBP-02-14, 56 NRC 30 (2002)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-91-2, 33 NRC 61, 72 n.2 (1991) deference given by NRC to CEQ regulations that it has not expressly adopted; CLI-02-25, 56 NRC 348 n.22 (2002)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-83-30, 17 NRC 1132, 1139-40 (1983)
- procedural requirements applicable to interested governmental entities; LBP-02-23, 56 NRC 455 (2002) Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-97-2, 45 NRC 3, 4 (1997)
- new arguments are not appropriate in motions to reconsider absent a showing that the new material addresses a ruling that could not have been reasonably anticipated; LBP-02-25, 56 NRC 475 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-97-15, 46 NRC 294, 302 (1997) financial relationships between parties that will own, operate, and lease proposed independent spent fuel storage installation; LBP-02-23, 56 NRC 444 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 88 (1998) admissibility of NEPA contention when the only possible relief is further analysis; CLI-02-17, 56 NRC 10 n.29 (2002)

- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998) adjudicatory record and the Board decision become, in effect, part of the FEIS; CLI-02-25, 56 NRC 356 n 66 (2002)
 - NRC Staff bears ultimate burden of demonstrating that environmental issues have been adequately considered; CLI-02-28, 56 NRC 385 (2002)
 - scope of Staff and board consideration of socioeconomic costs and benefits under NEPA; CLI-02-20, 56 NRC 154-55 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 100-02 (1998) meaning of Executive Order 12898 for NRC; CLI-02-20, 56 NRC 153 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 100-110 (1998) appropriate focus of NEPA environmental justice inquiry; CLI-02-20, 56 NRC 150 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 102 (1998) NEPA's core interest; CLI-02-20, 56 NRC 153 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 102-03 (1998) NEPA does not call for examination of every conceivable aspect of federally licensed projects; CLI-02-25, 56 NRC 349 (2002)
 - purpose of construing NEPA narrowly to include only issues of environmental harm; CLI-02-20, 56 NRC 155 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 103 (1998) lack of NRC authority to consider corruption issues under NEPA; CLI-02-20, 56 NRC 155 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 104-06 (1998) litigable issues limited to the elements of a contention as admitted; CLI-02-20, 56 NRC 150 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 105 (1998) purpose of NRC practice requiring adjudicatory boards to adhere to terms of admitted contentions; CLI-02-20, 56 NRC 157 (2002); CLI-02-22, 56 NRC 227 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 106 (1998) lack of NRC authority to consider race discrimination under NEPA; CLI-02-20, 56 NRC 155 (2002) scope of NRC's application of environmental justice; CLI-02-20, 56 NRC 156 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 106-10 (1998) essence of an environmental justice claim under NEPA; CLI-02-20, 56 NRC 153 (2002)
- Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 107 (1998) legitimacy of inquiry that splits pertinent environmental justice population into competing subgroups; CLI-02-20, 56 NRC 157 n.50 (2002)
- Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 55-56 (1985)
 - litigability of adequacy of NRC Staff review; LBP-02-14, 56 NRC 37 (2002)
- $Lujan\ v.\ Defenders\ of\ Wildlife,\ 504\ U.S.\ 555\ (1992)$
 - injury-in-fact test for standing to intervene in NRC proceedings; LBP-02-14, 56 NRC 23 (2002)
- Maine Yankee Atomic Power Co. (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1006-07 (1973)
 - interpretation of "adequate protection to the health and safety of the public" and "reasonable assurance" standards; LBP-02-14, 56 NRC 35-36 (2002)
- Maine Yankee Atomic Power Co. v. Bonsey, 107 F. Supp. 2d 47, 52-55 (D. Me. 2000) asserted application of state siting and environmental regulations to ISFSI may exceed state's authority; LBP-02-15, 56 NRC 49 n.6 (2002)
- Maine Yankee Atomic Power Co. v. Bonsey, 107 F. Supp. 2d 47, 53 (D. Me. 2000) state siting permit requirement preempted by AEA; CLI-02-29, 56 NRC 396 (2002)
- Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-82-6, 15 NRC 407 (1982) litigability of mental anguish as recognizable harm on which standing can be based; LBP-02-14, 56 NRC 27 (2002)
- Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-83-25, 18 NRC 327, 332 (1983) judicial concepts of standing applied in NRC proceedings; LBP-02-23, 56 NRC 426 (2002)
- Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 760, 772-75 (1983)
 - NEPA excludes impacts where the link between the agency action and the claimed impact is too

- attenuated to find the proposed federal action to be the proximate cause of that impact; CLI-02-25, 56 NRC 349 (2002)
- Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 774 (1983)
 litigability of issues under NEPA requires that a close relationship exist between the change in the physical environment and effect at issue; CLI-02-20, 56 NRC 159 (2002)
- Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 776 (1983)

 NEPA analysis confined to manageable inquiries; CLI-02-25, 56 NRC 349 n.33 (2002)

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 NRC 155 (2002)
- Morton v. Mancari, 417 U.S. 535, 549-50 (1974)
 - in statutory interpretation, the law disfavors implied repeals; CLI-02-29, 56 NRC 401 (2002)
- Morton v. Mancari, 417 U.S. 535, 551 (1974)
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 - when two statutes are capable of co-existence, each is regarded as effective; CLI-02-29, 56 NRC 401 (2002)
- Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827, 837 (D.C. Cir. 1972)
 NEPA's rule of reason requires only a discussion of reasonably foreseeable impacts; CLI-02-25, 56
 NRC 348, 354 (2002)
- Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Units 1 and 2), CLI-99-30, 50 NRC 333, 344 (1999)
 - benefits of participation by interested governmental entities in NRC proceedings; LBP-02-23, 56 NRC 457 (2002)
- No GWEN Alliance of Lane County v. Aldridge, 855 F.2d 380, 1385-86 (9th Cir. 1988)
 - NEPA excludes impacts where the link between the agency action and the claimed impact is too attenuated to find the proposed federal action to be the proximate cause of that impact; CLI-02-25, 56 NRC 349 (2002)
 - speculation that a foreign nation might target military radio towers in a nuclear war does not trigger a NEPA duty to study the effects of such an attack; CLI-02-25, 56 NRC 350 (2002)
- Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), CLI-01-3, 53 NRC 22, 27 (2001) unsupported factual allegations are inadequate to produce a controversy; CLI-02-22, 56 NRC 223 (2002)
- Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Unit 3), LBP-00-2, 51 NRC 25, 28 (2000) granting standing to individual with part-time residence located 10 miles from facility; LBP-02-23, 56 NRC 428 (2002)
- variation in zone of possible harm with type of proceeding; LBP-02-23, 56 NRC 427 (2002)
- Northern States Power Co. (Pathfinder Atomic Plant), LBP-90-3, 31 NRC 40, 42-43 (1990) petitioner who resided 1 mile from likely transportation route denied standing; LBP-02-23, 56 NRC 434 (2002)
- Northern States Power Co. (Pathfinder Atomic Plant), LBP-90-3, 31 NRC 40, 43 (1990)
 - denial of standing because alleged injuries are too speculative and lack a causal relationship between the injury claimed and the proceeding; LBP-02-23, 56 NRC 434 (2002)
- Oncology Services Corp., CLI-93-13, 37 NRC 419, 421 (1993)
 - standards applied to determine whether to undertake interlocutory review; LBP-02-25, 56 NRC 474 n.4
- Oregon Waste Systems, Inc. v. Department of Environmental Quality of Oregon, 511 U.S. 93, 98 (1994)

 Constitution's Commerce Clause operates to preclude states from unduly burdening, and discriminating against, interstate commerce; LBP-02-20, 56 NRC 178 n.4 (2002)
- Oregon Waste Systems, Inc. v. Department of Environmental Quality of Oregon, 511 U.S. 93, 99 (1994) state laws that discriminate against interstate commerce found invalid under dormant Commerce Clause of U.S. Constitution; LBP-02-20, 56 NRC 178 n.4 (2002)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-600, 12 NRC 3, 8 (1980)
 - interested governmental entity allowed to participate under condition that it take the proceeding as it finds it; LBP-02-15, 56 NRC 46 n.3 (2002)

- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 332 n.2 (2002)
 - restructuring plan relevant to license transfer; LBP-02-15, 56 NRC 46 (2002)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 333-34 (2002)
 - pendency of bankruptcy proceeding as basis for stay request; LBP-02-15, 56 NRC 50 (2002)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 340 (2002)
 - pendency of license transfer proceeding as basis for stay of independent spent fuel storage licensing proceeding; LBP-02-15, 56 NRC 51 (2002)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 343 (2002)
 - terrorist attacks are neither caused by nor result from the proposed license transfers; CLI-02-26, 56 NRC 365 n.23 (2002)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 345 (2002)
 - benefits of participation by interested governmental entities in NRC proceedings; LBP-02-23, 56 NRC 457 (2002)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-81-5, 13 NRC 226, 246-47 (1981)
 - participation of interested governmental entities without submitting contentions; LBP-02-23, 56 NRC
 - 454 (2002)
 pleading requirements for contentions that are sponsored by interested governmental entities;
 LBP-02-23, 56 NRC 455 (2002)
- Pacific Gas and Electric Co. v. State Energy Resources Conservation and Development Commission, 461 U.S. 190 (1983)
 - preemption of state law when compliance with both the state law and the federal law is impossible; DD-00-6, 56 NRC 74 n.42 (2002)
- Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission, 461 U.S. 190, 204 (1983)
 - circumstances appropriate for federal preemption of state laws; LBP-02-20, 56 NRC 178 n.3 (2002)
- Pacific Gas and Electric Co. v. State Energy Resources Conservation and Development Commission, 461 U.S. 190, 207 (1983)
 - scope of NRC jurisdiction to license nuclear materials; CLI-02-29, 56 NRC 396 (2002)
- Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission, 461 U.S. 190, 211-12 (1983)
 - state authority to apply permitting process to independent spent fuel storage installations; LBP-02-20, 56 NRC 177 (2002)
- Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-814, 22 NRC 191, 196 (1985)
 - showing necessary to demonstrate irreparable injury for purpose of grant of a stay; LBP-02-15, 56 NRC 48 (2002)
- Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 705-07 (1985)
 - adjudicatory record and the Board decision become, in effect, part of the FEIS; CLI-02-25, 56 NRC 356 n.66 (2002)
- Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 NRC 1423, 1449 (1982)
 - claims of contamination to the general food supply which may in turn be consumed by the petitioner found to be too remote and general to confer standing; LBP-02-14, 56 NRC 27 (2002)
- Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970)
 - validity of state law that is nondiscriminatory but burdens interstate commerce; LBP-02-20, 56 NRC 178 (2002)

- Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610
- judicial concepts of standing applied in NRC proceedings; LBP-02-23, 56 NRC 426 (2002)
- Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976)
 - judicial concepts of standing applied in NRC proceedings; LBP-02-14, 56 NRC 23 (2002) showing necessary to establish standing when proximity presumption does not apply; LBP-02-14, 56 NRC 26 (2002)
- Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 616 (1976)
 - factors considered in determining whether to grant discretionary standing to intervenors who do not meet judicial standing tests; LBP-02-14, 56 NRC 28 (2002)
- Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974)
 - admissibility of contentions that challenge existing rules or present issues that are or are about to become the subject of rulemaking; LBP-02-23, 56 NRC 438 (2002)
- Presidio Golf Club v. National Park Service, 155 F.3d 1153, 1163 (9th Cir. 1998)
 - NEPA excludes impacts where the link between the agency action and the claimed impact is too attenuated to find the proposed federal action to be the proximate cause of that impact; CLI-02-25, 56 NRC 349 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999)
 - applicability of zone-of-interests test for standing to intervene in NRC proceedings to individual and organizational petitioners; LBP-02-14, 56 NRC 23 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 30 (2000)
 - requisite showing of financial qualifications under Part 72 is considerably more flexible than under Part 50, and Part 72 applicants are not required to meet the detailed requirements of Part 50; LBP-02-23, 56 NRC 446 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 264 (2000)
 - properly supported motion for reconsideration requests correction of erroneous decision resulting from misapprehension or disregard of critical fact or controlling legal principle or decision; LBP-02-25, 56 NRC 475 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459, 470 (2001)
- hearing petitioners may not challenge NRC rules; CLI-02-23, 56 NRC 236 n.10 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-22, 54 NRC 255, 262 (2001)
 - risk constitutes the product of the probability of occurrence and the consequences; CLI-02-25, 56 NRC 350 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 379 (2001)
 - Commission finds that licensing proceedings can move forward in parallel with agency security review and interim compensatory measures; CLI-02-23, 56 NRC 239 (2002)
 - power reactor applicants are not required to provide design features to protect against destructive acts by enemies of the United States; LBP-02-23, 56 NRC 448 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 380 (2001)
 - considerations applied to pending licensing proceedings to decide whether to postpone them to await ongoing review of the agency's terrorism-related policies; CLI-02-23, 56 NRC 238 (2002)

- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 383 (2001)
 - suspension of proceedings is not necessary to ensure that the public will realize the full benefit of ongoing regulatory review of security issues; CLI-02-23, 56 NRC 240 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-26, 54 NRC 376, 384 (2001)
 - public interest considerations in determining whether suspension of a proceeding is warranted; CLI-02-23, 56 NRC 238 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage installation), CLI-02-3, 55 NRC 155 (2002) accepting referred ruling on terrorism-related contentions; CLI-02-24, 56 NRC 338 (2002); CLI-02-26, 56 NRC 362 n.4 (2002); CLI-02-27, 56 NRC 369 n.5 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-11, 55 NRC 260, 263 (2002)
 - incurring litigation expenses is not irreparable injury in the context of a stay decision; LBP-02-15, 56 NRC 49 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, 155-56 (2002)
 - NEPA does not call for examination of every conceivable aspect of federally licensed projects; CLI-02-25, 56 NRC 349 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, 157 (2002)
 - purpose of NRC practice requiring adjudicatory boards to adhere to terms of admitted contentions; CLI-02-22, 56 NRC 227 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002) NEPA imposes no legal duty on NRC to consider intentional malevolent acts on a case-by-case basis; CLI-02-24, 56 NRC 338 (2002); CLI-02-26, 56 NRC 365 (2002); CLI-02-27, 56 NRC 371 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 343-45 (2002)
 - NRC generic analysis of safeguards and security issues includes reevaluation of interim spent fuel storage at reactor sites; CLI-02-27, 56 NRC 371 (2002)
 - NRC role in conjunction with other agencies to meet and minimize the threat of terrorism; CLI-02-24, 56 NRC 339 (2002); CLI-02-26, 56 NRC 363, 366 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 347, 348, 354-57 (2002)
 - NRC analysis of terrorism treated as safeguards information and thus cannot be made available to the public; CLI-02-24, 56 NRC 359 (2002); CLI-02-27, 56 NRC 371 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 347, 348-50 (2002)
 - environmental impact statement is not the appropriate format to address terrorism concerns because they are speculative and not proximately caused by an NRC licensing decision; CLI-02-26, 56 NRC 365 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 347, 350-51, 353-54, 356-57 (2002)
 - as a practical matter, attempts to evaluate a terrorist threat is likely to be of no use in the agency's decisionmaking; CLI-02-24, 56 NRC 338 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002)
 - possibility of a terrorist attack considered to be too remote and speculative to require a study under NEPA; CLI-02-24, 56 NRC 338 (2002); CLI-02-26, 56 NRC 365 (2002); CLI-02-27, 56 NRC 371 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 350-51 (2002)
 - risk of terrorist attacks cannot be meaningfully determined; CLI-02-26, 56 NRC 365 (2002)

- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 351-54
 - NEPA does not require a worst-case analysis; CLI-02-26, 56 NRC 365 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 168, aff'd on other grounds, CLI-98-13, 48 NRC 26 (1998)
- showing necessary to intervene in a representational capacity; LBP-02-23, 56 NRC 426, 431 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 169, aff d on other grounds, CLI-98-13, 48 NRC 26 (1998)
 - granting standing to petitioners residing less than 4 miles from proposed ISFSI; LBP-02-23, 56 NRC 427 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179, aff d on other grounds, CLI-98-13, 48 NRC 26 (1998)
 - admissibility of contentions that challenge existing rules or present issues that are or are about to become the subject of rulemaking; LBP-02-23, 56 NRC 438 (2002)
 - contention admissibility depends on materiality to the grant or denial of the license application in question: LBP-02-23, 56 NRC 440 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180, aff d on other grounds, CLI-98-13, 48 NRC 26 (1998)
 - showing necessary to establish materiality of contentions; LBP-02-23, 56 NRC 440 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 187 (1998)
 - financial relationships between parties that will own, operate, and lease proposed independent spent fuel storage installation; LBP-02-23, 56 NRC 444 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-00-27, 52 NRC 216, 223 (2000)
 - late contention was denied where only assertion was that certain concerns that were not dealt with in the ER have additionally not been dealt with in the DEIS and no showing was made of new or different data or conclusions in the DEIS; CLI-02-28, 56 NRC 386 n.61 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-23, 54 NRC 163, 171 (2001)
 - language of the basis may be examined to determine a contention's scope; CLI-02-28, 56 NRC 383 n.45 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-23, 54 NRC 163, 171-72 (2001)
 - contentions alleging omission of information that is later supplied are moot; CLI-02-28, 56 NRC 383 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-26, 54 NRC 199, 207-09 (2001)
 - contentions alleging omission of information that is later supplied are moot; CLI-02-28, 56 NRC 383 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-26, 54 NRC 199, 208 (2001)
 - contentions must be amended to raise new claims; CLI-02-28, 56 NRC 383 n.44 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-37, 54 NRC 476, 486 (2001)
 - litigability of terrorism-related contentions; CLI-02-27, 56 NRC 369 n.7 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-37, 54 NRC 476, 487 (2001), referral accepted, CLI-02-3, 55 NRC 155 (2002)
 - admissibility of terrorism-related contentions; LBP-02-23, 56 NRC 448 (2002)
- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-02-2, 55 NRC 20, 29-30 (2002)
 - contentions alleging omission of information that is later supplied are moot; CLI-02-28, 56 NRC 383 (2002)

- Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-02-2, 55 NRC 20, 30
 - contentions must be amended to raise new claims; CLI-02-28, 56 NRC 383 n.44 (2002)
- Project Management Corp. (Clinch River Breeder Reactor Plant), ALAB-354, 4 NRC 383, 393 (1976) requirement that interested governmental entities meet procedural requirements that they wish to litigate; LBP-02-23, 56 NRC 456 (2002)
- PSEG Nuclear LLC (Salem Nuclear Generating Station, Units 1 and 2; Hope Creek Generating Station), DD-02-3, 56 NRC 243, 255-57 (2002)
 - responsibility for protection of airspace above nuclear power plants from credible threats; CLI-02-25, 56 NRC 351 (2002)
- PSEG Nuclear LLC (Salem Nuclear Generating Station, Units 1 and 2; Hope Creek Generating Station), DD-02-3, 56 NRC 243, 262 (2002), review declined, unpublished letter of NRC Secretary (Dec. 6, 2002) status of NRC analysis of potential effects of deliberate aircraft crash into a nuclear power plant; CLI-02-25, 56 NRC 356 n.65 (2002)
- Public Citizen v. Federal Aviation Administration, 988 F.2d 186 (D.C. Cir. 1993)
 - agency's statutory mandate to protect security overrides statutory notice-and-comment and publication requirements for rulemakings; CLI-02-25, 56 NRC 356 n.62 (2002)
- Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976)
 - denial of contentions that are outside the scope of the proceeding as defined by the notice of hearing or opportunity for heating; LBP-02-23, 56 NRC 438 (2002)
- scope of licensing board jurisdiction over subject matter of a hearing; LBP-02-14, 56 NRC 30 (2002) Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-493, 8 NRC 253, 270 (1978)
 - burden of persuasion on movant regarding the four-factor stay analysis; LBP-02-15, 56 NRC 48 (2002)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-349, 4 NRC 235, 245-46
- exception to application of res judicata in NRC proceedings; LBP-02-20, 56 NRC 182 n.8 (2002)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-838, 23 NRC 585, 592 (1986)
 - dismissing an interlocutory appeal by interested governmental entity whose sole proffered issue was rejected by licensing board because neither test under section 2.786(g) ordinarily is satisfied where a licensing board simply admits or rejects particular issues for consideration in a case; LBP-02-25, 56 NPC 473 (2002)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-862, 25 NRC 144, 148-49 (1987)
 - deference given by NRC to bona fide declarations regarding an entity's status as part of the state or local governmental system; LBP-02-23, 56 NRC 436 (2002)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-862, 25 NRC 144, 149-51 (1987)
 - participation by governmental body that does not qualify as interested governmental entity; LBP-02-23, 56 NRC 436 (2002)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 96-97 & n.11 (1988), aff d sub nom. Massachusetts v. NRC, 924 F.2d 311 (D.C. Cir.), cert. denied, 502 U.S. 899 (1991)
 - an intervenor may not freely change an admitted contention's focus at will as litigation progresses; CLI-02-28, 56 NRC 386 n.65 (2002)
 - bases set forth in support of contentions are referred to when issues arise over scope of admitted contentions; CLI-02-28, 56 NRC 379 (2002)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-8, 29 NRC 399, 416-17 (1989)
 - litigability of contentions that proffer additional or stricter requirements than those imposed by regulation; LBP-02-14, 56 NRC 30 (2002)

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Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-90-12, 31 NRC 427, 430-31 (1990)

pleading requirements for contentions that are sponsored by interested governmental entities; LBP-02-23, 56 NRC 455 (2002)

Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-397, 5 NRC 1143, 1422-23 (1977)

weight given to intervention petitioner's ability to contribute to decisionmaking process in determining whether to grant discretionary standing; LBP-02-14, 56 NRC 28 (2002)

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positive repugnancy test for incompatibility in laws; CLI-02-29, 56 NRC 405 (2002)

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dual purpose of NEPA; CLI-02-25, 56 NRC 348 (2002)

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requirement under NEPA that severe accident mitigation measures actually be implemented; CLI-02-17, 56 NRC 10 (2002)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 354 (1989)

worst-case scenarios excluded from NEPA analysis; CLI-02-25, 56 NRC 349 (2002)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 354-55 (1989)

NEPA does not call for a worst-case analysis because it creates a distorted picture of a project's impacts and wastes agency resources; CLI-02-25, 56 NRC 352 (2002)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 354-56 (1989)

abandonment by CEQ of regulation requiring worst-case analysis in an environmental impact statement; CLI-02-25, 56 NRC 352 (2002)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 356 (1989)

NEPA does not mandate the particular decisions an agency must reach, only the process the agency must follow while reaching its decisions; CLI-02-28, 56 NRC 388 n.77 (2002)

positive effect of CEQ's new focus on requiring consideration only of reasonably foreseeable impacts in an EIS; CLI-02-25, 56 NRC 352 (2002)

twin functions of NEPA; CLI-02-25, 56 NRC 352, 354 (2002)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 356 n.17 (1989)

original rule requiring worst-case analyses caused agencies to devote substantial effort to limitless analyses; CLI-02-25, 56 NRC 352, 354 (2002)

Rockford League of Women Voters v. NRC, 679 F.2d 1218, 1222 (7th Cir. 1982)

rule requiring worst-case analyses caused agencies to devote substantial effort to limitless analyses; CLI-02-25, 56 NRC 354 (2002)

Rosenberg v. XM Ventures, 274 F.3d 137, 141 (3d Cir. 2001)

in statutory interpretation, meaning should be given to every word that Congress used, thereby avoiding an interpretation that renders an element of the language superfluous; CLI-02-29, 56 NRC 397 n.27 (2002)

Safety Light Corp. (Bloomsburg Site Decontamination and License Renewal Denials), CLI-92-13, 36 NRC 79, 85-86 (1992)

Commission may grant review for "any other consideration" it deems in "the public interest"; CLI-02-22, 56 NRC 222 n.23 (2002)

Safety Light Corp. (Bloomsburg Site Decontamination and License Renewal Denials), CLI-92-13, 36 NRC 79, 87 (1992)

need for Commission approval of special procedures for dealing with security information in Subpart L proceeding; CLI-02-19, 56 NRC 145 n.8 (2002)

- Safety Light Corp. (Bloomsburg Site Decommissioning and License Renewal Denials), LBP-95-9, 41 NRC 412, 446-47 & n.158 (1995)
 - correctness of a prior decision is not a public policy factor upon which the doctrine of collateral estoppel depends; LBP-02-20, 56 NRC 182 (2002)
- San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287, 1300-01 (D.C. Cir. 1984), vacated on other grounds, 760 F.2d 1320 (D.C. Cir. 1985)
 - NEPA's rule of reason requires only a discussion of reasonably foreseeable impacts; CLI-02-25, 56 NRC 348 (2002)
 - NRC's exclusion from EIS of consequences of Class 9 accidents upheld in light of agency's finding that there was an extremely low probability of occurrence; CLI-02-25, 56 NRC 349 (2002)
- Santa Clara Pueblo v. Martinez, 436 U.S. 49 (1978)
 - board jurisdiction over internal tribal disputes, lack of; CLI-02-20, 56 NRC 160 (2002)
- Santa Clara Pueblo v. Martinez, 436 U.S. 49, 58 (1978)
 - wholly intratribal disputes must be resolved within the tribe; CLI-02-20, 56 NRC 159 (2002)
- Santa Clara Pueblo v. Martinez, 436 U.S. 49, 59 (1978)
 - subjecting wholly intratribal dispute to a nontribal forum would infringe on the Indians' right to govern themselves; CLI-02-20, 56 NRC 159 n.57 (2002)
- Save Our Heritage, Inc. v. FAA, 269 F.3d 49, 56 (1st Cir. 2001) sufficiency of similar but altogether new alleged harm, associated with a new licensing action, to establish standing; CLI-02-21, 56 NRC 166 (2002)
- SEC v. Chenery Corp., 318 U.S. 190 (1943)
 - court deference to NRC interpretation of Atomic Energy Act and Uranium Mill Tailings Radiation Control Act; LBP-02-19, 56 NRC 120 n.19 (2002)
- Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 n.22 (1994) application of proximity presumption for standing depends on whether there is an obvious potential for offsite consequences; LBP-02-23, 56 NRC 427 (2002)
 - determination of how proximate a petitioner must live to, or have frequent contacts with, a source of radioactivity, basis for; LBP-02-14, 56 NRC 24 (2002)
- Siegel v. AEC, 400 F.2d 778, 782 (D.C. Cir. 1968)
 - responsibility of military to provide defense against military attacks; CLI-02-27, 56 NRC 369 n.7 (2002)
- Sierra Club v. Marsh, 769 F.2d 868, 878 (1st Cir. 1985)
 - distinction between "reasonably foreseeable" and "highly speculative" impacts; CLI-02-25, 56 NRC 353 (2002)
- Sierra Club v. Marsh, 976 F.2d 763, 767 (1st Cir. 1992)
 - definition of "reasonably foreseeable" impacts; CLI-02-25, 56 NRC 353 (2002)
 - distinction between "reasonably foreseeable" and "highly speculative" impacts; CLI-02-25, 56 NRC 353 (2002)
- NEPA requires only a discussion of reasonably foreseeable impacts; CLI-02-25, 56 NRC 348 (2002) Silkwood v. Kerr-McGee Corp., 464 U.S. 238 (1984)
 - preemption of state law when compliance with both the state law and the federal law is impossible; DD-00-6, 56 NRC 74 n.42 (2002)
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