NUCLEAR REGULATORY COMMISSION ISSUANCES

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PREFACE

This is the forty-ninth volume of issuances (1 – 497) of the Nuclear Regulatory Commission and its Atomic Safety and Licensing Boards, Administrative Law Judges, and Office Directors. It covers the period from January 1, 1999, to June 30, 1999.

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 first established Licensing Boards in 1962 and the Panel in 1967.

Beginning in 1969, the Atomic Energy Commission 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 are drawn the Appeal Boards assigned to each licensing proceeding. The functions performed by both Appeal Boards and Licensing Boards were transferred to the Nuclear Regulatory Commission by the Energy Reorganization Act of 1974. Appeal Boards represent the final level in the administrative adjudicatory process to which parties may appeal. Parties, however, are permitted to seek discretionary Commission review of certain board rulings. The Commission also may 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. In the future, the Commission itself will review 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:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 40-8968-ML**

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101,
Albuquerque, NM 87120) **January 29, 1999**

Exercising its *sua sponte* supervisory authority over adjudications, the Commission reviews and vacates a scheduling order issued by the Presiding Officer on January 21, 1999, and reaffirmed on January 25, 1999.

RULES OF PRACTICE: *SUA SPONTE* REVIEW (SCHEDULING ORDER)

The Commission is loath to supervise filing schedules in matters being handled by licensing boards and presiding officers, but will do so when appropriate.

RULES OF PRACTICE: SCHEDULING

The Commission discourages extensions of deadlines absent extreme circumstances, for fear that an accumulation of seemingly benign deadline extensions will in the end substantially delay the outcome of the case. *See Statement of Policy on Conduct of Adjudicatory Proceedings,* CLI-98-12, 48 NRC 18, 21 (1998).

MEMORANDUM AND ORDER

In this Subpart L proceeding, several Intervenors challenge Hydro Resources, Inc.'s, license to conduct an *in situ* leach mining project in McKinley County, New Mexico. The proceeding is complicated. It already has been the subject of several Commission decisions, including one issued last October that rejected a petition for review challenging a scheduling order issued by the Presiding Officer. CLI-98-22, 48 NRC 215 (1998). Today, exercising our inherent *sua sponte* supervisory authority over adjudications,[1] we review another of the Presiding Officer's scheduling orders, this one issued on January 21, 1999, and reaffirmed on January 25. It extends the deadline for Intervenors' final briefs from February 1 until March 5. We vacate that scheduling order and require Intervenors to file their briefs by February 16.

We are loath, of course, to supervise filing schedules in matters being handled by licensing boards and presiding officers, but we will do so when appropriate. *See Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-19, 48 NRC 132, 134 (1998). In this longstanding case, we repeatedly have advised the parties and the Presiding Officer of our interest in resolving as many issues as possible as soon as possible. Indeed, our commitment to expedition and efficiency is what persuaded us *not* to second guess the Presiding Officer's decision last September to bifurcate his consideration of the case between issues of immediate concern and those of more remote concern:

> The Presiding Officer's decision to concentrate on deciding the most time-critical issues at the outset should conserve resources and expedite decisions, and thus is consistent with our guidance calling on presiding officers ''to establish schedules for promptly deciding the issues before them, with due regard for the complexity of contested issues and the interests of the parties.'' *Statement of Policy on Conduct of Adjudicatory Proceedings,* 48 NRC at 20. Our most recent decision in this very proceeding stressed our interest in fair, but speedy, decisionmaking. *See* CLI-98-16, 48 NRC 119, 120 (1998).

CLI-98-22, 48 NRC at 217.

In the current order, the Presiding Officer inexplicably granted Intervenors a *5-week* extension of briefing time, nearly 3 weeks *more* than Intervenors themselves had requested. (Intervenors had asked for a February 16 deadline; the Presiding Officer established a March 5 deadline.) When the Licensee, Hydro Resources, filed a motion to reconsider and vigorously opposed the extension of time, the Presiding Officer issued a one-page order refusing to reconsider and commenting that ''[i]n light of the complexity of the record, a deadline

[1] *See Statement of Policy on Conduct of Adjudicatory Proceedings,* CLI-98-12, 48 NRC 18, 20 (1998).

for Intervenors' Final Brief prior to March 5, 1999, would not contribute to an efficient determination of this case.'' *See* Order dated Jan. 25, 1999.

We do not question the complexity of this proceeding. It has generated innumerable issues and hundreds of pages of briefs and affidavits. The Presiding Officer and the parties face a formidable task in bringing coherence to the many factual and legal questions posed by the proceeding. That said, however, we expect the parties and the Presiding Officer to continue to move expeditiously toward a resolution. It does not advance that goal to stretch out briefing deadlines well beyond what even the hard-pressed parties themselves need or request, as the Presiding Officer appears to have done here. In fact, the policy statement on adjudicatory proceedings that we issued last summer explicitly discourages extensions of deadlines absent extreme circumstances, for fear that an accumulation of seemingly benign deadline extensions will in the end substantially delay the outcome of the case. *See* CLI-98-12, 48 NRC at 21. Accordingly, we vacate the Presiding Officer orders of January 21 and January 25 setting a March 5 filing deadline for Intervenors' next round of briefs, and establish the deadline for February 16.[2] In fairness, we also suggest that the Presiding Officer look favorably on a 2-week extension of the deadline for responsive briefs by Hydro Resources and the NRC Staff should those parties so request.

We have two final points on case management. First, our understanding from the Presiding Officer's original decision to divide the case into segments, and to allow staggered briefing of issues, was that he would issue a series of partial decisions as he resolved the set of issues presented by each briefing phase. That continues to be our expectation. A series of partial decisions, rather than one grand decision at the proceeding's end, would accommodate efficient appellate review by the Commission, if it is sought. *See* 10 C.F.R. § 2.1253.

Second, the Presiding Officer thus far has resolved various threshold controversies before him with admirable dispatch, frequently within a few days of the parties' submissions. We anticipate that he will continue to do so, although we fully recognize the complexity of many of the merits controversies awaiting decision. *See, e.g.,* Presiding Officer Order dated Jan. 26, 1999 (''Motions to reply or to request oral argument should be made promptly,'' because ''[t]he Presiding Officer is proceeding to prepare analyses and draft decisions'' and must ''allocate time efficiently''). Our expectation is that the Presiding Officer will complete his series of merits decisions on all matters related to the Church

[2] February 16 is the deadline requested by Intervenors in their January 19 motion for an extension of time. In view of the Presiding Officer's January 21 decision to establish a March 5 deadline, we cannot now deny Intervenors' extension request outright, and thereby leave intact the original February 1 deadline. At this point, Intervenors undoubtedly are in no position to file adequate pleadings by the original deadline. We caution all parties in this case, however, to pay heed to the guidance in our policy statement that ordinarily only ''unavoidable and extreme circumstances'' provide sufficient cause to extend filing deadlines. *See* CLI-98-12, 48 NRC at 21.

Rock Section 8 property — the first area where Hydro Resources intends to engage in mining — no later than June 15. If he cannot do so, we ask that he issue an order stating the reasons why the June 15 date is impracticable and establishing an alternate final decision date. *See generally* CLI-98-12, 48 NRC at 21 (Commission ''strongly encourages presiding officers to issue decisions within 60 days after the parties file the last pleadings permitted by the board's schedule for the proceeding'').

IT IS SO ORDERED.

For the Commission[3]

ANNETTE VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 29th day of January 1999.

[3] Commissioners Dicus and Merrifield were not available for the affirmation of this Memorandum and Order. Had they been present, they would have affirmed the Memorandum and Order.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of **Docket No. 50-213**

CONNECTICUT YANKEE ATOMIC POWER COMPANY
(Haddam Neck Plant) **January 12, 1999**

By a petition dated September 11, 1998, submitted by Rosemary Bassilakis on behalf of the Citizens Awareness Network (Petitioners), Petitioners requested that (1) the U.S. Nuclear Regulatory Commission (NRC) immediately revoke or suspend the Connecticut Yankee Atomic Power Company's (CYAPCO's) operating license for the Haddam Neck Plant (HNP), (2) an informal public hearing on the petition be held in the vicinity of the site, and (3) the NRC consider requiring CYAPCO to conduct decommissioning activities under 10 C.F.R. Part 72. Petitioners alleged that (1) CYAPCO demonstrated incompetence in creating and maintaining a safe work environment and an effective, well-trained staff; (2) CYAPCO was not conducting its decommissioning activities in accordance with its post-shutdown decommissioning activities report (PSDAR) and, therefore, posed an undue risk to public health; (3) the problems encountered at the plant during the summer of 1998 might not have occurred if the requirements under Part 72 had been applied; and (4) the spent fuel stored on site in the spent fuel pool (SFP) was the primary risk to public health and safety.

The Director of the Office of Nuclear Reactor Regulation issued a Director's Decision on January 12, 1999, concluding that the petition contained no information of which the NRC was not already aware and denying Petitioners' requests for revocation or suspension of the operating license and an informal public hearing. The Licensee's actions have been documented in NRC inspection reports and appropriate enforcement actions have been taken or are being evaluated. The Director granted Petitioners' request to consider applying the requirements of Part 72 to the Connecticut Yankee plant. The NRC's consid-

eration of the applicability of Part 72 was presented in the Director's Decision, which found that Part 72 did not apply to the decommissioning activities under way at the plant. The requirements of 10 C.F.R. Part 50 apply to spent fuel storage and decommissioning at Connecticut Yankee and provide adequate protection of public health and safety.

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

I. INTRODUCTION

On September 11, 1998, Ms. Rosemary Bassilakis submitted a petition pursuant to Title 10 of the *Code of Federal Regulations,* section 2.206 (10 C.F.R. § 2.206), on behalf of the Citizens Awareness Network requesting (1) that the U.S. Nuclear Regulatory Commission (NRC) immediately revoke or suspend the Connecticut Yankee Atomic Power Company's (CYAPCO's) operating license for the Haddam Neck Plant (HNP), (2) an informal public hearing on the petition be held in the vicinity of the site, and (3) that the NRC consider requiring CYAPCO to conduct decommissioning activities under 10 C.F.R. Part 72.

In support of their requests, the Petitioners state that (1) CYAPCO demonstrates incompetence in creating and maintaining a safe work environment and an effective, well-trained staff; (2) CYAPCO is not conducting its decommissioning activities in accordance with its post-shutdown decommissioning activities report (PSDAR) and, therefore, poses an undue risk to public health; (3) the problems encountered at the plant during the summer of 1998 might not have occurred if the requirements under Part 72 had been applied; and (4) the spent fuel stored on site in the spent fuel pool (SFP) is the primary risk to public health and safety.

II. BACKGROUND

CYAPCO submitted written certifications of permanent cessation of operations of HNP and permanent removal of fuel from the HNP reactor vessel on December 5, 1996. Upon the docketing of these documents, in accordance with 10 C.F.R. § 50.82(a)(2), CYAPCO was no longer authorized to operate the reactor or to place fuel into the reactor vessel. CYAPCO submitted its PSDAR on August 22, 1997, which, among other items, described its schedule and commitments for decommissioning HNP. The Licensee chose the DECON option for the plant.

The Licensee plans to keep its spent fuel stored in the SFP until such time as the Department of Energy takes possession of it. Systems supporting the

SFP are being modified to operate independently of the rest of the site so that decommissioning activities will have no impact on the SFP.

On March 4, 1997, the NRC issued a confirmatory action letter to document the Licensee's commitments to improve its radiological controls program. Subsequently, on May 5, 1998, the NRC determined that CYAPCO had met its commitments to make those improvements.

The Petitioners state that since May 5, 1998, a series of incidents that occurred at HNP raises questions regarding the ability of CYAPCO to protect worker and public health and safety and the environment. The incidents noted by the Petitioners and a brief statement of NRC's enforcement actions taken to date are listed below:

1. On June 20, 1998, 800 gallons of radioactive liquid, containing approximately 2200 microcuries total activity (excluding tritium and noble gases), were inadvertently released into the Connecticut River from the HNP waste test tank (WTT). The Licensee did not report the release for 2 days.

This event is discussed in Inspection Report 50-213/98-03, which was issued on August 21, 1998. The release was within regulatory limits. However, the event resulted in a Severity Level IV violation because of the Licensee's failure to declare an Unusual Event for an unplanned liquid discharge in which the total activity exceeds 1000 microcuries (excluding tritium and noble gases). The event also contributed to a Severity Level IV violation for inadequate configuration control in that a valve required to be closed was open.

2. On July 7, 1998, 350 gallons of demineralized water were inadvertently spilled, spraying workers in the spent fuel building.

This event is discussed in Inspection Report 50-213/98-03, which was issued on August 21, 1998. The workers involved were neither contaminated nor injured. However, the event contributed to a Severity Level IV violation for inadequate configuration control in that valves red-tagged shut and verified as closed were found open.

3. On July 27, 1998, approximately 1000 gallons of reactor coolant system (RCS) decontamination solution were spilled inside the plant.

This event is mentioned in Inspection Report 50-213/98-03, which was issued on August 21, 1998, as an example of inadequate configuration control in that a valve required to be full open was found less than full open, which contributed to pressure transients and vibrations that resulted in the spill. The partially closed valve contributed to a Severity Level IV violation for inadequate configuration control.

The event is discussed in detail in Inspection Report 50-213/98-04, which was issued on October 29, 1998. There was no release of radioactive water to the environment. However, the report found that the Licensee did not perform walkdown inspections or visual leak checks in the plant's pipe trenches during leak testing of the systems in preparation for the RCS decontamination. In

addition, the report found that the Licensee failed to adequately address potential transient conditions in the letdown system equipment. The NRC identified these deficiencies as apparent violations in that corrective actions to address weaknesses in configuration control were inadequate. The need for enforcement action related to this event is being evaluated by the NRC.

4. On August 11, 1998, the SFP demineralizer retention element and filter failed, allowing contaminated resin beads to enter plant piping.

This event is discussed in Inspection Report 50-213/98-04, which was issued on October 29, 1998. The failures were caused by a combination of increased flow and corrosion due to operating conditions created by the RCS decontamination procedure. The contaminated resin beads increased radiation levels in the pipe trench and containment, areas not readily accessible to workers. The NRC identified this event as an apparent violation in that the Licensee's technical evaluations and procedural controls failed to ensure that contaminated resin remained inside the demineralizer tank.

The final disposition of the apparent violations identified in items 3 and 4 above will be taken in accordance with the NRC's enforcement policy. The NRC is currently evaluating the events and the need for enforcement action. The results of the evaluation will be made available to the public.

The series of events during the summer of 1998 prompted the NRC to conduct a number of conference calls and management meetings with the Licensee. Conference calls were made to Licensee management on July 8 and 15, 1998. During the calls, the Licensee described the results of its preliminary root-cause analyses of the events of June 20 and July 7, 1998, and presented the corrective actions it took to ensure that no similar events would occur during the RCS decontamination procedure. The Licensee documented the commitments it made during those calls in a letter dated July 16, 1998. As a result of the July 27 event, a management meeting was held at the plant site on August 3, 1998, to discuss additional corrective actions taken by the Licensee. These commitments were documented by the Licensee in a letter dated August 12, 1998. The Regional Administrator for NRC Region I met with Licensee management on August 20, 1998, to discuss concerns raised by the Licensee's performance. On September 3-4, 1998, Region I and Headquarters personnel conducted interviews at the site with thirty Licensee managers, supervisors, and workers to obtain information on organizational and management issues associated with the events during the RCS decontamination.

The Petitioners state that CYAPCO never finished its root-cause analysis for the incident on June 20, 1998, before commencing similar work. By letter dated July 16, 1998, CYAPCO committed to completing a root-cause analysis by July 27, 1998, but did not commit to limit or prohibit similar work until the analysis was completed. Inspection Report 50-213/98-03 stated that the Licensee's preliminary analysis of the June 20 event found that the root cause was accidental

bumping of a cross-connect valve, which allowed partial discharge of the ''A'' WTT while the ''B'' WTT was being discharged. Both tanks had been properly prepared for release; however, they were intended to be released one at a time. The Licensee suspended WTT discharges until a number of corrective actions, such as installation of a locking device on the cross-connect valve, were taken to prevent recurrence of a similar event. After the preliminary corrective actions were taken, the Licensee removed the prohibition on WTT discharges. The final root-cause analysis was issued by CYAPCO as an internal document and was approved by the HNP Unit Director on July 29, 1998. However, there was no requirement to place the analysis on the docket.

The Petitioners also state that, as of the time of their September 11, 1998 petition, they had not received a response to their letter dated July 7, 1998, to NRC Chairman Jackson, in which they requested that NRC delay the start of the RCS chemical decontamination. The NRC Staff issued a response to the Petitioners in a letter dated August 31, 1998. The response was docketed on September 8, 1998, under accession number 9809080105.

III. DISCUSSION OF PETITIONERS' REQUESTS

The Petitioners' first request is to revoke or suspend the HNP operating license. The Petitioners' basis for the request is that CYAPCO continues to demonstrate incompetence in creating and maintaining a safe work environment and an effective, well-trained staff.

The Petitioners present the series of events outlined in Section II, ''Background,'' as evidence to support their basis.

The NRC considers the series of events that occurred during the summer of 1998 to have been challenges to the Licensee's ability to maintain a safe work environment. As noted in Section II, NRC has taken enforcement action in response to the events. The enforcement actions are based on the Commission's regulations, which place certain requirements on a licensee. To place a licensee under the authority of the regulations, the Commission issues a license with appropriate conditions. As a result, the facility operating license becomes a mechanism through which the Commission holds a licensee to its regulatory responsibilities. Revoking or suspending the HNP license would not relieve the Licensee of its responsibilities but could impede the NRC's ability to enforce regulatory requirements.

The events previously outlined did not result in a radiological release to the environment above regulatory limits, did not cause radiation exposure above regulatory limits, and did not cause injury to workers or the public. In addition, the permanently shutdown and defueled condition of the plant substantially reduces the risk to public health and safety. In light of these facts, the

NRC believes that revoking or suspending the HNP license is not necessary or appropriate. The NRC's enforcement policy provides objective criteria for responding to licensee actions and is adequate to require CYAPCO to take appropriate corrective actions in response to the events outlined. Therefore, the request to revoke or suspend the HNP operating license is denied.

The Petitioners' second request is to hold an informal public hearing in the vicinity of the site. The Petitioners' basis for the request is that CYAPCO is not conducting its decommissioning activities in accordance with its PSDAR and, therefore, poses an undue risk to the public.

With regard to the Petitioners' request for an informal public hearing, the Staff reviewed the PSDAR and found that CYAPCO has followed the sequence of activities included in the PSDAR as Figure 1, ''CY Decommissioning Schedule.'' Additionally, in its PSDAR, CYAPCO committed to controlling radiation exposure to offsite individuals to levels less than both the Environmental Protection Agency's Protective Action Guidelines and NRC's regulations. Both radiation exposures to individuals and effluents to the environment due to decommissioning activities have been within regulatory limits. On the basis of these facts, the Staff finds that there is no undue risk to public health and safety. The Staff also determined that the Petitioners neither provided new information that raised the potential for a significant safety issue (SSI) nor presented a new SSI or new information on a previously evaluated SSI. Therefore, the criteria for an informal public hearing on a petition submitted under the provisions of 10 C.F.R. § 2.206, contained in Part III(c) of Management Directive 8.11, are not satisfied and the Petitioners' request for an informal public hearing has been denied.

The Petitioners' third request is for the NRC Staff to consider applying the requirements of Part 72, ''Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste,'' to decommissioning activities at HNP. The Petitioners present two bases for this request. First, the problems encountered during the decommissioning activities in the summer of 1998 might not have occurred if Part 72 had been applied at HNP. Second, the spent fuel stored in the SFP is the primary risk to public health and safety.

The problems encountered by the Licensee during the summer of 1998 have been examined by the NRC. As illustrated in Section II, the problems were not due to a lack of regulatory requirements. Therefore, the Staff believes that the requirements of Part 72, which address activities associated with an independent spent fuel storage installation (ISFSI), would not have been applicable to the decommissioning activities under way at HNP during the summer of 1998.

The second basis for the request concerns the safe storage of spent fuel at HNP. The Staff's consideration of applying the requirements of Part 72 at HNP is presented in Section IV, below. Therefore, the third request is granted.

IV. APPLICATION OF 10 C.F.R. PART 72 AT HNP

The Staff reviewed the requirements of Part 72 and compared them with the requirements of 10 C.F.R. Part 50, ''Domestic Licensing of Production and Utilization Facilities,'' which currently apply to HNP. The scope of Part 72, as stated in 10 C.F.R. § 72.2, is limited to the receipt, transfer, packaging, and possession of power reactor spent fuel and other radioactive materials associated with spent fuel storage. As a result, decommissioning activities under Part 72 would apply only to the portion of the Part 50 site licensed as an ISFSI. However, the Licensee has not applied for a Part 72 license to establish the SFP as an ISFSI. Furthermore, the Licensee does not intend to decommission the SFP until after the Department of Energy takes possession of the spent fuel. In light of these facts, Part 72 does not apply to HNP and, even if CYAPCO held a Part 72 license, the decommissioning provisions of that part would not apply to the decommissioning activities currently under way at the facility. Because the HNP facility consists of contaminated and activated structures, systems, and components associated with a permanently defueled reactor as well as the SFP, the limited scope of Part 72 is not sufficient to cover the full range of decommissioning activities at a power reactor facility such as HNP.

In contrast, the scope of Part 50 applies to HNP and covers all the structures, systems, and components of a power reactor facility, including the SFP. Part 50 contains specific provisions for decommissioning power reactors in section 50.82, as well as other applicable sections. It follows that the decommissioning of HNP must proceed under Part 50, at least until such time as the decommissioning activities at HNP fall completely within the scope of Part 72 and the Licensee applies for and obtains a Part 72 license. As of now, the activities at HNP extend beyond the scope of Part 72, and Part 50 would continue to apply even if a licensed ISFSI were established at the site.

After considering the applicability of the regulations noted above, the Staff concludes that Part 72 does not apply to HNP at this time because the Licensee does not possess an ISFSI licensed under Part 72 and many of the decommissioning activities to be performed cannot be accommodated within the scope of Part 72.

V. DECISION

For the reasons stated herein, the petition is denied in part and granted in part. The requests to revoke or suspend the HNP operating license and to hold an informal public hearing in the vicinity of the site are denied. The request to consider application of the requirements of 10 C.F.R. Part 72 to HNP is granted. The Staff's evaluation of the applicability of Part 72 at HNP is

presented in Section IV; however, the Staff finds that Part 72 does not apply to the decommissioning activities now under way at the plant.

The Decision and the documents cited in the Decision are available for public inspection in the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW, Washington, D.C., and at the Local Public Document Room for HNP at the Russell Library, 123 Broad Street, Middletown, Connecticut.

In accordance with 10 C.F.R. § 2.206(c), a copy of this Decision will be filed with the Secretary of the Commission for the Commission's review. As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after issuance, 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 12th day of January 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Carl J. Paperiello, Director

In the Matter of **Docket No. 40-3453**
(License No. SUA-917)

ATLAS CORPORATION
(370 Seventeenth Street, Suite 3050,
Denver, CO 80202) **January 20, 1999**

On August 2, 1988, Atlas Corporation (Atlas) submitted an application for a license amendment to revise its site reclamation plan for uranium mill tailings at its site near Moab, Utah. On April 4, 1994, notice of Receipt of Application and notice of opportunity for hearing on the application were published in the *Federal Register.* 59 Fed. Reg. 16,665 (1994). On July 13, 1998, the State filed its petition stating that if the petition is found to be untimely that it be treated as a 10 C.F.R. 2.206 petition in accordance with 10 C.F.R. § 2.1205(*l*)(2). The petition was filed by Denise Chancellor, Assistant Attorney General, on behalf of the State. By Memorandum and Order dated August 13, 1998, the ASLB determined that the petition was inexcusably late and would be treated as a petition under section 2.206 in accordance with 10 C.F.R. 2.1205(*l*)(2). On October 22, 1998, notice of receipt of the petition was published in the *Federal Register.* 63 Fed. Reg. 56,667 (1998).

In its petition the State asserted that if Atlas were to proceed with its reclamation plan as approved by the Nuclear Regulatory Commission, it would be in violation of 10 C.F.R. Part 40, Appendix A. The petition was referred to the Director of the Office of Nuclear Material Safety and Safeguards. As provided by section 2.206 and discussed in the *Federal Register* notice, appropriate action was taken on this petition. The Staff reviewed the specific assertions made by the State and concluded that the petition should be denied. The basis for the Staff's conclusions are detailed in this Director's Decision.

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

I. INTRODUCTION

On August 2, 1988, Atlas Corporation (Atlas or Licensee) submitted an application for a license amendment to revise its site reclamation plan for uranium mill tailings at its site in Moab, Utah. On April 4, 1994, notice of Receipt of Application and notice of Opportunity for Hearing on the application were published in the *Federal Register*. 59 Fed. Reg. 16,665 (1994). On July 13, 1998, the State of Utah (State or Utah) filed the State's Request for Hearing and Petition for Leave to Intervene (petition). By Memorandum and Order dated August 13, 1998, the Atomic Safety and Licensing Board determined that the petition was inexcusably late and would be treated as a petition under 10 C.F.R. § 2.206, in accordance with 10 C.F.R. § 2.1205(*l*)(2).

In its petition, the State asserts that if Atlas were to proceed with its reclamation plan as approved by the U.S. Nuclear Regulatory Commission (NRC), it would not meet the requirements of 10 C.F.R. Part 40, Appendix A. More specifically, the State asserts that the rock apron design (armoring the side slope and toe of the tailings pile) does not provide reasonable assurance against engineering failure at the Atlas Uranium Tailings Site, and thus does not satisfy Appendix A. As bases for its assertion it is stated that the unpredictability of flood events, erosion, and vegetation growth along the river banks makes computation of the probability of river migration extremely difficult and that, therefore, conservatism should be built into how the tailings pile is armored. The State, furthermore, references an April 2, 1998 memorandum from its Department of Environmental Quality, Division of Radiation Control (DRC), wherein it is stated that: (1) there are two different conceptual designs for the Atlas tailings pile apron — one presented by Atlas and accepted by NRC, and the second presented by the U.S. Army Corps of Engineers (ACE); (2) assumptions and inputs to the conceptual models result in the size, gradation, and volume of rock necessary to protect the tailings pile from erosion by the Colorado River; (3) the DRC staff has concluded that the ACE approach is more protective of the tailings pile side slopes; and (4) the DRC staff disagrees with the NRC conclusion that the Atlas design provides the necessary protection of the tailings pile in the event of river migration. A letter acknowledging receipt of the petition and its status for consideration pursuant to section 2.206 was sent to the State on September 26, 1998.

II. BACKGROUND

In 1997, the NRC Staff issued NUREG-1532, ''Final Technical Evaluation Report for the Proposed Revised Reclamation Plan for the Atlas Corporation Moab Mill'' (TER), presenting its evaluation of technical issues related to Atlas Corporation's proposed reclamation plan for the uranium mill tailings pile. Among the issues considered was the ability of the proposed erosion protection design to prevent erosion from various flooding events over long periods of time. One of the features of the erosion protection design evaluated in the TER was the ability of the self-launching rock apron to prevent erosion of the tailings if the Colorado River were to migrate to the pile.

In the TER, the Staff concluded that the rock apron provided adequate protection for the reclaimed tailings pile, in the unlikely event that the Colorado River migrated several hundred feet and reached the toe of the pile. The adequacy of the apron design was questioned by the State and the Grand County Council (GCC). In addition, the GCC funded a report developed by the ACE that indicated that the rock apron had not been designed properly. The GCC also solicited the opinions of vegetation and geomorphic experts and provided those opinions to the State. These reports, questions, and comments were transmitted to the NRC Staff by the State by letters dated November 10, 1997, and January 9, 1998.

Because the 1997 TER only summarized the NRC Staff review of the rock apron, a supplemental report (SR) was developed to address in detail the questions and concerns raised by the DRC. The SR addressed specific aspects of the Staff review and provided a detailed technical basis for the Staff's conclusions on the adequacy of the rock apron. The SR also addressed issues raised by the GCC and the ACE. Specific topics that were addressed included: (1) potential for erosion and migration of the Colorado River; (2) riprap size needed for the side slopes to protect from overland or overtopping flows; (3) riprap size needed to protect the side slope from velocities in the river; (4) rock volume needed; (5) river velocities; (6) vegetation/tamarisk growth and the effects on river flow velocities; (7) ACE design procedures, including specific discussions of computations and analytical methods; (8) potential for cohesive soils to affect the performance of the rock apron; (9) reasonable assurance requirements, NRC Staff review procedures, and other regulatory requirements; (10) post-licensing monitoring and maintenance; and (11) other conservatisms in the design. Each of these factors was discussed in a degree of detail that was not provided in the TER. In addition, specific contentions and questions raised by the GCC, ACE, and/or DRC were addressed.

III. DISCUSSION

As discussed in the TER, the Staff considers that an adequate design has been provided for the rock apron to be placed at the toe of the Atlas tailings pile side slope near the Colorado River. This conclusion is based on many factors, including evaluation of design details that are very site-specific.

For the Atlas site, the design of the rock apron is affected by three principal factors: (1) the velocity or shear stress that is used in various analytical methods to determine the rock size necessary to resist erosive forces; (2) the analytical methods that are used to determine rock size, layer thickness, and rock volume; and (3) the estimated scour depth that is used to determine volume of rock needed in the apron. For each of these factors, there may be several acceptable methods for estimating and calculating the parameters. For example, a designer could assume various combinations of values for velocity, shear stress, radius of curvature, or other inputs to a design method and arrive at different estimates of rock size and rock volume. Also, each parameter requires input data, based to a great extent on the assumed configuration of the river and other assumptions related to expected river velocities.

It should also be emphasized that there are many procedures for determining the rock sizes necessary to resist erosion. Over the years, various government agencies and individuals have developed procedures that best suit their needs, given the degree of conservatism necessary, the risk to public health and safety, and other factors, such as cost. Use of any specific one of those procedures, including the ACE procedure, for determining rock size, is not necessarily ''correct'' or required. It should be recognized that different methods are used by different organizations and agencies. ACE's special need to protect embankments, where erosion or failure could immediately jeopardize many lives behind those structures, is not necessarily the needs of designers to provide reasonable assurance of tailings stability, or to meet the requirements of 10 C.F.R. Part 40, Appendix A.

The Staff considers it important to use input parameter values that can be reasonably expected to affect the rock apron (if the river were to migrate), not values that are based on very conservative assumptions. For many situations where streambank erosion is imminent, a bank configuration can be easily determined, based on observed conditions. However, in this case, the main river channel is hundreds of feet away and not threatening the tailings pile, and the rock apron must be designed for some future unknown configuration of the river. Therefore, the Staff assumed that the river would retain its principal characteristics, even though it had migrated. Recognizing that exact characteristics would be difficult to predict, the Staff assumed that the river would retain the same width, depth, radius of curvature, and velocity. It is also possible that the river would migrate and develop characteristics such as

increased width, decreased depth, decreased velocity, and increased radius of curvature; such assumptions would result in lesser rock apron designs being protective of the pile.

In making assumptions such as those discussed above, the Staff is required by 10 C.F.R. Part 40, Appendix A, to have reasonable assurance of tailings stability. The Staff is not required to make a determination with absolute certainty. Therefore, given the fact that river migration to the pile in itself is unlikely, the Staff is required only to assume a reasonable configuration, not necessarily an extreme configuration that maximizes every design parameter or input to a riprap design method. Recognizing that a considerable amount of judgment is necessary to predict design conditions at this site , such as river configuration or river velocity, it is not the position of the NRC Staff to assume the most critical value for every input parameter that is used in every calculation. Reasonable assurance only requires that input parameters be selected within a reasonably conservative range of values of the parameter.

It should be emphasized that the Staff does not consider the ACE analyses or design method to be incorrect or inappropriate. Rather, the Staff considered that the input parameters selected for use in the analyses were overly conservative for this specific application and do not represent conditions that can reasonably be expected to occur if the river were to migrate to the rock apron. In the SR, the Staff provided many reasons to support its conclusion that the Licensee's design was adequate and provided extensive discussion to show that the ACE report overestimates the riprap sizes and quantity of rock required for the rock apron to provide reasonable assurance of tailings stability. In summary, based on independent analyses of the Licensee's proposal and the information provided the DRC and ACE, the Staff concludes that Atlas proposes to use a volume and size of rock that is larger than the volume and size computed by the Staff.

Each of the assertions made by the State in the petition have been addressed previously by the Staff. The Staff provided its initial findings in its TER and provided further details of the Staff analysis in its supplemental report that was transmitted to the State by letter dated February 26, 1998. The Staff has provided detailed technical bases for its conclusion that the design of the rock apron meets the requirements of 10 C.F.R. Part 40, Appendix A.

The State was offered an opportunity to provide additional information to further address its assertions. The State indicated that no additional information would be provided for Staff review or consideration.

Each of the State's assertions is addressed in the following discussions. Each assertion is stated and a brief summary of the Staff's analysis is provided. If additional details are needed, they may be found in the Staff's SR.

Assertion 1. The unpredictability of flood events, erosion, and vegetation growth along the river banks makes computation of the probability of river migration very difficult, and therefore conservatism should be built into the tailings pile design.

The Staff agrees that the computation of the probability of river migration is difficult. However, the Staff has concluded that the potential for migration of the Colorado River to the tailings pile is very low and has provided several bases supporting that conclusion. The Staff has also concluded that adequate conservatism has been provided by the apron design to demonstrate that Part 40 requirements have been met and has provided detailed analyses and technical bases supporting that conclusion.

First, the Staff examined aerial photographs of the Colorado River in this area, taken over a period of about 47 years. Those photographs verified that very little erosion has occurred over that period of time.

Second, the Staff reviewed a report prepared by expert geomorphologists that addressed the river migration issue. In that report, it was concluded that river migration was unlikely and that lateral accretion, rather than erosion, has occurred in some areas near the pile. Those expert geomorphologists also examined aerial photographs and concluded that: ''Review of available historical photographs indicates that the right bank . . . has remained *remarkably fixed* spatially.'' (Emphasis added.)

Third, the Staff has visited the site several times and has determined that only some minor erosion of the river banks has occurred and that this can be attributed to sloughing, rather than erosion from river velocities. In fact, it was this minor erosion that led the Staff to question the original conclusion of the Licensee that the river would not erode.

Fourth, despite the information available on channel stability, a conservative approach was taken by Atlas in its reclamation plan by assuming that the Colorado River would migrate to the tailings pile and by designing the erosion protection apron to account for that event. This approach eliminated the need for Atlas to conduct further detailed analyses of river migration and provided a design that exceeds the reasonable assurance requirements specified in Part 40, Appendix A.

Fifth, the Staff examined the effects of increased vegetation growth on the erosion potential of the Colorado River. The Staff performed independent calculations and concluded that the potentially increased density of vegetation and tamarisks in the floodplains of the river will not significantly affect river velocities. Staff computations indicate that the maximum velocity will be only slightly increased in the river channel near the tailings pile. Based on Staff experience with vegetated floodplains and the widespread use of vegetation to stabilize channel banks, it is also likely that increased vegetation density of the

river will *increase* the erosion resistance of the channel banks and floodplain area near the tailings pile.

Assertion 2. There are two different conceptual designs: one presented by Atlas and accepted by the Staff; and the second presented by the ACE.

The Staff has recognized for some time that there are two designs and that the designs are different. In the SR, the Staff addressed the ACE design and provided a detailed analysis of the ACE method and the use of various input parameters to the ACE method. The Staff performed a detailed review of the analyses, provided in the ACE report, that were used to assess the rock requirements for the apron. The Staff evaluated input parameters related to computation of scour depths, river velocities, increases in river velocities at channel bends, and factors of safety. The Staff also examined the technical basis for the development of the ACE procedure, including the supporting laboratory data. The Staff's analysis of the ACE report is also discussed in Assertion 3, below.

Assertion 3. Assumptions and inputs to the conceptual models result in differences in the size, gradation, and volume of rock necessary to protect the tailings pile from erosion by the Colorado River.

The Staff has recognized that differences in input parameters can significantly affect the size and volume of rock required for the rock apron. Extensive discussion of the ACE report and the ACE design method were provided in the SR.

Based on its review of the ACE report, the Staff concluded that the design parameters selected for use in the ACE calculations of rock size were very conservative and did not reflect conditions that are likely to occur at the rock apron if the river migrated to the tailings pile. Velocities, radii of curvature, and scour depths were based on conditions that currently exist upstream, but do not exist in the vicinity of the apron. Velocities that would affect the apron will likely be smaller, and radii of curvature greater, than those that currently exist upstream of the site. In addition, the methods used by ACE to determine design velocities, increases in velocities in bends, and scour depths are conservative and incorporate large factors of safety that may not be necessary to provide reasonable assurance that Appendix A requirements are met. The Staff, however, concluded that if reasonable and likely, values of channel velocity and channel curvature are used in the ACE method, the rock apron design proposed by Atlas is acceptable, even if all the other ACE safety factors are taken into account.

Assertion 4. The DRC staff has concluded that the ACE approach is more protective of the tailings pile side slope.

The Staff agrees that the ACE design is more conservative than the design approved and would protect the pile under more severe conditions if such conditions were to occur. Use of the ACE approach to determine rock size and volume results in larger quantity of larger rock. However, the Staff has concluded that the design proposed by Atlas is acceptable and that more and larger rock is not required to meet the requirements of Appendix A.

In the SR, the Staff provided an extensive discussion of how the reasonable assurance requirements are met by the proposed design. Further discussion was also provided on the use of standard review plans and design procedures that reflect an approach to tailings management that incorporates an appropriate level of safety.

Of considerable importance in the NRC Staff's assessment of Atlas' proposed design of the rock apron is the concept of ''reasonable assurance.'' NRC regulations require (Part 40, Appendix A, Criterion 6) ''a design which provides reasonable assurance of control of radiological hazards to . . . be effective for 1000 years. . . .'' This requirement comes directly from U.S. Environmental Protection Agency (EPA) requirements in 40 C.F.R. Part 192. These standards do not require absolute nor even near certainty.

Several reasons can be offered to justify the appropriateness of a ''reasonable assurance'' requirement, rather than a more conservative requirement. Of primary importance is that exposure to uranium mill tailings do not pose an immediate acute risk to the health and safety of individuals. Rather, the risk posed by tailings is from continual exposure to low levels of radioactivity and is a long-term cumulative risk. If control of tailings was lost (for example, if an earthquake beyond the design basis were to damage the cover and expose tailings), actions could be taken to repair the damage, with little likelihood of endangering individuals.

Additionally, uranium mill tailings disposal sites will be under perpetual government custodial care. If the features providing control of the tailings were damaged or compromised in the future, the government custodian could assess the situation and provide repairs. Although NRC standards require that the design for control of radiological hazards not rely on maintenance, the concept of ''reasonable assurance'' does not preclude contemplation of government custodian actions in unusual or unlikely situations.

Finally, the rock apron does not have to withstand a single, severe event that could occur without warning at any time. This is unlike the situation in designing protection from earthquakes or severe precipitation. For those events, the protective design may not be tested for decades or centuries and then, in a very short time, have to perform with a design event. If the Colorado River

were to migrate toward the tailings pile, it would occur over decades or centuries. There would be ample time to determine whether the assumptions used in the design of the rock apron (e.g., the scour depth, river curvature, river velocity) were correct or appropriate.

In summary, NRC regulations and EPA standards do not require the degree of certainty about the potential future threats to the rock apron that would require an extremely conservative design, but rather ''reasonable assurance'' that the design will protect the tailings pile.

Assertion 5. The DRC disagrees with the NRC conclusion that the Atlas design provides the necessary protection of the tailings pile. DRC asserts that the apron design does not meet the requirements of 10 C.F.R. Part 40, Appendix A.

As discussed in the TER and SR, the Staff performed detailed evaluations of the proposed design. Based on those evaluations, the Staff concludes that: (1) a conservative approach was taken by Atlas in its reclamation plan by assuming that the Colorado River would migrate to the tailings pile and by designing the erosion protection apron to account for that event; (2) the rock size of 11 inches proposed by Atlas for the rock apron is greater than the rock size of about 2.4 inches required to resist velocities produced by the Colorado River on the collapsed rock apron, based on the most conservative calculated channel velocity and considering the effects of channel curvature and increased shear forces on the outside of channel bends; (3) the volume of rock provided for the apron is acceptable; (4) the maximum river velocity that should be used for the design of the rock apron for reasonable assurance is approximately 5.2 feet per second (ft/s), rather than the 6.9 ft/s used by ACE; (5) the potentially increased density of vegetation and tamarisks in the floodplains of the river will not significantly affect river velocities in the channel; (6) the design parameters selected for use in the ACE calculations of rock size are very conservative and are not likely to reflect conditions that will exist at the rock apron, if the river were to migrate to the pile in the future; (7) cohesive soils that could adversely affect the performance of the apron are not significantly present; (8) the requirement of reasonable assurance of site stability for a period of 200-1000 years is met by the proposed apron design; (9) a post-licensing monitoring and maintenance program will be implemented for this by the long-term custodian and will help to ensure that requirements are continuously met and to ensure that any unexpected problems occurring at the site will be promptly detected and mitigated; (10) the current design includes an over-designed volume of 5.3-inch rock on the side slope of the tailings pile that would be available to also launch into any gaps formed in the launched 11-inch rock; (11) the riprap for the side slopes is designed for a precipitation intensity approaching the world

record rainfall intensity; and (12) the riprap layer thickness exceeds the design criteria routinely accepted by the Staff; and (13) the rock sizes that will actually be constructed will likely exceed the sizes proposed by Atlas.

IV. CONCLUSIONS AND RECOMMENDATIONS

The NRC Staff has reviewed the concerns and issues raised in the State's petition and has concluded that the rock apron design for the Atlas reclamation plan complies with 10 C.F.R. Part 40, Appendix A. For the reasons discussed above, no basis exists for taking any action in response to the petition. Accordingly, no action pursuant to section 2.206 is being taken.

FOR THE NUCLEAR
REGULATORY COMMISSION

Carl J. Paperiello, Director
Office of Nuclear Material Safety
and Safeguards

Dated at Rockville, Maryland,
this 20th day of January 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 50-289**

GENERAL PUBLIC UTILITIES NUCLEAR CORPORATION, et al.
(Three Mile Island Nuclear Station, Unit 1) **February 11, 1999**

In this license transfer application involving the Three Mile Island Nuclear Station, Unit 1, the Commission rejects an intervention petition on the ground that it has failed to satisfy the requirements set forth in Subpart M for intervention.

MEMORANDUM AND ORDER

This proceeding involves a license transfer application involving the Three Mile Island Nuclear Station, Unit 1. The plant's operator (General Public Utilities Nuclear Corporation, or ''GPU'') and owners (Metropolitan Edison Company, Jersey Central Power & Light Company and Pennsylvania Electric Company) collectively seek the Commission's permission to transfer GPU's facility operating license to AmerGen Energy Company (AmerGen).

On January 11, 1999, Mr. Camille ''Bud'' George of the Pennsylvania State House of Representatives submitted a letter asking us to ''ensure that a federal hearing is held'' on this application and ''to ensure that Pennsylvanians are not put at risk by this facility.'' On January 22nd, Mr. George's office informed the

Commission's Office of the Secretary (''SECY'') by telephone that Mr. George had intended his letter to be both an intervention petition and a hearing request. SECY responded that Mr. George had not satisfied the regulatory provisions governing requests for intervention and hearing in a Subpart M license transfer proceeding. *See* 63 Fed. Reg. 66,721 (Dec. 3, 1998), *to be codified at* 10 C.F.R. Part 2, Subpart M. Immediately following the phone call, SECY mailed Mr. George's office a copy of Subpart M.

GPU and AmerGen, in their answers opposing Mr. George's intervention, argued that the procedural failures specified above were fatal to his requests. Mr. George filed no reply to those answers but, on February 11th, submitted a second letter which he says ''amend[s], clarif[ies] and [restate[s]'' the content of his first letter.[1] We agree with GPU and AmerGen that Mr. George has failed to satisfy the requirements set forth in Subpart M for intervention. Nothing in Mr. George's most recent correspondence convinces us otherwise. We therefore deny Mr. George's requests and dismiss this proceeding. The NRC Staff, of course, will review the license transfer application to ensure that all regulatory requirements are met and that the public health and safety are protected.[2]

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 11th day of February 1999.

[1] Mr. George's second letter does not purport to be a reply pursuant to 10 C.F.R. § 2.1307(b). However, even construing it as such, the filing would still fail as being untimely and failing to reply (or refer) to GPU's and AmerGen's Answers.

[2] In our December 21st *Federal Register* Notice, we indicated that intervention petitions and hearing requests must be filed by January 11th, but that, as an alternative to requests for hearing and petitions to intervene, persons were also permitted to submit written comments to the Commission by January 20, 1999, regarding the license transfer application. The Commission has received one comment, postmarked January 15th, from H.E. Williams, Jr. We have referred this comment, as well as Mr. George's two letters, to the NRC Staff for its consideration.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 40-8968-ML**

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101,
Albuquerque, NM 87120) **February 11, 1999**

The Commission reviewed a petition from several Intervenors for interlocutory review of a Presiding Officer's Memorandum and Order denying requests to adjust schedules for various motions in the proceeding and to extend a deadline for written submissions. The Commission grants the petition insofar as it seeks an extension of the submission deadline and gives the Intervenors additional time. In all other respects, the petition is denied and the Commission does not alter the balance of the Presiding Officer's order.

RULES OF PRACTICE: TIME LIMITS FOR FILING

The Commission does not ordinarily review interlocutory orders denying extensions of time, but may do so in specific cases as an exercise of its general supervisory jurisdiction over agency adjudications.

RULES OF PRACTICE: TIME LIMITS FOR FILING

The Presiding Officer possesses considerable authority to adjust general deadlines and procedures set out in the Commission's rules.

MEMORANDUM AND ORDER

On February 4, 1999, several Intervenors filed a petition for the Commission's interlocutory review of the Presiding Officer's Memorandum and Order (Procedural Issues) issued earlier on the same day. In particular, the Presiding Officer denied (1) a request to adjust the schedule for motions for leave to reply and/or to request oral presentations, and (2) a request to extend the February 16 filing deadline for the next round of written submissions. Hydro Resources, Inc. (HRI), has responded to the Intervenors' petition and urges the Commission to deny it.

We ordinarily do not review interlocutory orders denying extensions of time, but we do so here as an exercise of our general supervisory jurisdiction over agency adjudications. *See Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-19, 48 NRC 132, 134 (1998). The Presiding Officer's ruling of February 4 is consistent with the Commission's frequently expressed intention that this proceeding move to completion in an expeditious manner. In a recent decision in this case, issued on January 29 (CLI-99-1, 49 NRC 1 (1999)), the Commission — acting *sua sponte* — vacated an earlier scheduling order from the Presiding Officer setting a March 5 briefing deadline and instead required the Intervenors to file their briefs by February 16. Nevertheless, it appears that, in this instance, the deadline set by the Commission's order may have unduly disrupted the expectations of the Intervenors given their reliance on the earlier scheduling order. As such, the Commission is extending the filing deadline for Intervenors' briefs to February 19, 1999.

Our decision today to relax the deadline by no means suggests any dissatisfaction with the Presiding Officer's handling of the matter. In light of the Commission's earlier direction, the Presiding Officer understandably refused to extend the February 16 deadline. We urge the Presiding Officer to continue his effort to move this proceeding forward expeditiously. Finally, as we have noted elsewhere (*see Calvert Cliffs,* 48 NRC at 134), the Presiding Officer possesses considerable authority to adjust general deadlines and procedures set out in our rules and we expect him to continue to exercise that authority if appropriate and consistent with our directives to resolve this case promptly.

For the foregoing reasons, we grant the petition insofar as it seeks an extension to the February 16 filing deadline and give the Intervenors additional time, until February 19, 1999. In all other respects, the petition is denied and the

Commission does not alter the balance of the Presiding Officer's February 4 order.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 11th day of February 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Thomas D. Murphy, Special Assistant

In the Matter of **Docket No. 40-8968-ML**
(ASLBP No. 95-706-01-ML)
(Re: Leach Mining and Milling License)

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101, Albuquerque, NM 87120)

February 3, 1999

Relief was denied concerning liquid waste disposal issues. The Presiding Officer determined that the licensing standard that must be met by Applicant is that there is adequate protection of public health and safety and adequate consideration of environmental issues related to waste disposal, both during operations and cleanup. 10 C.F.R. § 40.32(c) and (d). He concluded that Intervenors had incorrectly relied on 10 C.F.R. § 40.31(h) and on 10 C.F.R. Part 40, Appendix A, which apply to mill tailings facilities ''at sites formerly associated with such milling.''

INJECTION MINING OR *IN SITU* URANIUM SOLUTION MINING

Section 40.31(h) and 10 C.F.R. Part 40, Appendix A, apply to mill tailings facilities ''at sites formerly associated with such milling.'' They do not apply to injection mining for uranium, although Criteria 2 and 5A apply. Criterion 7 does not apply.

INJECTION MINING OR *IN SITU* URANIUM SOLUTION MINING

This Decision includes a detailed description of an injection mining project.

PARTIAL INITIAL DECISION
(Waste Disposal Issues)

This Decision determines the merits of the Written Presentations on Liquid Waste Disposal Issues filed on November 9, 1998, by Eastern Navajo Diné Against Uranium Mining (ENDAUM), the Southwest Research and Information Center (SRIC), Grace Sam, and Marilyn Morris (Intervenors).[1]

I have concluded that Intervenors' request for relief should be denied. Intervenors erroneously rested a substantial portion of their argument on 10 C.F.R. § 40.31(h) and on 10 C.F.R. Part 40, Appendix A, which apply to mill tailings facilities ''at sites formerly associated with such milling.'' Although portions of Appendix A do apply to injection mining, Intervenors are incorrect in their assumption that the appendix is generally applicable to this project.

For reasons that will be discussed below, I have concluded that the licensing standard that must be met by HRI is that there is adequate protection of public health and safety and adequate consideration of environmental issues related to waste disposal, both during operations and cleanup. 10 C.F.R. § 40.32(c) and (d); National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 *et seq.* (NEPA). HRI's waste products are far less hazardous than mill tailings and its precautions for the treatment and disposition of wastes are adequate. Intervenors have not raised any issues on which HRI has not carried its burden of demonstrating adequate protection of public health and safety and adequate consideration of environmental issues.

I. BACKGROUND: DESCRIPTION OF THE HRI PROJECT

HRI has applied for and received a materials license to conduct in situ leach (ISL) mining on Sections 8 and 17 in Church Rock, New Mexico, and on two sites in Crownpoint, New Mexico, ''Unit 1'' and ''Crownpoint.''[2] HRI's

[1] Hydro Resources, Inc. (HRI), filed its ''Response to Intervenors' November 9, 1998 Briefs in Opposition to Application for a Materials License with Respect to Liquid Waste Disposal Issues'' on December 9, 1998 (HRI Response). The Staff of the Nuclear Regulatory Commission (Staff) filed its ''Response to Intervenor Presentations on Liquid Waste Disposal Issues'' on December 16, 1998 (Staff Response).

[2] HRI has been granted a license (SUA-1508, January 5, 1998) (License) to conduct ISL mining. It submitted its initial application on April 13, 1988, and proposed to mine on Section 8 in Church Rock. Hearing

(Continued)

application proposes processing the uranium extracted from each site at its Crownpoint processing facility.[3]

Solution mining produces different types of effluents that could be released to the environment: (1) gaseous emissions and airborne particulates resulting from the injection of groundwater enriched with dissolved oxygen and bicarbonate ions (''lixiviant'') and from the drying of yellowcake, and (2) liquid waste associated with well field processing and aquifer restoration. ''Final Environmental Impact Statement: To Construct and Operate the Crownpoint Uranium Solution Mining Project,'' NUREG-1508 (February 1997) (FEIS) at 2-5, 6, 14 and 16. This Decision deals only with liquid effluents.

Some liquid waste occurs because HRI will inject lixiviant into rock formations in which recoverable quantities of uranium oxide have been identified. The lixiviant will cause the uranium oxide to be dissolved. By operating ''production wells'' near the injection sites, HRI will withdraw somewhat more water from the formation than it has injected into it. This causes a ''negative pressure'' that causes the pregnant (i.e., uranium rich) lixiviant to flow toward the production wells, where it is pumped to the surface. Aboveground, the pregnant lixiviant is subject to three treatments. One removes the uranium oxide through ion exchange (using IX resin). Another ensures that radon gas will be kept under pressure so that the lixiviant may be safely reinjected into the underground formations without being discharged to the atmosphere. Still another treatment removes 99% of the radium from the production bleed, which would be subsequently treated and then disposed of by ''an NRC-approved disposal method.'' FEIS at 2-16.

After the uranium oxide is removed from the pregnant lixiviant through ion exchange, the ion exchange resin is subject to a chemical process, called elution or ''stripping,'' which uses a chloride salt to replace the uranium oxide that was bound to the resin. The solution containing the uranium oxide is then dewatered, filtered, and dried in a vacuum drier to produce uranium oxide concentrate or yellowcake. The moisture from the drying chamber is filtered and condensed, reducing emissions almost to zero. FEIS at 2-9 to 2-12.

The production bleed contains radium, 99% of which is removed from the process wastewater. Because 1% of the radium remains in the production bleed, retention ponds at injection mining sites are necessary. These ponds are designed

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Record Accession Number (ACN) 8805200339, Application for Materials License (April 13, 1988). HRI later amended the application to include processing in Crownpoint and mining at Section 17, Unit 1 and Crownpoint. Consolidated Operations Plan, Rev. 2.0 (''COP Rev. 2.0''), at 2, Hearing Record ACN 9708210179 (August 15, 1997). *See also* Hearing Record ACNs 8805200339 (Application for Materials License, April 13, 1988), 9509080065 (Environmental Assessment of Unit 1, January 6, 1992), 9211399381 (forwarding documents, including Crownpoint project technical report, July 31, 1992), and 9211300077 (Requests NE quarter of Section 17 be included in Churchrock mining project, September 28, 1992).

[3] COP Rev. 2.0 at 2. *See also* Hearing Record ACN 8811040138 (HRI changes location of the proposed Central Processing Facility) (October 12, 1988).

to promote evaporation and to control the byproduct material contained in the production bleed. *See* FEIS, § 2.1.1.5, at 2-12. During any injection mining operations, HRI would be required to inspect the retention ponds, measure the storage space left in the ponds (typically referenced as the ''pond freeboard''), and check for evidence of any pond leaks. *See id.; see also* HRI License Condition 10.5. The retention ponds will have double synthetic liners to prevent any leaks. *See* FEIS § 2.1.1.5, at 2-12; *see also* § 2.3 of HRI's COP, at 29, providing a further description of the liners to be used.

At the end of injection mining (also called ISL mining) operations, the radium-contaminated sludge at the bottom of the retention pond and any other leftover byproduct material, will be transported off site for disposal at a licensed facility. *See* FEIS § 2.1.2.3, at 2-16 to 2-17. Injection mining does not produce any mill tailings. *See* Affidavit of Christopher A. McKenney, attached as Staff Exhibit 10 to ''NRC Staff's Response to Motion for Stay, Request for Prior Hearing, and Request for Temporary Stay'' ¶ 30. Indeed, no permanent onsite byproduct waste disposal is authorized by HRI's license. *See* HRI License Condition 9.6.

HRI claims that this process is low risk. It asserts that there have been 25 years of ISL uranium mining in the United States with ''no significant impacts to human health or the environment.''[4] It asks that the Presiding Officer attach significance to the failure of Intervenors to cite any adverse incidents.

II. APPLICABLE LAW

A. NRC Regulations

The principal regulatory standards governing this application for a license are 10 C.F.R. § 40.32(c) and (d), which mandate protection of the public health and safety. Generally speaking, a license may be granted if, ''The applicant's proposed equipment, facilities and procedures are adequate to protect health and minimize danger to life or property.'' For Intervenors to challenge successfully the HRI license, they must establish that HRI has failed to demonstrate the adequacy of its proposed equipment, facilities, and procedures.

1. Reliance on 10 C.F.R. § 40.31(h) and Part 40, Appendix A

The Intervenors erroneously rely on section 40.31(h), which refers generally to the provisions of Part 40, Appendix A, ''Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the

[4] HRI Response at 2 nn.9 & 10.

Extraction or Concentration of Source Material from Ores Processed Primarily for Their Source Material Content'' (Appendix A). As we shall see, below, these regulatory provisions generally are not relevant to the inadequacy of HRI's license application. *See* SRIC Disposal Brief at 9-12; Morris Disposal Brief at 2-4.

On its face, section 40.31(h) states that it applies ''at sites formerly associated with such [uranium or thorium] milling.'' Intervenors do not present any argument that explains why they believe the section applies to the HRI license even though the HRI site is not ''formerly associated with such milling.'' The language of the section simply does not apply to the HRI site. The legislative history also strongly suggests that section 40.31(h) and Part 40, Appendix A, were designed to address the problems related to mill tailings and not problems related to injection mining. *See* Hydro Resources' Response at 9-16; Staff Response at 5-21. The history of section 40.31(h) demonstrates that it does not apply to injection mining license applicants, and in implementing the general requirements of 10 C.F.R. § 40.32 instead, the Staff properly applies only those Appendix A criteria that apply to injection mining.

Similarly, Intervenors have argued that Part 40, Appendix A is generally applicable to ISL mining. It is not. The principal purpose of Appendix A relates to ''sites formerly associated with such [uranium or thorium] milling.'' Hence, the criteria of Appendix A do not apply wholesale to the HRI license. Specific criteria within Appendix A are applicable to this license only when they explicitly apply to ISL mining.

2. Applicability of Part 40, Appendix A Criteria

Criterion 2 is the only one of the Appendix A criteria that references ISL mining.[5] The Criterion 5A provisions also are applicable to HRI's proposed operations because ISL mining operations generally use surface impoundments, and because such operations produce ''byproduct material.'' *See* 10 C.F.R. § 40.4, ''Byproduct Material'' definition; *see also* Staff's December 1997 SER at 29 (recognizing applicability of Criterion 5A provisions to HRI's proposed operations). The detailed basis for the Appendix A criteria, promulgated in 1980, are set forth in a Generic Environmental Impact Statement (GEIS). 45 Fed. Reg. 65,521, 65,529 col. 1 (Oct. 3, 1980). The GEIS focused on the impacts of

[5] Criterion 2, which the Intervenors do not discuss, states in full as follows:

> To avoid proliferation of small waste disposal sites and thereby reduce perpetual surveillance obligations, byproduct material from in situ extraction operations, such as residues from solution evaporation or contaminated control processes, and wastes from small remote above ground extraction operations must be disposed of at existing large mill tailings disposal sites; unless, considering the nature of the wastes, such as their volume and specific activity, and the costs and environmental impacts of transporting the wastes to a large disposal site, such offsite disposal is demonstrated to be impracticable or the advantages of onsite burial clearly outweigh the benefits of reducing the perpetual surveillance obligations.

conventional uranium milling operations, while giving limited consideration to the impacts of nonconventional uranium recovery processes such as ISL mining. *See* GEIS § 1.2, ''Scope of Statement,'' at 1-1 to 1-2.[6]

Intervenors have focused their attention on Criterion 7. However, Criterion 7A explains that the purpose of the required detection monitoring program is to detect ''leakage of hazardous constituents *from the disposal area.*'' (Emphasis added.) I infer that this requirement applies to mill tailings, which are left in a ''disposal area'' and not to ISL mining. The definition of ''disposal area,'' found in the beginning of Criterion 6, refers to an area of a site put aside for controlled, long-term storage of waste after a project is completed. That criterion is inapplicable here because there will not be any waste byproduct material permanently disposed of on this site.

Staff correctly states, at 19 of the Staff Response:

> In arguing the applicability of Criterion 7A, Ms. Sam and Ms. Morris cite the 1995 ''Staff Technical Position on Effluent Disposal at Licensed Uranium Recovery Facilities'' (Effluent STP). *See* Morris Disposal Brief, at 4 n.1, 10, and 10 n.6. The Effluent STP provides a general guide to the NRC staff in reviewing waste disposal proposals at both uranium mills and ISL facilities. *See* Effluent STP, at 1. As a result, its wording is necessarily broad. Consistent with its status as a general guidance document, the wording of the applicable regulations controls for purposes of legal enforcement. *See id.,* at 2.

In license proceedings, guidance documents provide ''guidance'' but it is the agency's regulations, promulgated after notice and comment, that control. 10 C.F.R. § 2.1239(a).

Intervenors have argued that HRI's license application is deficient because it does not specify in detail the arrangements for surface impoundments. I reject this argument. HRI complied with these regulations when it stated in the COP 2.0 that:

> all CUP surface impoundments will be equipped with two impermeable synthetic membrane liners: an inner 30 mil Hypalon liner, or equivalent, and an outer liner 36 mils thick made of Hypalon, or equivalent (1 mil = 0.001 inch). A space 4 to 5 inches thick between the two liners will contain sand, or some other (granular) porous medium, and a drainage network of open piping, forming an underdrain leak detection system. The (inner) liner will provide secondary containment for any leakage that may occur.

NRC recognized HRI's commitment in this regard in the SER:

> HRI has committed to using a double-lined, impermeable synthetic membrane for its waste retention ponds in accordance with 10 C.F.R. Part 40, Appendix A requirements. The liners

[6] In October 1980, section 40.31(h) and Part 40, Appendix A were promulgated in final form. *See* 45 Fed. Reg. at 65,528 col.2, 65,529 col. At 65,529, the 1980 Statement of Considerations erroneously refers to ''a new paragraph (g)'' being added to 10 C.F.R. § 40.31. The error is corrected at 46 Fed. Reg. 13,497 (Feb. 23, 1981).

> will be separated by 4-5 inches of sand or equivalent medium, and a drainage network of open piping which forms an underdrain leak detection system. The inner liner will provide secondary containment for any leakage that may occur. HRI states that it will conduct daily inspections for leakage, and that fluid found in the leak detection system will be cause for immediate corrective action, including notification of the NRC.

SER at 30. In addition the Staff has imposed License Condition 10.26, requiring NRC acceptance of the adequacy of waste retention ponds prior to lixiviant injection. License SUA-1508 at 8. Intervenors have not persuaded me that these specifications are deficient.

3. Applicability of Part 20

On pages 29-37 of their brief, ENDAUM and SRIC claim that HRI has failed to provide specific information and analyses in the license application required by 10 C.F.R. § 20.2002 for licensing waste disposal by land application, surface discharge, or deep-well injection ''as HRI is already contemplating using these alternative methods in some form.'' ENDAUM and SRIC Phase I Brief at 29-30.[7] As the SER points out, with respect to restoration water, ''[c]urrently, HRI would be limited to using either surface discharge (with appropriate State or Federal permits/licenses), brine concentration, waste retention ponds, or a combination of these three options to dispose of [restoration][8] waste water.'' SER at 26. HRI has not submitted an application to the Commission for deep-well injection, surface water discharge, or land application. Accordingly, it need not satisfy the section 20.2002 requirements at this time.

III. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

A. Analysis

As the Staff argues, the FEIS has not been brought seriously into question by the arguments of the Intervenors. Page 30 of the Staff Response declares:

> The 1997 FEIS contains over 250 pages of analysis, not including appendices. Even if all of the criticisms offered by ENDAUM and SRIC regarding the FEIS (*see* SRIC Disposal Brief, at 38-53) were valid (which, as discussed below, they are not), their arguments would fall far short of establishing that the NRC failed to take the ''hard look'' required by the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 *et seq.* (NEPA).

[7] ENDAUM and SRIC do not take issue with HRI's use of evaporation as they admit that it is authorized by 10 C.F.R. Part 40, Appendix A. *See* ENDAUM and SRIC Phase I Brief at 29 n.14.

[8] Although the SER states ''process'' water here, clearly, the Staff intended to refer to ''restoration'' water. There are no plans for process water to be surface discharged.

Indeed, I have reviewed the FEIS carefully and I am impressed by its attention to technical detail and its thoughtful consideration of environmental risks. Intervenors have failed to demonstrate any significant deficiencies.

I am also convinced by the Staff's arguments, at 30-37, that Intervenors have made a variety of errors in characterizing the FEIS. These errors include:

> Mischaracterizing the FEIS's production bleed estimate, which consistently states that the bleed is 1% or 40 g.p.m. of water which is not returned to the aquifer. *See* FEIS, § 4.3.1, at 4-26. In agreement with the FEIS, COP Figures 3.1-2 fn 3.1-1 both show a 40 g.p.m. production bleed for various options of waste water treatment.
>
> SRIC and ENDAUM, citing page 2-20 of the FEIS, state that 150-250 g.p.m. of water ''would be withdrawn during groundwater sweep'', and that after treatment, ''all those gallons would be re-injected [in]to the aquifer.'' SRIC Disposal Brief, at 46. This misunderstanding may have been derived from FEIS pages 4-58 to 4-60, estimating consumptive water volumes for each of the proposed ISL mining sites singly, and in combination. At page 2-20, the 150 to 250 g.p.m. flow is represented as an average 200 g.p.m. flow in Figure 2.7. Neither the FEIS text on page 2-20, or Figure 2.7, states that restoration would result in reinjection of all withdrawn water. Rather, the text on page 2-20 states that the permeate (clean water produced by the reverse osmosis treatment option) would be reinjected into the aquifer. Figure 2.7 shows restoration flows for various restoration options, and shows that a 200 g.p.m. restoration flow would produce 150 g.p.m. of clean water (permeate), and 50 g.p.m. of waste water.
>
> ENDAUM and SRIC state that the FEIS does not discuss evaporation ponds in terms of soil impact from ground disturbance. *See* SRIC Disposal Brief, at 48. However, impacts to soils from evaporation pond construction are described on pages 4-6 to 4-14 of the FEIS, along with estimates of disturbed acreage for various alternatives.
>
> ENDAUM and SRIC incorrectly state that evaporation ponds are left out of the FEIS discussion on how ground water must be protected from the effects of pond leakage. *Compare* SRIC Disposal Brief, at 48 with FEIS pages 4-25 to 4-26. *See also* HRI License Condition 10.5 (providing additional safeguards).
>
> SRIC and ENDAUM erroneously state that evaporation ponds may overflow. This is a misconception, as HRI License Condition 10.5 requires that enough space be left within each pond container (freeboard requirement) so that if a leak occurs in a pond, there will be enough space in other ponds so that the contents of the leaky pond can be transferred to other ponds to prevent further leakage.
>
> SRIC and ENDAUM incorrectly state that the FEIS only considered impacts for the 80 acres in Section 17 that might be used for land application disposal of liquid waste. However, as was stated on FEIS page 4-11, the NRC Staff assumed that land application at the Church Rock site could occur on any of the four sections but that no more that 640 acres would be affected. *See also* HRI License Condition 11.8, which requires advance approval for land application; FEIS pages 4-7 and 4-10 to 11.

ENDAUM and SRIC are incorrect in their concern about the significance of the omission of manganese, molybdenum, and selenium from HRI's water quality data. These elements have been measured and are either absent or are present only in insignificant amounts. *See* Table 29-1 of HRI's response to RAI 29 (pregnant lixiviant data); *see also* HRI's December 9, 1998 filing, at 51.

Contrary to SRIC and ENDAUM's arguments, the FEIS gave adequate consideration to impacts on water fowl. *See* FEIS § 4.7.3, at 4-91 to 4-92.

Intervenors' also presented overtopping concerns pertaining to rainfall, wind and wave action, and operator error. It is difficult to imagine how maximum rains in McKinley County, New Mexico, could result in overtopping, as the Probable Maximum Precipitation (PMP) is 8.9 inches. In any event, in accordance with License Condition 10.26(d), prior to injecting lixiviant at Churchrock, HRI must receive NRC acceptance that the waste retention ponds are designed to accommodate the Probable Maximum Flood. Further, wind and wave action are covered by License Condition 10.26, which requires HRI to comply with NRC guidance which sets requirements with respect to these factors. Intervenors also have not sustained their concern that operator error may cause overfilling of the ponds. HRI is committed to conduct operations so that pond freeboard is maintained and it has adopted proper Standard Operating Procedures (SOPs), as stated in the COP Rev. 2 § 9.16 and as required by License Condition 9.8. COP Rev. 2 § 9.16, at 153-54; License Condition 9.8.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 3d day of February 1999, ORDERED that:

1. Eastern Navajo Diné Against Uranium Mining, the Southwest Research and Information Center, Grace Sam, and Marilyn Morris are denied relief with respect to their area of concern related to waste disposal issues.

2. This Decision is reviewable under 10 C.F.R. § 2.1253, pursuant to the procedures set forth in 10 C.F.R. §§ 2.786 and 2.763. The petition for review must be filed within 15 days of the service of this Decision.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Thomas S. Moore, Chairman
Thomas D. Murphy
Dr. Peter S. Lam

In the Matter of **Docket No. 30-34318-EA**
(ASLBP No. 99-759-01-EA)

SPECIAL TESTING LABORATORIES, INC.
(Bethel, Connecticut) **February 3, 1999**

ORDER

The NRC Staff and Special Testing Laboratories, Inc. (STL) by its Director, Richard A. Speciale, have filed a joint motion to terminate this proceeding initiated by the Staff's December 23, 1998 immediately effective order suspending STL's material license. The Board's January 8, 1998 Memorandum and Order sets forth the course of the parties' settlement negotiations in this proceeding. It suffices to note that the parties have now agreed upon an immediately effective confirmatory order modifying STL's material license and rescinding the earlier Staff enforcement order.

The issuance of the confirmatory order settles the disputed issues between STL and the Staff. Although at this stage of the proceeding the record is necessarily limited, the terms of the confirmatory order clearly appear to be in the public interest and reasonable in light of the conduct charged in the original enforcement order. Because the parties agreed to the confirmatory order before the Board entered an order establishing a hearing date, however, a motion to terminate the proceeding is the appropriate vehicle to close the proceeding.

Compare 10 C.F.R. § 2.203. Accordingly, the joint motion to terminate the proceeding is granted and the proceeding is terminated.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Thomas S. Moore, Chairman
ADMINISTRATIVE JUDGE

Thomas D. Murphy
ADMINISTRATIVE JUDGE

Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 3, 1999

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) **February 3, 1999**

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 a late-filed intervention petition concerning a revised proposal to construct a rail spur that would be used to transport spent fuel shipping casks to the PFS facility.

RULES OF PRACTICE: INTERVENTION PETITION (PLEADING REQUIREMENTS)

Absent some demonstration that separate consideration is required, a showing regarding the 10 C.F.R. § 2.714(a)(1) criteria would be equally applicable to a late-filed intervention petition and any concurrently filed contentions.

RULES OF PRACTICE: INTERVENTION PETITIONS(S) (GOOD CAUSE FOR LATE FILING)

The first late-filing factor under section 2.714(a)(1) — good cause for filing late — is also the most important in the five-factor balance. *See* LBP-98-7, 47 NRC 142, 173 (1998).

RULES OF PRACTICE: INTERVENTION PETITION(S) (TIMELINESS)

Even though there is no *Federal Register* notice of an amendment application, the fact the amendment was placed in a local public document room (LPDR) created for a facility provides an enhanced opportunity for access to licensing information that should be taken into account in analyzing the timeliness of an intervention petition. It is reasonable to expect that, from time to time, those in the area of the facility who may have an interest in the proceeding, would visit the LPDR to check on its status. At the same time, nonparty status to a proceeding is a pertinent factor in assessing the frequency of such visits. A nonparty would not be expected to visit the LPDR as often as a party given the need to travel to the LPDR in order to see the files. With this in mind, one LPDR trip a month by a nonparty to monitor a proceeding seems reasonable.

RULES OF PRACTICE: NONTIMELY INTERVENTION PETITION(S) (BALANCING OF 10 C.F.R. § 2.714(a)(1) CRITERIA)

Even with a finding that the first, and most important, section 2.714(a)(1) late-filing factor — good cause for late-filing — weighs in a petitioner's favor, the other four factors must be considered to arrive at an assessment of the overall balance that accrues.

RULES OF PRACTICE: NONTIMELY INTERVENTION PETITION(S) (OTHER MEANS AND OTHER PARTIES TO PROTECT INTERVENORS' INTEREST)

Although winning United States Department of the Interior Bureau of Land Management (BLM) permission to use federal land to construct a rail spur involves a public process during which there is an opportunity for participation in an administrative hearing, there is a significant question about the degree to which this alternative forum might otherwise afford ''a full hearing,'' *see Detroit Edison Co.* (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-707, 16 NRC 1760, 1767 n.6 (1982), such that the second section 2.714(a)(1) factor — availability of other means to protect petitioner's interests — would constitute

a substantial negative ingredient in the overall balance. When the NRC is the ''lead agency'' that will prepare an environmental impact statement (EIS) relative to a proposal to use federal land for a rail spur, BLM will act only in a cooperating role, providing comments on NRC's preliminary, draft, and final EIS, but not preparing its own EIS. Because any National Environmental Policy Act (NEPA) responsibilities relative to the rail spur have been assumed by the NRC, it is problematic whether the issue of NEPA compliance can (or should) be contested as part of any BLM review process, neutralizing any negative element this factor might bring to the balance. *Compare Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26-27 (1978) (in NEPA analysis, NRC will not relitigate issues delegated to the Environmental Protection Agency).

RULES OF PRACTICE: NONTIMELY INTERVENTION PETITION(S) (OTHER MEANS AND OTHER PARTIES TO PROTECT INTERVENORS' INTEREST)

The fourth section 2.714(a)(1) factor — extent of representation of petitioner's interests by existing parties — clearly weighs in favor of a petitioner when no other party has raised a similar issue or even been successful in having a contention dealing with the same general subject matter admitted in the proceeding.

RULES OF PRACTICE: NONTIMELY INTERVENTION PETITION(S) (ASSISTANCE IN SOUND RECORD DEVELOPMENT)

When a petitioner identifies three of the witnesses it may utilize in the proceeding and, in the context of the affidavits supporting its petition and contentions, provides an outline of the testimony of one of those individuals, this affords at least some minimal support for acceptance of its petition under factor three — extent to which petitioner's participation may lead to development of a strong record. *See* LBP-98-29, 48 NRC at 294 n.5.

RULES OF PRACTICE: NONTIMELY INTERVENTION PETITION(S) (DELAY)

Any broadening of the proceeding by the entry of new issues is offset to a considerable degree by the fact that admission is unlikely to result in any protracted delay because the case is still in its informal discovery phase, so that section 2.714(a)(1) factor five — broadening the issues or delaying the proceeding — is, at worst, a neutral element in the balance.

RULES OF PRACTICE: STANDING TO INTERVENE (NEPA)

In the NEPA context agency consideration of an action that would alter assertedly pristine public land without a discussion of alternatives seemingly would constitute a sufficiently direct and concrete injury to an intervenor's legitimate interests under NEPA to provide standing to contest that action.

RULES OF PRACTICE: STANDING TO INTERVENE (REDRESSABILITY)

Argument that intervenor has failed to demonstrate a favorable decision likely will redress its injury, and so establish its standing, because even if land use application is rejected, BLM could grant a separate proposal for the land to some other entity misapplies the redressability standard. What intervenor seeks to gain from its challenge is to preclude the danger it perceives the applicant's proposal poses to the land in question. If, as a result of agency NEPA consideration of the applicant's proposal in this proceeding, the proposal is implemented in a way that is not inconsistent with the petitioner's asserted interest in the land, then the intervenor has won all it can expect from this proceeding and its potential injury has been redressed.

RULES OF PRACTICE: STANDING TO INTERVENE (FACTUAL REPRESENTATION)

While an affidavit indicating that an individual had ''frequently visited, used, and enjoyed'' an area and planned to do so ''frequently in the future,'' could have been more specific about the number of times the individual traversed and otherwise used (and plans to use) the land in question, adoption of the term ''frequently'' in this context demonstrates that individual's bond with the area is sufficiently concrete to establish his standing and, consequently, that of the organization he has authorized to represent his interests.

RULES OF PRACTICE: STANDING TO INTERVENE (FACTUAL REPRESENTATION)

Precision regarding a standing showing that is based on actual physical contact (i.e., hiking, camping, etc.) with the object of the purported injury is of less concern than for a standing showing based on distance from the object in question (i.e., reside ''*x*'' miles from the facility). An ongoing presence via physical contact can be adequately conveyed with a general term such as ''frequently.'' General references regarding distance, however, will usually be

inadequate to establish the requisite concreteness. *See Atlas Corp.* (Moab, Utah Facility), LBP-97-9, 45 NRC 414, 426-27, *aff'd,* CLI-97-8, 46 NRC 21 (1997).

MEMORANDUM AND ORDER
(Granting Late-Filed Intervention Petition)

In LBP-98-29, 48 NRC 286 (1998), we denied requests by Intervenor State of Utah (State), Confederated Tribes of the Goshute Reservation (Confederated Tribes), and Ohngo Gaudadeh Devia (OGD) to admit late-filed contentions relating to the August 28, 1998 license application amendment of Private Fuel Storage, L.L.C. (PFS). The application amendment in question moves some 17 miles west the rail line that PFS proposes to construct to bring loaded spent fuel shipping casks from the Union Pacific mainline south to its planned 10 C.F.R. Part 72 independent spent fuel storage installation (ISFSI) located on the reservation of the Skull Valley Band of Goshute Indians (Skull Valley Band). Besides spawning these Intervenors' late-filed contention requests, that application also was the catalyst for the late-filed petition to intervene and supporting contentions of the Southern Utah Wilderness Alliance (SUWA) that is pending before the Licensing Board.

For the reasons set forth below, we grant the SUWA intervention petition and accord it party status, finding that (1) a balancing of the late-filing criteria in 10 C.F.R. § 2.714(a)(1) supports entertaining the petition and the accompanying contentions; (2) SUWA has established its representational standing to intervene; and (3) SUWA has proffered one litigable contention.

I. BACKGROUND

The circumstances surrounding the August 1998 license application amendment that makes the so-called Low Junction rail spur the PFS preferred rail transportation scheme are described in LBP-98-29, 48 NRC at 289. In a November 18, 1998 hearing request, Petitioner SUWA sought to intervene in this proceeding, either as of right or as a discretionary intervenor, to challenge that amendment. *See* [SUWA] Request for Hearing and Petition to Intervene (Nov. 18, 1998) [hereinafter SUWA Petition]. In its petition, SUWA describes itself as a nonprofit organization dedicated to identifying and protecting the ''wilderness character'' of roadless areas under the jurisdiction of the United States Department of the Interior's Bureau of Land Management (BLM) until such time as Congress has an opportunity to designate those areas as wilderness under the Wilderness Act of 1964, 16 U.S.C. §§ 1131-1136, and the Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. §§ 1701-1784.

Id. at 2-3. According to SUWA, in conjunction with an ongoing BLM reinventory of Utah wilderness areas, SUWA has conducted its own inventory of potential wilderness areas and has determined that the North Cedar Mountains area, through which a 3-mile portion of the Low Junction rail spur runs, should be designated as a potential wilderness area. In this vein, SUWA submitted two contentions, SUWA A and SUWA B, that assert a PFS failure to consider adequately the wilderness character of the North Cedar Mountains area in and near the Low Junction rail corridor in assessing the impacts of, and a possible range of alternatives to, the PFS proposal in violation of the Wilderness Act, FLPMA, and the National Environmental Policy Act of 1969 (NEPA). *See* [SUWA] Contentions Regarding [PFS] Facility License Application (The Low Rail Spur) (Nov. 18, 1998) [hereinafter SUWA Contentions]. In its petition, SUWA also addressed the standards in 10 C.F.R. § 2.714(a)(1) that govern late intervention, asserting its petition meets those late-filing standards.

Responses to these SUWA filings were submitted by Intervenor State, Applicant PFS, and the NRC Staff. The State supported intervention, asserting SUWA had met the standards for late-filed intervention and had provided admissible contentions. *See* [State] Response to Request for Hearing, Petition to Intervene and Contentions of [SUWA] (Dec. 1, 1998) [hereinafter State Response]. PFS and the Staff, on the other hand, both asserted the SUWA petition should be denied in that (1) the SUWA hearing request did not merit admission under the section 2.714(a)(1) late-filing standards; (2) SUWA had failed to establish its standing as of right; (3) SUWA had not made a case for permitting discretionary intervention; and (4) SUWA had failed to provide an admissible contention. *See* Applicant's Answer to Petition to Intervene and Contentions of [SUWA] (Dec. 1, 1998) [hereinafter PFS Response]; NRC Staff's Response to [SUWA] Request for Hearing, Petition to Intervene, and Contentions Regarding [PFS] License Application (The Low Rail Spur) (Dec. 1, 1998) [hereinafter Staff Response]. In a reply to the PFS and Staff responses, SUWA declared that (1) it did meet the section 2.714(a)(1) standards for late filing so as to warrant admission of its intervention petition and the accompanying contentions; (2) it should be admitted as party to the proceeding because it had established its standing as of right and as a matter of discretion; and (3) its contentions were admissible. *See* Reply of [SUWA] to Staff and Applicant Responses to SUWA's Petition to Intervene, Request for Hearing and Contentions (Dec. 8, 1998) [hereinafter SUWA Reply]. Thereafter, during a December 11, 1998 videoconference, the Board entertained arguments from SUWA, the State, PFS, the Skull Valley Band, and the Staff concerning the SUWA petition and its contentions. *See* Tr. at 1050-165.

II. ANALYSIS

A. Standards Governing Late-Filed Intervention Petitions, Standing, and Late-Filed Contentions

At this juncture, to gain admission as a party to this proceeding, SUWA must clear the following hurdles: (1) establish that its intervention petition and the accompanying contentions should be accepted even though late-filed; (2) show that it has established its standing to intervene, either (a) as of right, or (b) as a matter of discretion; and (3) show that its contentions meet the standards for admissibility. In prior decisions in this proceeding, we have outlined the various standards that govern these assorted aspects of our consideration of the admission of SUWA's petition and contentions. Among these are (1) the five criteria of 10 C.F.R. § 2.714(a)(1) that govern the admission of late-filed intervention petitions and contentions;[1] *see* LBP-98-7, 47 NRC 142, 167 (late intervention), 182-83 (late-filed contentions), *aff'd,* CLI-98-13, 48 NRC 26 (1998); LBP-98-29, 48 NRC at 291 (late-filed contentions); (2) the requirements to establish standing as of right or discretionary standing, *see* LBP-98-7, 47 NRC at 167-68; and (3) the standards for admission of contentions, *see id.* at 178-81; LBP-98-13, 47 NRC 360, 365 (1998). We deal with these admission guideposts first as they apply to the SUWA intervention petition and then with respect to the accompanying contentions.

B. SUWA Intervention Petition

1. Late-Filing Criteria

DISCUSSION: SUWA Petition at 9-11; State Response at 13; PFS Response at 15-17; Staff Response at 4-7; SUWA Reply at 2-5; Tr. at 1050-54, 1060-63, 1070-75, 1091-94, 1105-09.

RULING: As we have noted before, *see* LBP-98-7, 47 NRC at 173, the first late-filing factor — good cause for filing late — is also the most important in the balance. In this instance, SUWA declares that it first found out about the Low Junction rail corridor application amendment the second week of October 1998 and filed its petition and contentions some 6 weeks later. *See* SUWA Reply at 3; *see also* Tr. at 1105-08. According to SUWA, it had good cause for taking 6 weeks of preparation before filing because of the time needed (1) to familiarize itself with the NRC regulatory process and the amendment, including generating maps to compare the Low Junction rail corridor with the areas in which it has an

[1] Absent some demonstration that separate consideration is required, a showing regarding the 10 C.F.R. § 2.714(a)(1) criteria would be equally applicable to a late-filed intervention petition and any concurrently filed contentions.

interest as potential wilderness areas; (2) to retain an expert for use in analyzing the revision and preparing the necessary support for its contentions; (3) to retain a volunteer attorney; and (4) to consummate its internal processes to authorize the preparation and filing of a petition and accompanying exhibits. *See* SUWA Reply at 3.

The State agrees with SUWA's assertion. *See* State Response at 3. Both PFS and the Staff do not, albeit for somewhat different reasons. PFS asserts the 6-week period is too long given the nature of the amendment. *See* Tr. at 1061. The Staff's disagreement, on the other hand, is based not on the claimed 6-week preparation period, which it indicates would be reasonable under the circumstances, but rather on the basis that SUWA, as an organization generally interested in Utah areas such as that around the proposed PFS site, should have been more vigilant in learning of the amendment because (1) in early July 1998 PFS placed a letter in the docket of this proceeding indicating it planned to file the Low Junction corridor amendment in late summer or early fall 1998; and (2) the amendment was placed in the local public document room for this proceeding in early September 1998. *See* Tr. at 1071-72.

We agree with the Staff that, under the circumstances here, the approximately 45-day period SUWA used to prepare its intervention petition, while perhaps approaching the outer boundary of ''good cause,'' was not unreasonable. We do not agree, however, with the Staff's assessment of SUWA's vigilance in discovering the PFS application amendment. Although there was not a *Federal Register* notice of the amendment application, the fact the amendment was placed in a local public document room (LPDR) created in Salt Lake City, Utah, for the PFS facility provides an enhanced opportunity for access to licensing information that should be taken into account in analyzing the timeliness of SUWA's intervention petition. It is reasonable to expect that, from time to time, those in the area who may have an interest in the proceeding, including SUWA, would visit the LPDR to check on its status. At the same time, the fact SUWA is not a party to this proceeding is a pertinent factor in assessing the frequency of such visits. By way of contrast, we would not expect a nonparty to visit the LPDR as often as a party given the need to travel to the LPDR, which is located in Salt Lake City on the University of Utah campus, in order to see the files. With this in mind, one LPDR trip a month by a nonparty to monitor this proceeding seems reasonable.[2]

Considering the circumstances here against this backdrop, although the July 1998 letter apparently was placed in the LPDR, it seemingly was not sufficiently

[2] In this regard, we note that by the end of 1999 the agency hopes to implement a paperless document control system under which electronic versions of publically available licensing documents would be placed on the agency's Internet Web site within a short time after the documents are received. How such a system might affect the timing analysis above, at least for those with Internet access, is a question we need not resolve here.

specific to prompt an intervention petition or contentions, particularly when it referenced the fact an actual amendment would be filed later. The August 1998 amendment itself thus is the appropriate trigger point for any intervention or contentions regarding the Low Junction rail corridor. Further, although the Staff declares the amendment was placed in the LPDR in early September, *see* Tr. at 1071, it has not provided a specific date. We thus will presume the August 28, 1998 amendment reached the LPDR within 2 weeks, or by the second week of September 1998. Further, we think it reasonable to count the 30 days within which SUWA would be expected to make an LPDR trip, and thus learn about the amendment, from the date the document is placed in the LPDR, or the second week of October 1998. As it turns out, this is the same time frame in which SUWA asserts it received notice of the amendment, albeit not from the LPDR, and began its 6-week period of petition preparation.

Consequently, taking into account both when SUWA learned of the amendment and the period it took to prepare and to file its hearing request, we conclude SUWA has demonstrated the requisite good cause for its late-filing.

Having found the first, and most important, late-filing factor weighs in SUWA's favor, we nonetheless must consider the other four factors to arrive at an assessment of the overall balance that accrues. Relative to factor two — availability of other means to protect the petitioner's interests — we do not find the PFS and Staff assertions regarding a legislative remedy and the right to comment on any NRC draft environmental impact statement (EIS) particularly compelling as alternative fora to protect SUWA's interests. *See* PFS Response at 16; Staff Response at 5. PFS, however, has suggested that SUWA does have another administrative arena, the BLM, within which to seek a protected wilderness designation for the portion of the Low Junction rail corridor about which it is concerned. Indeed, PFS apparently must win BLM permission to use the federal land upon which the Low Junction rail spur would be constructed, a public process during which there is an opportunity for participation in an administrative hearing. *See* Applicant's Reply to [State] Response to NRC Staff Lead Agency Filing (Jan. 5, 1999) at 3-5.

There is, however, a significant question about the degree to which this alternative forum might otherwise afford ''a full hearing,'' *see Detroit Edison Co.* (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-707, 16 NRC 1760, 1767 n.6 (1982), such that this factor would constitute a substantial negative ingredient in the overall balance. As the Staff has made clear, NRC is the ''lead agency'' that will prepare the EIS relative to the PFS proposal to use federal land for the Low Junction rail spur. The BLM will act only in a cooperating role, providing comments on NRC's preliminary, draft, and final EIS, but not preparing its own NEPA statement. *See* Letter from Sherwin E. Turk, NRC Staff Counsel, to the Licensing Board (Dec. 16, 1998) at 1-2. Given that any NEPA responsibilities relative to the Low Junction rail corridor have, in the first

instance, been assumed by the NRC, it is problematic the degree to which the issue of NEPA compliance, a focus of the SUWA contentions, will be a matter that can (or should) be contested as part of any Department of the Interior review process, neutralizing any negative element this factor might bring to the balance. *Compare Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26-27 (1978) (in NEPA analysis, NRC will not relitigate issues delegated to the Environmental Protection Agency).

On the other hand, as the Staff notes, *see* Staff Response at 6, the fourth factor — extent of representation of petitioner's interests by existing parties — clearly weighs in favor of SUWA because no other party has raised a wilderness issue or, in fact, been successful in having a Low Junction rail corridor contention admitted in this proceeding. Thus, at best, the second and fourth factors negate each other in the balance.

As to factors three and five, which carry more weight among the four section 2.174(a)(1) non-good cause considerations, they are marginally positive (or at least not negative) elements in the balance. SUWA does identify three of the witnesses it may utilize and, in the context of the affidavits supporting the SUWA petition and contentions, provides an outline of the testimony of one of those individuals, Dr. Jim Catlin, thereby affording at least some minimal support for acceptance of its petition under factor three — extent to which petitioner's participation may lead to development of a strong record. *See* LBP-98-29, 48 NRC at 294 n.5. At the same time, any broadening of the proceeding by the entry of SUWA with its new ''wilderness'' issues is offset to a considerable degree by the fact that admission is unlikely to result in any protracted delay because this case still is in its informal discovery phase, so that factor five — broadening the issues or delaying the proceeding — is, at worst, a neutral element in the balance.

Accordingly, with good cause for lateness having been shown and the other four factors providing little, if any, counterweight, we conclude that a balancing of the five section 2.714(a)(1) factors favors entertaining the SUWA petition and the accompanying contentions despite their late filing.

2. Standing

DISCUSSION: SUWA Petition at 12-15; PFS Response at 5-14; Staff Response at 10-18; SUWA Reply at 6-11; Tr. at 1053-58, 1063-69, 1076-85, 1110-31.

RULING: Having gotten over the ''late-filing'' barrier, SUWA still must establish its standing to intervene. As presented by the parties, the dispute regarding standing centers on whether (1) SUWA as an organization has standing to intervene; and (2) SUWA has standing through its representation of the interests of one or more of its members. We see no need to address the first

controversy, because, as we explain below, SUWA has fulfilled the qualifications for representational standing relative to its member, Dr. Jim Catlin.

Of the four showings required by an organization wishing to establish standing as the representative of its members' interests, *see* CLI-98-13, 48 NRC at 30-31, only one — whether one or more of its members would otherwise have standing to sue in his or her own right — is at issue here.[3] Further, relative to the three elements at play in this determination of Dr. Catlin's standing as the represented individual, *see id.* at 31, we consider only the first and third — injury in fact and redressability — to be in serious question.[4]

Regarding Dr. Catlin's injury in fact, both the PFS and the Staff assert that he has failed to establish that his injury is sufficiently concrete and particularized. Both declare the asserted injury involved is not sufficiently concrete because it does not involve a specific, tangible environmental harm. *See* PFS Response at 8-11, 13; Staff Response at 12. Additionally, both challenge the sufficiency of Dr. Catlin's affidavit describing the injury to his personal interests, which states:

> I have a personal interest in and have frequently visited, used and enjoyed the natural resources of the North Cedar Mountains and benches, including the section of this area that will be traversed by the proposed rail spur, for many health, recreational, scientific, spiritual, educational, aesthetic, and other purposes and will do so frequently in the future. I have visited these areas, including the exact tract of land within the North Cedar Mountains area that will be traversed by the proposed rail spur, and have developed an ongoing and deep bond with the land and its wilderness character which I will continue to cultivate in the future. I frequently enjoyed and will, in the future with some frequency, enjoy hiking, camping, birdwatching, study, contemplation, solitude, photography, and other activities in and around the North Cedar Mountains roadless area, including the exact tract of land — the bench of the North Cedar Mountains — over which the proposed rail spur will traverse. I will be personally harmed and my health, recreational, scientific, spiritual, educational, aesthetic, informational, and other interests will be directly affected and irreparably harmed by a decision to allow construction and operation of the Low Rail Spur and by other agency actions which may impact the North Cedar Mountains, including the exact tract of land — the bench of the North Cedar Mountains — over which the proposed rail spur will traverse.

SUWA Reply, Second Declaration of Jim Catlin for Petitioner [SUWA] (Dec. 8, 1998) at 4-5. According to PFS and the Staff, Dr. Catlin's use of the word ''frequently'' to describe his past and future contacts with the Low Junction rail

[3] Relative to representational standing, neither PFS nor the Staff has contested whether (1) the interests SUWA seeks to protect are germane to its purpose; (2) the claim asserted or relief requested requires an individual member to participate in the organization's adjudicatory challenge; or (3) the organization has demonstrated that at least one of its members upon which its standing rests has authorized it to represent his or her interests. *See* PFS Response at 11-13; Staff Response at 12-15; Tr. at 1063-69, 1078-81. We likewise do not see these elements as negating SUWA's representational standing.

[4] As the Staff notes, the causation element relative to Dr. Catlin's purported injury in fact appears to have been met. *See* Staff Response at 13-14.

corridor is insufficiently particularized to establish the requisite concreteness for his asserted injury in fact. *See* Tr. at 1066-67, 1078-79.

Relative to the PFS and Staff assertions about the concreteness of any purported environmental-related injury, we find the decision of the United States Court of Appeals for the Ninth Circuit in *Idaho Conservation League v. Mumma,* 956 F.2d 1508 (9th Cir. 1992), instructive.[5] Initially, we note the court's admonition that when ''Congress is the source of the purportedly violated legal obligation, we look to the statute to define the injury.'' *Id.* at 1514. In this instance, SUWA in its contentions has based its claims on alleged violations of the Wilderness Act, FLPMA, and NEPA. As the *Mumma* court suggests, NEPA provides a procedural protection for potential intervenors by imposing an agency duty to consider all reasonable alternatives before making a decision affecting the environment. In this NEPA context, even without the Wilderness Act or FLPMA, agency consideration of an action that would alter assertedly pristine public land without a discussion of alternatives seemingly would constitute a sufficiently direct and concrete injury to an intervenor's legitimate interests under NEPA to provide standing to contest that action. Consequently, with the provisions of the Wilderness Act and FLPMA, which make it clear maintaining wilderness, and by implication the option to obtain a wilderness designation that results in such preservation, has more than nominal value, *see* 16 U.S.C. § 1131(c) (wilderness defined as land ''which is protected and managed so as to preserve its natural conditions''), agency action without sufficient consideration of alternatives that would preserve any designation potential is equally injurious to an intervenor's NEPA procedural interests so as to provide standing.[6]

As is specifically alleged in contention SUWA B, it is this NEPA interest in considering alternatives that Dr. Catlin and, as his representative, SUWA clearly want to protect. Accordingly, there is a concrete injury in fact in a proposal

[5] As PFS noted, *see* Tr. at 1116-17, at least one other federal circuit has declined to follow the *Mumma* decision. *See Sierra Club v. Robertson,* 28 F.3d 753, 759-60 (8th Cir. 1994). It did so, however, based on the fact the matter under scrutiny in *Mumma* was a proposed resource management plan, as opposed to a site-specific action. *See id.* at 760. Here, of course, we are concerned with a proposed site-specific action.

[6] Both PFS and the Staff maintain that the fact BLM previously declined to designate the area in question as potential ''wilderness'' area for further consideration by Congress renders speculative any SUWA injury in losing the opportunity to have the land designated for protection. *See* PFS Response at 9; Staff Response at 12. As we have noted, however, in the context of NEPA, even absent the FLPMA statutory scheme, there would be a need to consider the natural state of the land and the alternatives, if any, that would be available to preserve that status. This is particularly so in an instance when that natural state will be irrevocably changed by the proposed project. Compare PFS Response, Exh. 3, at 17 (Utah BLM Statewide Wilderness Final EIS) (impact of not designating Cedar Mountains wilderness area is area would not receive protection, but in foreseeable future no development anticipated that would affect wilderness values).

In this regard, the Staff also questions the sufficiency of SUWA's interest in light of the fact the proposed rail spur would only go through 3 miles of the several thousand acre area identified by SUWA as wilderness. *See* Staff Response at 5 n.6; *see also* PFS Response at 10. While this fact may influence the consideration of alternatives, it is not disqualifying relative to SUWA's standing.

to take such an action without an adequate consideration of alternatives that accrues to SUWA as it acts as Dr. Catlin's representative.

Because, as the Staff concedes, there is a chain of causation by which approval of the PFS application will result in at least a small portion of the Low Junction rail spur corridor becoming ineligible for protected ''wilderness'' designation under the Wilderness Act and FLPMA (at least as long as the rail line is in existence), *see* Staff Response at 14, this leaves only the matter of redressability, which can be promptly disposed of. The Staff makes the argument that SUWA has failed to demonstrate that a favorable decision likely will redress its injury, and so establish its standing, because even if PFS's application is rejected, the BLM could grant a separate proposal for the land to some other lessee. To adopt this reading, however, would misapply the redressability standard. What SUWA seeks to gain from this challenge is to preclude the danger the PFS proposal poses for the wilderness designation of the land in question. If, as a result of agency NEPA consideration of the PFS Low Junction rail spur in this proceeding, the PFS proposal is implemented in a way that is not inconsistent with SUWA's asserted interest in the land, then SUWA has won all it can expect from this proceeding and its potential injury has been redressed. We thus find the redressability requirement is not a bar to SUWA's representational standing.

Finally, we do not find convincing the PFS and Staff assertion that Dr. Catlin has not shown sufficient contacts with the Low Junction rail corridor to establish a personal injury. Dr. Catlin, as was noted above, indicated in his affidavit that he had ''frequently visited, used, and enjoyed'' the area and planned to do so ''frequently in the future.'' As used in this context, the root term ''frequent'' is defined in the dictionary as meaning ''habitual'' or ''persistent.'' *Webster's Third New International Dictionary* 909 (unabr. 1976). While Dr. Catlin could have been more specific about the number of times he has traversed and otherwise used (and plans to use) the Low rail corridor lands in question,[7] his adoption of the term ''frequently'' in this context demonstrates that his bond with the area is sufficiently concrete to establish his standing and, consequently, that of his representative SUWA.

[7] In this connection, we are considerably less concerned about precision regarding a standing showing that is based on actual physical contact (i.e., hiking, camping, etc.) with the object of the purported injury, in this case the Low Junction rail corridor, than we would be for a standing showing based on distance from the object in question (i.e., reside ''*x*'' miles from the facility). An ongoing presence via physical contact can be adequately conveyed with a general term such as ''frequently.'' General references regarding distance, however, will usually be inadequate to establish the requisite concreteness. *See Atlas Corp.* (Moab, Utah Facility), LBP-97-9, 45 NRC 414, 426-27, *aff'd,* CLI-97-8, 46 NRC 21 (1997).

Because we find that SUWA has established it has representational standing as of right, we need not reach the question of whether it should be admitted as a matter of discretion.[8]

C. SUWA Contentions

SUWA A

> CONTENTION: The License Application Amendment fails to consider adequately the impacts of the Low Corridor Rail Spur and the associated fire buffer zone on the wilderness character and the potential wilderness designation of a tract of roadless Bureau of Land Management (BLM) land — the North Cedar Mountains — which it crosses. SUWA has determined, after significant analysis, that the North Cedar Mountains qualifies for and should be designated as wilderness under the Wilderness Act of 1964 and therefore should be preserved in its current natural state until the United States Congress has an opportunity to evaluate the land for wilderness designation.

DISCUSSION: SUWA Contentions at 2-5; PFS Response at 18-23; Staff Response at 20-24; SUWA Reply at 11-14; Tr. at 1132-33, 1136-41, 1143-48, 1151-54, 1155-56.

RULING: Inadmissible in that this contention and its supporting bases lack adequate factual or expert opinion support; and/or fail properly to challenge the PFS application, as amended.

SUWA B

> CONTENTION: The License Application Amendment fails to develop and analyze a meaningful range of alternatives to the Low Corridor Rail Spur and the associated fire buffer zone that will preserve the wilderness character and the potential wilderness designation of a tract of roadless Bureau of Land Management (BLM) land — the North Cedar Mountains — which it crosses.

DISCUSSION: SUWA Contentions at 5-6; PFS Response at 23-25; Staff Response at 24-25; SUWA Reply at 14-15; Tr. at 1133-35, 1141-43, 1148-51, 1154-55.

RULING: As it seeks to explore the question of alignment alternatives to the proposed placement of the Low Junction rail spur, admissible in that the contention and its supporting basis are sufficient to establish a genuine dispute adequate to warrant further inquiry.

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[8] We note, however, that given SUWA's showing of its strong, persistent concern for the local environment, SUWA would be a much stronger candidate for discretionary standing than petitioner Scientists for Secure Waste Storage, a group we earlier dismissed from this proceeding for having failed to establish its standing as of right or its eligibility for discretionary standing. *See* LBP-98-7, 47 NRC at 175-78.

III. CONCLUSION

For the reasons given above, we find that Petitioner SUWA has established (1) its intervention petition should be entertained under a balancing of the late-filing criteria set forth in 10 C.F.R. § 2.714(a)(1); (2) it has representational standing as of right; and (3) it has proffered an admissible contention — SUWA B. Accordingly, SUWA is admitted as a party to this proceeding.

For the foregoing reasons, it is, this third day of February 1999, ORDERED,

1. The November 18, 1998 SUWA hearing request/intervention petition is *granted* and SUWA is *admitted* as a party to this proceeding.

2. SUWA contention SUWA A is *rejected* as inadmissible for litigation in this proceeding.

3. SUWA contention SUWA B is *admitted* for litigation in this proceeding and shall be considered as a Group III contention under the general schedule for this proceeding, as revised on December 28, 1998.

4. In accordance with 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 BOARD[9]

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Jerry R. Kline
ADMINISTRATIVE JUDGE

Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 3, 1999

[9] Copies of this Memorandum and Order were sent this date by Internet e-mail transmission to counsel for (1) the Applicant PFS; (2) Intervenors Skull Valley Band, OGD, Confederated Tribes, Castle Rock Land and Livestock, L.C./Skull Valley Company, Ltd., and the State; (3) Petitioner SUWA; and (4) the Staff.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. Jerry R. Kline
Dr. Peter S. Lam

In the Matter of **Docket No. IA 97-068**
(ASLBP No. 97-731-01-EA)
(Order Superseding Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately))

AHARON BEN-HAIM, Ph.D.
(Upper Montclair, New Jersey) **February 8, 1999**

The Atomic Safety and Licensing Board affirms, with modifications, an immediately effective Staff enforcement order, sustaining most of the substantive assertions of the order but reducing the proposed suspension from NRC-licensed activities from 5 years to 3 years and retaining other ancillary relief sought by the Staff, such as reporting requirements for future involvement in NRC-licensed activities.

ENFORCEMENT ACTIONS: UNLICENSED INDIVIDUALS

Under 10 C.F.R. § 30.10, any contractor to a licensee, including a supplier or consultant, who knowingly provides to any licensee information or other things, may not engage in deliberate misconduct that causes or would have caused, if not detected, the licensee to be in violation of any NRC rule, regulation, order, or license condition.

ENFORCEMENT ACTIONS: DELIBERATE MISCONDUCT

Deliberate misconduct means an intentional act or omission that the person knows would cause a licensee to be in violation of any NRC rule, regulation, order, or license condition. Deliberate is the same as intentional and does not include careless disregard.

REGULATIONS: CONTROL OF RADIOACTIVE MATERIAL

NRC regulations under 10 C.F.R. Part 35 require a byproduct materials licensee to appoint both a Radiation Safety Officer (RSO) and an Authorized User, each with defined duties and responsibilities. An RSO or Authorized User may delegate the authority to carry out those duties and responsibilities but not the responsibility for ensuring that they are carried out.

REGULATIONS: CONTROL OF RADIOACTIVE MATERIAL

A licensee must apply for and receive a license amendment before it changes RSOs.

REGULATIONS: CONTROL OF RADIOACTIVE MATERIAL

NRC regulations under 10 C.F.R. Part 35 require that a byproduct material licensee retain a record of the measurement of each dosage, including prescribed dosage, of a photon-emitting radionuclide prior to medical use. Part 35 further requires a written directive, or explicit prescription, any time a dose of I-131 exceeding 30 microcuries is to be administered to a patient; or for any therapeutic administration of a radiopharmaceutical. These activities must be performed by an Authorized User or designee.

ENFORCEMENT ACTIONS: UNLICENSED INDIVIDUALS (SANCTIONS); DELIBERATE MISCONDUCT (SANCTIONS)

The Enforcement Policy, NUREG-1600, is NRC's policy for exercising its authority to take action to enforce its regulatory requirements. The particular sanction is determined on a case-by-case basis and involves discretion, based on specified factors that do not necessarily carry equal weight. Willful violations are of particular concern.

APPEARANCES

Aharon Ben-Haim, Ph.D., Montclair, New Jersey, *pro se,* assisted during prehearing phases by **Everett van Kampen, Esq.,** Fairlawn, New Jersey.

Ann P. Hodgdon, Esq., and **Catherine L. Marco, Esq.,** for the Nuclear Regulatory Commission Staff.

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INITIAL DECISION
(Affirming Enforcement Order, with Modifications)

Opinion (Including Findings of Fact)

This proceeding involves the challenge of Aharon Ben-Haim, Ph.D., to the August 27, 1997 ''Order Superseding Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately)'' (Order), issued by the Staff of the Nuclear Regulatory Commission (Staff). 62 Fed. Reg. 47,224 (Sept. 8, 1997). The Order prohibits Dr. Ben-Haim from any involvement in NRC-licensed activities for 5 years from July 31, 1997. *Id.* at 47,225. It also imposes various ancillary relief, including reporting requirements for future permitted activities.

For the reasons described herein, we sustain most of the substantive assertions of the Staff's Order. In particular, we conclude that Dr. Ben-Haim deliberately caused the Licensee, Newark Medical Associates (NMA), to be in violation of several of the Commission's requirements. We also conclude that the proposed 5-year prohibition against Dr. Ben-Haim is more severe than is warranted, taking into account all the facts and circumstances before us. We accordingly are modestly adjusting the length of the suspension, although retaining the other aspects of relief included in the Order.

I. BACKGROUND AND INTRODUCTION

The Staff's August 27, 1997 Order superseded in its entirety an order issued to Dr. Ben-Haim on July 31, 1997. *See* ''Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately) Pending Further Order,'' 62 Fed. Reg. 43,360 (Aug. 13, 1997). On August 19, 1997, Dr. Ben-Haim filed an answer to the initial order in which he requested a hearing and sought rescission of the immediate effectiveness of the order. Letter from Dr. Aharon Ben-Haim to Edward Jordan, Deputy Executive Director for Regulatory Effectiveness, dated August 19, 1997. On September 8, 1997, the Staff responded to Dr. Ben-Haim's answer to the initial order, treating it as applicable to the Superseding Order. ''NRC Staff's Response to Request to Set Aside Immediate Effectiveness of Order Superseding Order Prohibiting Involvement in NRC-Licensed Activities,'' dated September 8, 1997.

On August 25, 1997, this Atomic Safety and Licensing Board (Board) was established to preside in this proceeding. 62 Fed. Reg. 46,381 (Sept. 2, 1997). On September 11, 1997, we issued a ''Memorandum and Order (Granting Request for Hearing and Scheduling Prehearing Conference),'' in which we granted Dr. Ben-Haim's request for a hearing and scheduled a prehearing

conference to hear oral argument on the rescission of the immediate effectiveness of the Order and to establish hearing schedules. On September 15, 1997, we issued a Notice of Hearing. 62 Fed. Reg. 49,260 (Sept. 19, 1997).

At the September 18, 1997 prehearing conference, we orally ruled to uphold the immediate effectiveness of the Order, based on the criteria set forth in 10 C.F.R. § 2.202(c)(2)(i). Tr. 36. This ruling was memorialized by our Prehearing Conference Order (Denying Rescission and Establishing Schedules), dated September 25, 1997, LBP-97-15, 46 NRC 60.

On September 30, 1997, the Staff filed ''NRC Staff's Motion for Delay of Proceeding'' at the request of the United States Department of Justice (DOJ). The Staff's motion for a 120-day delay of the proceeding was based on the pendency of a criminal investigation concerning allegations of possible violations of federal criminal law by Newark Medical Associates (NMA), its owners and employees, including its consultant, Dr. Ben-Haim. The Staff's motion was supported by an affidavit from an Assistant United States Attorney in the United States Attorney's Office for the District of New Jersey. By letter dated October 15, 1997, Dr. Ben-Haim offered no opposition to the Staff's motion. By Memorandum and Order (Staff's Motion for Delay of Proceeding), dated October 22, 1997, LBP-97-18, 46 NRC 234, we granted the Staff's motion, staying the proceeding for 120 days, until January 28, 1998, and setting forth procedural requirements for further extension of the stay.

On January 28, 1998, the Staff informed the Board that it would not seek to extend the stay, based on DOJ's advice that, although a related investigation was still continuing, it was not in the best interest of the government to extend the delay.[1] On March 2, 1998, after seeking a proposed schedule from the parties, we issued a ''Memorandum and Order (Schedules for Proceeding),'' in which we established a discovery and a hearing schedule. In accordance with that schedule, litigation went forward, with the filing of interrogatories and document requests, and deposition discovery. Prior to the hearing, by Notice of Evidentiary Hearing dated April 20, 1998, 63 Fed. Reg. 20,434 (Apr. 24, 1998), we set forth a number of technical hearing requirements, including the prefiling of lists of witnesses and documents to be utilized and the statements of qualifications of the parties' expert witnesses. Prior to the hearing, we also held several telephone prehearing conferences with the parties.

To assist the Board in developing an adequate record at the hearing, the Licensing Board, pursuant to 10 C.F.R. § 2.722(a)(1), appointed Administrative Judge Harry Rein, who has expertise as a medical doctor, as its Special Assistant, to serve as a technical interrogator. 63 Fed. Reg. 18,458 (Apr. 15, 1998). The

[1] On April 23, 1998, the Staff informed the Board, as well as Dr. Ben-Haim, that DOJ declined prosecution in the matter of Newark Medical Associates. The DOJ had directly informed Dr. Ben-Haim that he was not an investigative ''target'' by letter dated March 20, 1998. Exh. BH-12.

evidentiary hearing was held in Newark, New Jersey, from May 27, 1998, to May 29, 1998. Following the public hearing, on June 4, 1998, the Board issued a ''Memorandum and Order (Telephone Conference, 6/3/98; Proposed Findings),'' in which, to accommodate the schedule of Dr. Ben-Haim, we established August 14, 1998, as the date by which the Staff would file its proposed findings; August 31, 1998 (later extended until September 8, 1998, at Dr. Ben-Haim's request), as the date by which Dr. Ben-Haim's findings must be filed; and September 11, 1998 (later extended to September 21, 1998, to accommodate Dr. Ben-Haim's extension), as the date for the Staff to file its reply findings. All proposed findings were timely filed.

II. FINDINGS OF FACT

A. Introduction

In setting forth our findings of fact in this proceeding, we must note first that Dr. Ben-Haim did not submit a conventional type of proposed findings, setting forth matters of record tending to prove his claims. Instead, he admitted three of the facts on which the Staff's proposed violations were founded. He further accepted ''responsibility for his wrongdoing.'' He assured the Commission that ''he will conduct license activities safely in the future'' and expressed thanks to the NRC Staff for its professional handling of his case. He expressed his apology to Dr. Magdy Elamir, President of NMA, for having caused NMA to be in violation of NRC regulations. Finally, he sought to have his proposed findings considered as ''a showing of cause to relax the order against'' him. (The proposed findings were not signed.)

The Staff in its reply notes that Dr. Ben-Haim in his proposed findings does not dispute any of the findings set forth by the Staff. In these circumstances, we could, except with respect to the relief sought, adopt all of the Staff's Proposed Findings. The Staff further claims that Dr. Ben-Haim provides no support for his request that the penalty be relaxed (NRC Staff's Findings in Response to Dr. Ben-Haim's Proposed Findings, dated September 16, 1998, at 2).

Because of the nature of Dr. Ben-Haim's Proposed Findings, we are adopting many of the Staff's Proposed Findings, subject to editing. But our obligation, of course, is to consider the entire record and not merely the content of various parties' proposed findings. *See* 10 C.F.R. § 2.760(c) and, in particular, (c)(1). Our findings reflect these requirements.

B. The Staff's Order

The violations upon which the Superseding Order are based are set forth as follows (62 Fed. Reg. at 47,225):

> 10 CFR 30.10(a)(1), (c)(1) and (c)(2) require, in part, that any contractor of a licensee not engage in deliberate misconduct that causes or, but for detection, would have caused, a licensee to be in violation of any rule, regulation, or order, or any term, condition, or limitation of any license issued by the Commission; or any requirement, procedure, instruction, contract, purchase order or policy of a licensee.
>
> 1. 10 CFR 35.21 requires that a licensee appoint a Radiation Safety Officer responsible for implementing the radiation safety program; and requires that the licensee, through the Radiation Safety Officer, ensure that radiation safety activities are being performed in accordance with approved procedures and regulatory requirements in the daily operation of the licensee's byproduct material program.
>
> 10 CFR 35.13 requires that a licensee apply for and receive a license amendment before it changes Radiation Safety Officers.
>
> Byproduct Material License No. 29-30282-01, Condition 12, dated September 25, 1996 states that the Radiation Safety Officer for this License is Gerard W. Moskowitz, M.D.
>
> During the period from November 1996 through February 6, 1997, Dr. Ben-Haim caused Newark Medical Associates to be in violation of the requirements in Section III.A.1 above by performing the functions of the Radiation Safety Officer (RSO), even though he knew that: (1) the RSO named on the license application and, subsequently, on the license, was Gerard Moskowitz, M.D., and (2) he, Dr. Ben-Haim, was not the RSO named on the license application or the license.
>
> 2. 10 CFR 35.11(a) and (b) permit an individual to use licensed material for medical use only in accordance with a specific license issued by the Commission or under the supervision of an authorized user as provided in 10 CFR 35.25.
>
> 10 CFR 35.53(c)(3) requires, in part, that the licensee retain a record of the measurement of each dosage of a photon-emitting radionuclide prior to medical use to include, among other things, the prescribed dosage. Pursuant to 10 CFR 35.2: ''Prescribed dosage'' means the quantity of radiopharmaceutical activity as documented in a written directive or diagnostic clinical procedures manual or in any appropriate record in accordance with the directions of the authorized user; ''Written directive'' means an order in writing for a specific patient dated and signed by an authorized user; ''Diagnostic clinical procedures manual'' means a collection of written procedures that includes, among other things, where each diagnostic procedure has been approved by the authorized user and the radiopharmaceutical, dosage, and route of administration; and ''Authorized user'' means a physician, dentist, or podiatrist who is (1) Board certified by at least one of the boards listed in Paragraph (a) of 10 CFR Part 35, sections 35.910, 35.920, 35.930, 35.940, 35.950, or 35.960, (2) identified as an authorized user on a Commission or Agreement State license that authorizes the medical use of byproduct material, or (3) identified as an authorized user on a permit issued by a Commission or Agreement State specific license of broad scope that is authorized to permit the medical use of byproduct material.

Byproduct Material License No. 29-30282-01, dated September 25, 1996, states in Condition 13, that licensed material is only authorized for use by, or under the supervision of, Gerard W. Moskowitz, M.D.

Byproduct Material License No. 29-30282-01, dated September 25, 1996, requires in part, in Condition 14, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the Application dated February 21, 1996. This application, which was prepared by Dr. Ben-Haim, requires, in Item 10.6, ''Ordering and Receiving'', that the licensee follow procedures in Appendix K to Regulatory Guide 10.8, Revision 2. The procedures in Appendix K require, in part, that the Radiation Safety Officer or a designee must authorize each order for radioactive materials and ensure that the requested materials and quantities are authorized by the license for use by the requesting authorized user.

During the period from November 1996 through February 6, 1997, Aharon Ben-Haim, who is not a physician, caused Newark Medical Associates to be in violation of the requirements in Section III.A.2 above by prescribing, in writing, the radiopharmaceuticals and dosages to be ordered and administered to patients by technologists for bone scans and cardiac images (which are medical uses), even though he knew that: (1) he was not an authorized user nor under the supervision of an authorized user; (2) he had prepared the Newark Medical Associates license application to specify the name of Gerard Moskowitz as the sole physician authorized user and Radiation Safety Officer; (3) Gerard Moskowitz, as the sole physician user named on the license, was the only individual who could prescribe a radiopharmaceutical and dosage for a technologist to administer to a patient; and (4) Gerard Moskowitz, as the Radiation Safety Officer named on the license, was the only individual who could authorize, or delegate to a technologist the authority to authorize, each order of byproduct material for medical use.

C. Witnesses

At the request of Dr. Ben-Haim, the parties were not required to use prefiled direct testimony of their witnesses but were permitted to present oral direct testimony. Both of them did so (although the Staff elected to file prepared testimony for one of its witnesses, Mr. R. Joseph DelMedico, ff. Tr. 659,[2] and Dr. Ben-Haim elected to have his own prepared statement bound into the record as if read, ff. Tr. 786). All parties were required to prefile the statements of qualifications for each of their expert witnesses. Memorandum and Order (Schedules for Proceeding), dated March 2, 1998; Memorandum and Order (Telephone Conference, May 12, 1998), dated May 13, 1998.

In support of its Order, the Staff presented the testimony of nine individuals: (1) Richard Gibson, Jr., the NRC Staff inspector who had conducted an inspection of NMA in January 1997 (Qualifications, ff. Tr. 73); (2) John D. Kinneman, Chief of Nuclear Materials Safety Branch 2, Region I (Qualifications, ff. Tr. 75); (3) Dr. Barry Siegel, Professor of Radiology and Medicine/Director,

[2] Citations to transcripts of the evidentiary hearing reflect corrected versions of those transcripts.

Division of Nuclear Medicine, Mallinckrodt Institute of Radiology, Washington University School of Medicine (Qualifications, ff. Tr. 358); (4) Ernest P. Wilson, Senior Special Agent, Office of Investigations, Region I (Qualifications, ff. Tr. 516); (5) William J. Davis, Special Agent, Office of Investigations, Region I (Qualifications, ff. Tr. 540); (6) Dr. Gerard W. Moskowitz, the individual listed on NMA's license as the Radiation Safety Officer (RSO) and Authorized User (Qualifications, ff. Tr. 215); (7) Lubica Smoligova, an MRI technologist who ordered radiopharmaceuticals for NMA; (8) Marina Geylikman, a nuclear medical technologist who performed bone scans for NMA; and (9) R. Joseph DelMedico, Senior Enforcement Specialist, Office of Enforcement (OE) (Qualifications, ff. Tr. 659).

Dr. Ben-Haim presented himself as a witness (Qualifications, B-H Exhs. 5-11). In addition, witnesses Marina Geylikman, Lubica Smoligova, and Dr. Moskowitz had been designated as witnesses for both Dr. Ben-Haim and the Staff. *See* Memorandum and Order (Telephone Conference, May 12, 1998), dated May 13, 1998, at 3.

D. The Licensee, Newark Medical Associates

As of the date of hearing in this matter, Newark Medical Associates (NMA) was the holder of an NRC byproduct materials license issued on September 25, 1996. Tr. 77 (Gibson); Staff Exh. 1 (NRC Materials License No. 29-30282-01).[3] The license authorized the possession and use of byproduct material for imaging and localization procedures conducted at NMA's facility located at 810 Broad Street, Newark, New Jersey 07102. Staff Exh. 1.

NMA's President, Dr. Magdy Elamir, signed NMA's February 21, 1996 application for its NRC license. Staff Exh. 2 (NRC Form 313, Application for Material License, dated February 21, 1996); Tr. 80 (Gibson). The license listed Gerard W. Moskowitz, M.D., as both the RSO and the Authorized User. Staff Exh. 1, ¶¶ 12, 13; Tr. 78 (Gibson).

E. The NRC Inspection and Subsequent Licensing Actions

Mr. Richard Gibson conducted an inspection of NMA in Newark, New Jersey, in early 1997. It was an initial inspection of a new licensee. Tr. 77 (Gibson). The purpose of the inspection was to assess the Licensee's compliance with the regulations and with the license conditions. Tr. 85 (Gibson). *See also* Staff Exh. 10 (Inspection Report No. 030-34086/97-001, dated September 5, 1997).

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[3] As part of the settlement of a companion case, Dr. Magdy Elamir, President of NMA, agreed that NMA would relinquish and surrender its byproduct materials license to the NRC. *Magdy Elamir, M.D.* (Newark, New Jersey), LBP-98-25, 48 NRC 226 (1998).

Prior to the January 29, 1997 inspection, Mr. Gibson contacted the Licensee and spoke with Dr. Elamir. Mr. Gibson informed Dr. Elamir that he would be conducting an initial inspection and would like to meet with him or the RSO, Dr. Moskowitz. Dr. Ben-Haim met inspector Gibson at the facility, and neither Dr. Elamir nor Dr. Moskowitz was there. Dr. Ben-Haim advised Mr. Gibson that the Licensee normally conducts work on Saturdays and that Dr. Elamir had asked him to meet with Mr. Gibson at the inspection (which took place on a Wednesday). Tr. 86-87 (Gibson).

Following the inspection, Mr. Gibson telephoned Dr. Moskowitz and informed him about the inspection. Mr. Gibson reported that Dr. Moskowitz advised that he was not aware that he was listed as the RSO and Authorized User for NMA; that he was never at that facility; that he had not performed any of the responsibilities of the RSO; and that he had not given his consent to be the RSO and Authorized User for NMA. Tr. 87-88 (Gibson).

A Confirmatory Action Letter (CAL) was issued to NMA on February 6, 1997, following Mr. Gibson's conversation with Dr. Moskowitz. The CAL documents NMA's agreement to immediately discontinue activities with byproduct material until such time as an amendment was filed and granted naming a new RSO and Authorized User. Tr. 89 (Gibson); Staff Exh. 4. The CAL also provided that Dr. Ben-Haim, NMA's consultant, would audit all aspects of the radiation safety program to determine compliance with NRC requirements and conditions of the license. Tr. 96 (Gibson); Staff Exh. 4.

Dr. Ben-Haim responded to the CAL by letter on February 14, 1997, stating that he performed an audit of the setup and operations at NMA. Dr. Ben-Haim, in the letter, further stated that twenty-seven patients had received bone scans, that only Tc-99m MDP single doses of 25 mCi had been ordered for bone scans, and that the date of the first delivery was October 19, 1996. Tr. 96 (Gibson); Staff Exh. 5.

On February 6, 1997, the same day as the CAL had been issued, NMA submitted a license amendment application to change the RSO and Authorized User on the license from Dr. Moskowitz to Dr. Romolo Maurizi. NMA also sought to add Dr. Ricardo Baldonado as an additional Authorized User. Tr. 96-97 (Gibson); Staff Exh. 6. On February 7, 1997, the Staff issued an amended license (Materials License Amendment No. 01), listing Dr. Maurizi as RSO and Authorized User. Tr. 101-02 (Gibson); Staff Exh. 7.[4]

[4] The license amendment did not list Dr. Baldonado as an additional Authorized User inasmuch as Dr. Baldonado was a medical doctor who already was an Authorized User at another facility and could act in that capacity at any facility, so long as the facility license listed at least one Authorized User of its own. Tr. 103 (Kinneman).

F. The OI Investigation

Special Agent Ernest P. Wilson, as part of his duties, conducted an investigation of NMA that originated from an allegation concerning the identification of the RSO and Authorized User at NMA. The case was initiated on February 11, 1997, and the Report of Investigation (OI Report) was issued on July 23, 1997. Tr. 517 (Wilson); Staff Exh. 8 (OI Report, ''Newark Medical Associates, P.A.: False Statement in License Application Concerning the Identification of the RSO and Authorized User,'' dated July 23, 1997). Special Agent William J. Davis assisted in the investigation. Tr. 519 (Wilson), 541 (Davis).

As part of the investigation, many documents were reviewed and individuals interviewed, including Dr. Ben-Haim, Ms. Geylikman, Dr. Moskowitz, and Ms. Smoligova. Tr. 517-19 (Wilson). In the OI Report, which included thirty exhibits, OI concluded that Dr. Elamir and Dr. Ben-Haim both deliberately provided false information to the NRC in NMA's license application and that, after the license issued, NMA operated in deliberate violation of its license. Tr. 522, 537 (Wilson); Staff Exh. 8, at 23.

G. The August 27, 1997 Order

The Staff's Order asserted that from November 1996 through February 6, 1997, Dr. Ben-Haim, in his role as contractor-consultant to the Licensee, NMA, aided and assisted the Licensee in continuing to conduct NRC-licensed activities even though NMA did not employ the Authorized User or the RSO named in the license application and on the NRC license, and the named individual did not serve in these capacities. 62 Fed. Reg. 47,224 (Sept. 8, 1997). The Order stated that Dr. Ben-Haim's actions constituted violations of 10 C.F.R. § 30.10, ''Deliberate misconduct.'' *Id.* at 47,225.

The Order provides that Dr. Ben-Haim violated 10 C.F.R. § 30.10 by two types of conduct: First, Dr. Ben-Haim caused NMA to be in violation of the Commission's requirements by performing the functions of the RSO even though he knew that the RSO on the license application and the license was not Dr. Ben-Haim but, rather, Dr. Gerard Moskowitz (hereinafter, RSO Violation). Second, Dr. Ben-Haim caused NMA to be in violation of the Commission's requirements by prescribing, in writing, the radiopharmaceuticals and dosages to be ordered and administered to patients by technologists for medical uses even though he knew that only Dr. Moskowitz could authorize or delegate the authority to authorize the ordering of byproduct material for medical uses (Authorized User Violation). The Order also provides that Dr. Ben-Haim caused NMA to be in violation of Appendix K of the license, which sets forth requirements regarding the ordering of radiopharmaceuticals. *Id.*

As a result of these actions, the Staff concluded that Dr. Ben-Haim deliberately caused the Licensee to be in violation of NRC requirements. The Staff did not believe that, if Dr. Ben-Haim were permitted to be involved in NRC-licensed activities, reasonable assurance would exist that licensed activities could be conducted in compliance with the Commission's requirements and that the health and safety of the public would be protected. Therefore, the Order concluded that public health, safety, and interest required that Dr. Ben-Haim be prohibited from any involvement in NRC-licensed activities for 5 years. *Id.*

The Order further provides that the prohibition is applicable to Dr. Ben-Haim as an officer, employee, contractor, consultant, or other agent of a licensee and includes, but is not limited to: (1) any use of NRC-licensed materials; (2) supervising licensed activities, including (but not limited to) hiring of individuals engaged in licensed activities or directing or managing individuals engaged in licensed activities; (3) any involvement in radiation safety activities including (but not limited to) functions of an RSO; and (4) development of license applications, procedures and policies to meet license requirements, providing training to meet license requirements, and providing professional services to meet license requirements. 62 Fed. Reg. at 47,225-26.

The Order, among other things, additionally requires Dr. Ben-Haim to notify the NRC within 20 days of engaging in NRC-licensed activities following his 5-year prohibition of the name of the NRC or agreement-state licensee and location where licensed activities will be performed. This notification period runs for 5 years following Dr. Ben-Haim's resumption of licensed activities. *Id.* at 47,226.

H. Common Factual Findings

Several factual findings are common to both of the categories of alleged violations. Principal among these are: (1) Dr. Ben-Haim was a consultant to NMA; (2) Dr. Ben-Haim prepared the license application; (3) Dr. Moskowitz never performed the role of RSO or Authorized User at NMA; and (4) Dr. Ben-Haim knew Dr. Moskowitz was not performing the role of RSO or Authorized User at NMA. The Board, therefore, addresses these findings first.

1. Dr. Ben-Haim was a consultant to NMA. He testified that he was an outside consultant to NMA (Tr. 787, 790), that he had known Dr. Elamir for about a week before becoming a consultant for NMA, and that he had far greater knowledge about nuclear materials than Dr. Elamir. Tr. 850-51.

Dr. Ben-Haim wrote a proposal to Dr. Elamir for his services on February 15, 1996, and delivered it to Dr. Elamir in person. The proposal stated that ''[w]e offer to obtain on your behalf in the shortest possible time your State and Federal Material Licenses'' (with the term ''we'' referring to Dr. Ben-Haim). Tr. 821 (Ben-Haim); Staff Exh. 8, OI Exh. 7 at 1.

The proposal also provided that ''we will install your Hot Laboratory and establish the necessary Radiation Health procedures.'' Tr. 821 (Ben-Haim); Staff Exh. 8, OI Exh. 7 at 1. Dr. Ben-Haim verified that the proposal stated that ''we will prepare for State and NRC inspections,'' and ''[w]e will assure continuous monitoring of the Laboratory in compliance with the regulations of the Nuclear Regulatory Commission.'' Tr. 822; Staff Exh. 8, OI Exh. 7 at 1.

The proposal also provides that:

> We will train your staff, assist you in staffing requirements, perform all equipment tests, such as Dose Calibrator constancy, accuracy, and linearity, assure that proper procedures are used in the handling of radioactive material, etc.

Staff Exh. 8, OI Exh. 7 at 1; Tr. 822 (Ben-Haim). Significantly, the proposal did not offer to obtain the services of an RSO or Authorized User for NMA but only to ''assist you in staffing requirements.''

On February 20, 1996, Dr. Ben-Haim and Dr. Elamir entered into a contract that provided, among other things, for Dr. Ben-Haim to supervise the NMA staff ''in all aspects related to the safe use of radioisotopes'' and to prepare NMA's NRC license. Staff Exh. 8, OI Exh. 7 at 2.

Based on the foregoing evidence, we find that Dr. Ben-Haim was NMA's consultant for the preparation of NMA's materials license and for ensuring the safe use of radioactive material and compliance with the Commission's requirements. We also find that Dr. Ben-Haim held himself out to be well versed in the Commission's requirements and that he knew specifically that Dr. Elamir did not have extensive knowledge in this area. Indeed, Dr. Ben-Haim's knowledge of the safe use of radioactive materials and understanding of the Commission's requirements were instrumental in his securing the consultantship with NMA.

2. Dr. Ben-Haim prepared the NRC license application for NMA. Tr. 820, 823 (Ben-Haim); *see* Staff Exh. S-2. He testified that he is familiar with Form 313, Application for Materials License, that it is a one-page form, and that he filled out such a form for NMA. He also indicated that he prepared the supplemental pages that go with the form. Tr. 823-24 (Ben-Haim).

Dr. Ben-Haim acknowledged that the RSO and Authorized User in the license application was Dr. Moskowitz and only Dr. Moskowitz. Tr. 826. *See* Staff Exh. 2. Dr. Ben-Haim's testimony in this regard is consistent with that of Special Agent Wilson, who testified that Dr. Ben-Haim told the OI investigators that he prepared the application and all the correspondence and required paperwork that needed to be submitted to the NRC. Tr. 527 (Wilson); *see also* Staff Exh. 8, OI Exh. 22 (interview of Dr. Ben-Haim). We reiterate that, as we previously found, the license issued to NMA to possess byproduct material provided that the RSO and Authorized User was Gerard W. Moskowitz, M.D. Staff Exh. 1.

Dr. Ben-Haim was experienced in preparing NRC materials license applications. He testified that he had experience with the NRC's regulations and considers them important in his consultant work; that he had experience in preparing NRC license applications; that he prepared five or so license applications before preparing NMA's application; and that he knows what needs to go into an NRC license application. Tr. 820-22 (Ben-Haim). He further testified that he makes it a practice to know the regulations and knew a licensee must have an RSO and an Authorized User. Tr. 823 (Ben-Haim).

Dr. Ben-Haim knew he could not be NMA's RSO. On May 3, 1995, NRC Region I sent a letter to Dr. Ben-Haim, owner of Servicing Imaging Systems International, in response to an application for a byproduct materials license. Tr. 281 (Kinneman); Staff Exh. 11. The letter stated that the submitted qualifications of Dr. Ben-Haim did not appear to satisfy the regulatory requirements at 10 C.F.R. § 35.900 for him to be an RSO. The letter concludes: ''Please submit evidence that Dr. Ben-Haim has completed the required training and experience. If Dr. Ben-Haim has not, we recommend that you withdraw your request and reapply at a later date when a sufficient number of hours has been obtained.'' Tr. 282 (Kinneman), Staff Exh. 11.

Mr. Kinneman testified that the Staff searched for files to assess whether Dr. Ben-Haim had provided additional information and could not find any. As a result of the search, the Staff concluded that Dr. Ben-Haim had not submitted information that indicated that he meets the RSO requirements of 10 C.F.R. § 35.900. Tr. 284-85 (Kinneman).

Based on the foregoing evidence, we find that Dr. Ben-Haim was experienced in preparing NRC license applications and prepared NMA's license application, including the supplemental information. The application provided that the RSO and Authorized User was Dr. Moskowitz and the license, which was based on the application, so specified. It is clear that Dr. Ben-Haim knew that Dr. Moskowitz was NMA's only named RSO and Authorized User. Further, Dr. Ben-Haim knew that he could not be NMA's RSO because the NRC had found his 1995 application to be an RSO to be deficient.

3. Dr. Moskowitz never performed the role of RSO or Authorized User at NMA. He testified that he did not know anything about NMA until February 6, 1997, when Mr. Gibson contacted him and he became aware that his name had been used in NMA's license application and subsequently on the license. Tr. 216, 223-24, 257 (Moskowitz); *see* Tr. 88 (Gibson). Dr. Moskowitz asserted that he was very concerned when contacted by Mr. Gibson and, in fact, that he was ''horrified about the whole thing.'' Tr. 225. ''It's like someone taking my medical license, putting it on their wall, practicing medicine with my name and my license . . . .'' Tr. 224-25 (Moskowitz). When asked whether he ever delegated to Dr. Ben-Haim the duties of RSO and Authorized User at NMA,

Dr. Moskowitz stated, ''I never delegated that kind of responsibility to anyone.'' Tr. 217.

In response to questions posed by Dr. Ben-Haim, Dr. Moskowitz asserted:

> I was never invited to come see your facility, I was never told where your facility was, . . . I was never shown a full-fledged application that was submitted to the NRC. I was never told that you had received a license. I was never invited to come over. Tr. 226.
>
> At no time have you ever notified me . . . that I did not appear. You never invited me, you never sent me a letter stating that I was in any way associated with the medical facility. Tr. 259.

Dr. Moskowitz's testimony in this regard is supported by all the witnesses that testified on this subject, except Dr. Ben-Haim. Mr. Wilson conducted two interviews of Dr. Moskowitz (on March 6 and April 22, 1997) as part of the OI investigation. Tr. 521-23 (Wilson). At the first interview, conducted in Dr. Moskowitz's office at the University of Medicine and Dentistry of New Jersey (UMDNJ), Dr. Moskowitz told Mr. Wilson that he had absolutely no affiliation with NMA, did not know Dr. Elamir, had never been to NMA, and did not have anything to do with NMA at all. Tr. 523. Dr. Moskowitz also provided a sworn statement to OI, which became part of Exhibit 15 to the OI report. Tr. 524 (Wilson). *See* Staff Exh. 8, OI Exh. 15. Dr. Moskowitz's sworn statement provides, in pertinent part:

> I have absolutely no affiliation to Newark Medical Associates (NMA), Newark, NJ, and never have. I never met Dr. Magdy Elamir, M.D., any technicians that work at NMA, or any consultants to NMA. I have never visited the NMA for any purpose and, to my recollection, was never aware that NMA or Dr. Elamir had used my name as an RSO or Authorized User (AU) on the NRC license application or the license itself, since the issue was made known to me by Mr. Gibson of the NRC on or about 2/6/97.

Staff Exh. 8, OI Exh. 15 at 3.

Ms. Smoligova had been employed as an MRI technician for Dr. Elamir at Newark Open MRI from June 1996 and ordered radiopharmaceuticals for NMA. Tr. 124-25 (Smoligova). She testified that she did not know who Dr. Moskowitz was, that she never heard of Dr. Moskowitz, and that she never saw him. Further, that she did not know who the RSO and Authorized User for NMA were. Tr. 126. *See also* Tr. 535, 619 (Wilson); Staff Exh. 8, OI Exh. 27.

Ms. Geylikman worked as a nuclear medical technologist at NMA on Saturdays. Tr. 176; *see* Staff Exh. 8, OI Exh. 26. She testified that she never met Dr. Moskowitz and did not know who the Authorized User for NMA was. Tr. 178. She had heard Dr. Ben-Haim mention Dr. Moskowitz's name but did not remember anything that he said about Dr. Moskowitz or the purpose for which his name was mentioned. Tr. 186-87.

Ms. Geylikman's testimony in this regard differs somewhat from that of Special Agent Wilson. Mr. Wilson interviewed Ms. Geylikman at Harlem Hospital in the Nuclear Medicine Department. He asked her about Dr. Moskowitz, and she replied that she did not know who Dr. Moskowitz was and further stated that she knew the name but only because of the NRC inspection. Tr. 531, 532 (Wilson).

When Ms. Geylikman was asked whether she told OI that she only knew of Dr. Moskowitz as a result of NRC's inspection, she stated, ''It might be, I just don't remember right now. But then I start to think and maybe I heard his name before, just once, like this.'' Tr. 184-85. The Board considers that regardless of whether Ms. Geylikman heard Dr. Moskowitz's name mentioned prior to the NRC inspection, it is clear that she did not see him at NMA or consider him to be NMA's RSO or Authorized User.

Based on the foregoing evidence, we find that Dr. Moskowitz did not perform the role of RSO or Authorized User at NMA. Further, we find that Dr. Moskowitz did not delegate the duties of the RSO or Authorized User to Dr. Ben-Haim or any other person.

4. Dr. Ben-Haim knew Dr. Moskowitz was not performing the role of RSO or Authorized User. The Staff argued that Dr. Ben-Haim knew that Dr. Moskowitz was not performing the role of RSO or Authorized User because at no time did Dr. Ben-Haim see Dr. Moskowitz at NMA or have any communication with Dr. Moskowitz. Further, the Staff argued that Dr. Ben-Haim was aware that an essential record at NMA had not been reviewed by Dr. Moskowitz. Dr. Ben-Haim argued in defense that he met with Dr. Moskowitz at UMDNJ prior to listing him on NMA's license application, that he was candid at the NRC inspection, and that Dr. Elamir provided assurances to him regarding Dr. Ben-Haim's expressed concerns that Dr. Moskowitz had not been to NMA.

Concerning a meeting with Dr. Moskowitz, Dr. Ben-Haim testified that he saw Dr. Moskowitz on February 16, 1996, at UMDNJ, and that Dr. Moskowitz gave him his curriculum vitae (CV) and other papers in order to be included in NMA's license application as the Authorized User and RSO. Ben-Haim, ff. Tr. 786, at 1; Tr. 797, 809 (Ben-Haim). Dr. Ben-Haim testified that he phoned Dr. Moskowitz using the phone number provided by Dr. Elamir, spoke with Dr. Moskowitz, and made an appointment for February 16, 1996, at 10:30 a.m. in his office in the Nuclear Medicine Laboratory H141, at UMDNJ. Ben-Haim, ff. Tr. 786, at 1; Tr. 788 (Ben-Haim). Dr. Ben-Haim testified that ''there was no other purpose to my visit than to receive from Dr. Moskowitz these papers.'' Ben-Haim, ff. Tr. 786, at 1; Tr. 789, 797. Dr. Ben-Haim testified that receipt of Dr. Moskowitz's papers is ''a proof of his consent'' to being named as the RSO and Authorized User in NMA's application for a materials license. Ben-Haim, ff. Tr. 786, at 5. Dr. Ben-Haim indicated that no other person participated in the meeting, although an unidentified individual may have been present. Tr. 828.

Dr. Ben-Haim admitted that Dr. Moskowitz did not specifically say that he wanted to be included in the application as the Authorized User and RSO. Tr. 795, 829-30. ''He didn't say, 'I will be the RSO.' . . . We were talking about scans and he said, 'I'm going to read the bone scans.' '' Tr. 795. Dr. Ben-Haim testified that he equated the reader of the scans with the Authorized User. Tr. 854. However, when asked, ''Other than handing you the CV, did he imply in any way, by words or body language, 'Yes, I will be the RSO'?'' Dr. Ben-Haim answered, ''No.'' Tr. 854.

Dr. Ben-Haim testified regarding his March 7, 1997 interview with OI, in which the agents questioned him about his meeting with Dr. Moskowitz. At that interview, Dr. Ben-Haim could not remember the date of his meeting with Dr. Moskowitz. Ben-Haim, ff. Tr. 786, at 3. When asked if he had an appointment book, Dr. Ben-Haim stated that he took out his diary and came back to the two inspectors. He looked through the book in their presence and saw the entry on February 16, 1996. Ben-Haim, ff. Tr. 786, at 3; Tr. 800. *See also* Ben-Haim Exh. 1 (excerpt from Dr. Ben-Haim's diary). Dr. Ben-Haim, however, could not recall if anybody saw him write the note. Tr. 830.

Dr. Ben-Haim's testimony is generally consistent with that of Special Agent Wilson. Mr. Wilson interviewed Dr. Ben-Haim at his residence in Upper Montclair, New Jersey. Tr. 527 (Wilson); *see* Staff Exh. 8, OI Exh. 22. Dr. Ben-Haim told Mr. Wilson that Dr. Elamir said that a Dr. Moskowitz of UMDNJ had expressed interest in doing outside work and, therefore, Dr. Moskowitz would serve as the RSO and Authorized User. Tr. 527 (Wilson). Dr. Ben-Haim told Mr. Wilson that he met with Dr. Moskowitz after calling and making an appointment with him. Tr. 528 (Wilson). Mr. Wilson testified that Dr. Ben-Haim retrieved a daily planner which had an entry for February 16, 1996, that read, ''H-141, Dr. Moskowitz 10:30, 982-6022.'' Tr. 528, 554 (Wilson); *see* B-H Exh. 1.

Dr. Moskowitz did not recall ever meeting Aharon Ben-Haim until the day of the hearing. Tr. 216-17 (Moskowitz). Upon cross-examination by Dr. Ben-Haim (Tr. 217-27), when asked ''And you've never seen me?'', Dr. Moskowitz asserted, ''[a]s far as I was concerned, the only time I've ever seen you is today.'' Tr. 217. Dr. Moskowitz did not recall giving his CV and papers to anyone or remember an Israeli coming and meeting with him. Tr. 220-21 (Moskowitz).

When asked specifically about his recollection of February 16, 1996, Dr. Moskowitz stated that he ''would not have met somebody for an *extended* period of time to discuss anything on that Friday'' because that was President's Day weekend, and he was going away and, therefore, Friday was a precious time to complete all the work he had to do. Tr. 217-18 (emphasis supplied).

When asked regarding a statement Dr. Moskowitz made to OI that there was less than a 1% chance that he may have met with Dr. Ben-Haim at UMDNJ, Dr. Moskowitz clarified that his statement was made in the context that Dr.

Moskowitz may have met Dr. Ben-Haim at ''another conference somewhere else in the hospital,'' but not in the context of negotiating a position as an RSO. Tr. 220, 222; *see* Staff Exh. 8, OI Exh. 16 (''Moskowitz allowed that there was less than a 1% chance that he may have met with [Dr.] Ben-Haim at UMDNJ''). Dr. Moskowitz testified that the only face he could conceive of meeting was different from Dr. Ben-Haim's. Tr. 231. Dr. Moskowitz stated that Dr. Ben-Haim has a ''unique sort of facial appearance'' and that Dr. Moskowitz should have remembered if he had seen him. Dr. Moskowitz conceded, however, that under the pressure of a rushed Friday, he may have given Dr. Ben-Haim a CV. Tr. 243.

Dr. Moskowitz did state that Dr. Baker of the UMDNJ might have given out his qualifications to a group with whom Dr. Baker, the Chairman of the Department of Radiology, was negotiating. Tr. 223. Dr. Moskowitz explained that Dr. Baker and his coordinator had his CV and they had given it out to different places for different purposes. Tr. 222. Dr. Moskowitz testified that he did not know very much about the negotiations and was not privy to them. Tr. 225. Dr. Moskowitz's testimony is consistent with Mr. Wilson's: Mr. Wilson testified that Dr. Moskowitz told the investigators that Dr. Baker would typically hand out his CV. Tr. 524, 599. Thus, NMA could have received Dr. Moskowitz's CV without Dr. Ben-Haim's having obtained it from Dr. Moskowitz. Dr. Moskowitz, however, did state that it is possible that he gave Dr. Ben-Haim his CV, although he does not recall. Tr. 232, 238-39, 243.

Dr. Moskowitz's testimony is generally consistent with that of Special Agent Wilson. Mr. Wilson and Mr. Davis interviewed Dr. Moskowitz a second time after OI interviewed Dr. Ben-Haim in order to confront him regarding the meeting that Dr. Ben-Haim spoke of. Tr. 525 (Wilson); *see* Staff Exh. 8, OI Exh. 16. Mr. Wilson testified that Dr. Moskowitz had no recollection that a meeting took place or of having provided his CV to Dr. Ben-Haim. Tr. 525. Dr. Moskowitz told the OI investigators that, if he had been contacted by Dr. Ben-Haim, he would have contacted Dr. Baker and made a note of the occurrence, because Dr. Baker could conduct negotiations for the university and not Dr. Moskowitz. Tr. 525-26. Dr. Moskowitz looked for documents relative to such a notation and did not find any. Tr. 526. Mr. Wilson testified that Dr. Moskowitz was ''very adamant'' that he had not met with Dr. Ben-Haim, but he did allow that there was less than a 1% chance that he may have met Dr. Ben-Haim at UMDNJ. ''[H]e highly doubted it.'' Tr. 526 (Wilson).

Mr. Wilson testified that the Office of Investigations believed Dr. Moskowitz instead of Dr. Ben-Haim regarding the meeting because Dr. Moskowitz had no vested interest in the outcome. Tr. 538; *see* Staff Exh. 8 at 22. Mr. Wilson clarified that Dr. Moskowitz was not a subject or target of the investigation. Tr. 559, 639 (Wilson). Mr. Wilson opined that there was no potential for Dr. Moskowitz to have gained financially regarding the resolution of whether he met

with Dr. Ben-Haim. Mr. Wilson was not aware of any threat to Dr. Moskowitz that would be removed if the issue were resolved in his favor. Tr. 639 (Wilson).

Mr. Wilson added that Dr. Moskowitz was ''antagonized that someone had used his name'' and that Dr. Moskowitz felt like a victim and wanted answers. Tr. 597. When asked if that showed some vested interest, Mr. Wilson said, ''a little bit.'' *Id.*

Based on the above evidence, the Board is convinced that at no time prior to speaking with Inspector Gibson was Dr. Moskowitz aware that he was listed on either NMA's license or license application as the RSO or Authorized User. Regarding Dr. Ben-Haim's defense that he met Dr. Moskowitz at UMDNJ for the purpose of having Dr. Moskowitz listed on NMA's license application, however, we find that Dr. Ben-Haim did indeed travel to the UMDNJ, at the request of Dr. Elamir, to obtain Dr. Moskowitz's CV, but that at no time did Dr. Ben-Haim and Dr. Moskowitz discuss proposed service as an RSO or Authorized User. Our finding is based chiefly on the testimony of Dr. Ben-Haim, the copy of Dr. Ben-Haim's calendar in which he made a notation in the space for February 16, 1996, regarding a meeting with Dr. Moskowitz at UMDNJ (B-H Exh. 1), together with our evaluation that Dr. Moskowitz had a motive for not remembering the alleged meeting: his position at UMDNJ was in danger and he did not want to get involved in a potential regulatory violation.

We disagree with the Office of Investigations' analysis that Dr. Moskowitz is more credible than Dr. Ben-Haim regarding the purported meeting. It is clear, as the Staff asserts (Staff Proposed Findings ¶72, at 21) that Dr. Ben-Haim had a vested interest in stating that he met with Dr. Moskowitz that is evidenced by these very proceedings. That is, Dr. Ben-Haim knew that, as the preparer of NMA's license application, he might be subject to some action if the license application were prepared fraudulently. On the other hand, Dr. Moskowitz, although concerned that someone had used his name improperly and desirous of having the matter set straight (as claimed by the Staff in Proposed Findings ¶72, at 21), knew it was against UMDNJ policy for him to be negotiating for extracurricular services and did not want to be connected with service for another organization, particularly one with alleged regulatory violations, without following proper UMDNJ channels. Indeed, Dr. Moskowitz admitted, at the time of the hearing, that he had not had tenure at UMDNJ and was not at that institution any longer. Tr. 243.

Although we are finding that a meeting between Dr. Moskowitz and Dr. Ben-Haim did take place, we also find, as the Staff observes (Staff FOF ¶75, at 21-22), that the most that took place at the meeting was Dr. Moskowitz's handing his CV to Dr. Ben-Haim. As recounted by Dr. Ben-Haim (Tr. 795), Dr. Moskowitz did not say that he would be the RSO or Authorized User on NMA's license. In fact, Dr. Ben-Haim admitted that, other than handing him the CV, Dr. Moskowitz did not imply in any way that he would be the RSO,

although he did equate Dr. Moskowitz's statement that he would read the scans with being the Authorized User. We find that the receipt of the CV and Dr. Moskowitz's statement that he would interpret the scans is an inadequate basis for Dr. Ben-Haim to conclude that Dr. Moskowitz would serve either as RSO or Authorized User for NMA.

Regarding Dr. Ben-Haim's defense concerning his attitude during the inspection, Mr. Gibson testified that he asked Dr. Ben-Haim about Dr. Elamir and Dr. Moskowitz's absence, and Dr. Ben-Haim informed him that the Licensee normally conducted work on Saturday and that Dr. Elamir had requested him to be at the inspection. Tr. 87. Mr. Gibson asked Dr. Ben-Haim if Dr. Moskowitz was ever at NMA, and Dr. Ben-Haim informed him that he did not know if Dr. Moskowitz was ever there. Tr. 87 (Gibson). In that connection, however, Dr. Ben-Haim maintained that he was never at the facility on Saturdays, when all nuclear work was performed, and thus did not know whether Dr. Moskowitz was there or not. Tr. 790 (Ben-Haim).

On the day of the inspection, about an hour prior to the inspection, Dr. Elamir asked Dr. Ben-Haim to be present. Ben-Haim, ff. Tr. 786, at 2. When Mr. Gibson asked him who the RSO was, Dr. Ben-Haim advised ''without any hesitation'' that it was Dr. Moskowitz. *Id.* Dr. Ben-Haim was not aware that Mr. Gibson had specifically asked for the RSO to be present at the inspection. Ben-Haim, ff. Tr. 786, at 4.

We do not consider Dr. Ben-Haim's statement to Mr. Gibson that Dr. Moskowitz was the RSO to be of much assistance to his defense. The issue is not whether Dr. Ben-Haim knew that Dr. Moskowitz was the RSO named on the license but, rather, whether Dr. Ben-Haim knew that Dr. Moskowitz was not performing his role at NMA.

Dr. Ben-Haim testified that, after NMA's operations started, he was ''convinced that Dr. Elamir was in contact with Dr. Moskowitz and had no way of knowing he was not.'' Tr. 790; *see* Ben-Haim, ff. Tr. 786, at 1-2. However, Dr. Ben-Haim admitted on cross-examination that he never saw Dr. Moskowitz at NMA. Tr. 838, 828-29. As of December 1996, Dr. Ben-Haim knew that Dr. Moskowitz had not been to NMA. Tr. 839 (Ben-Haim). Dr. Ben-Haim further admitted that during the time NMA was in operation he had no communication with Dr. Moskowitz. Tr. 837.

Dr. Ben-Haim was concerned that Dr. Moskowitz had not been to NMA. Tr. 790, 839, 860 (Ben-Haim). Specifically, in his direct testimony, Dr. Ben-Haim stated:

> I hadn't seen any signed — any signature of [Dr. Moskowitz's] in the log book, and I had asked [Dr. Elamir] specifically. I told him actually, 'This has to be signed. He has to review the procedures and I don't see anything.' Dr. Elamir nodded. Our encounters were very brief. So he nodded and said, 'Okay, okay.'

Tr. 790. Further, when asked by the Board whether he thought he ''ought to see that there's an AU that's going to show up,'' Dr. Ben-Haim stated, ''I was concerned about this.'' Tr. 860. Dr. Ben-Haim admitted that he expected to see some tangible evidence that an Authorized User and RSO had been to NMA. Tr. 861.

As part of his defense, Dr. Ben-Haim testified that in August 1996 he prepared a form regarding dose calibrator geometry correction for the Victoreen Dose Calibrator. Tr. 833. He indicated that he signed the form as the one who performed the calibration and that he left a place open for the RSO to sign. Tr. 834. Dr. Ben-Haim added that the form actually shows the word ''RSO'' at the signature line, and Dr. Moskowitz did not sign it. Tr. 834-35. Dr. Ben-Haim admitted that he knew that Dr. Moskowitz had not signed the form. Tr. 838. *See* Ben-Haim Exh. 4.

Dr. Ben-Haim testified that when he told Dr. Elamir that the procedures needed to be reviewed by an RSO, Dr. Elamir told him, ''I have somebody else.'' Tr. 862. When questioned by the Board as to why Dr. Ben-Haim did not advise Dr. Elamir that NMA needed a license amendment, Dr. Ben-Haim testified, ''Somehow it did not click.'' Tr. 862. Dr. Ben-Haim's testimony differs from what he said at his deposition. On cross-examination, Dr. Ben-Haim admitted that during his deposition he had said he asked Dr. Elamir why the RSO had not come in and signed, and that the extent of Dr. Elamir's response was merely to nod. Tr. 891-92.

Dr. Ben-Haim admitted that his only bases for assuming during the time NMA was in operation that Dr. Moskowitz was acting as Authorized User and RSO were (1) that Dr. Elamir told Dr. Ben-Haim that Dr. Moskowitz was the RSO and (2) that Dr. Moskowitz had given Dr. Ben-Haim his CV. Tr. 866.

Dr. Ben-Haim did not follow up to see to it that the RSO and Authorized User were functioning. He admitted, ''I thought, 'Well, it's just the beginning. Let's see how things develop. . . . I don't want to make waves.' '' Tr. 863 (Ben-Haim).

Based on the above evidence, the Board finds that Dr. Ben-Haim knew, at least by December 1996 (*see* Tr. 839 (Ben-Haim)), that Dr. Moskowitz was not performing the role as RSO or Authorized User for NMA. Even though we conclude that a meeting with Dr. Moskowitz took place and Dr. Ben-Haim left that meeting believing that Dr. Moskowitz would be NMA's RSO and Authorized User, the Board rejects all inferences that Dr. Ben-Haim adhered to his belief that Dr. Moskowitz was acting as the RSO and Authorized User up until the NRC's inspection. We find it incredible that Dr. Ben-Haim, who saw no evidence that Dr. Moskowitz had been to NMA, who had no communication with Dr. Moskowitz, and who knew that an essential record had not been reviewed by Dr. Moskowitz, did not conclude that Dr. Moskowitz was not serving as NMA's RSO and Authorized User.

Dr. Ben-Haim's admitted concern that Dr. Moskowitz had not been to NMA, and his conveyance of that concern to Dr. Elamir demonstrates that Dr. Ben-Haim knew, at least by December 1996, that something was wrong regarding Dr. Moskowitz's fulfilling any of the required duties of the RSO. Dr. Elamir's purported response that he had ''someone else'' simply reinforces this conclusion. Thus, Dr. Ben-Haim clearly knew by December 1996 that Dr. Moskowitz was not acting as RSO and Authorized User.

5. Summary of Common Findings. In summary, we conclude the following: (1) Dr. Ben-Haim was NMA's consultant for the preparation of NMA's materials license application and for ensuring the safe use of radioactive material and compliance with the Commission's requirements; (2) Dr. Ben-Haim knew that Dr. Moskowitz was named in the license application and on the license as NMA's only RSO and Authorized User; (3) Dr. Moskowitz did not perform the role of RSO or Authorized User at NMA and did not delegate the duties of the RSO or Authorized User to Dr. Ben-Haim; and (4) Dr. Ben-Haim knew, at least by December 1996, that Dr. Moskowitz was not performing the role of RSO and Authorized User for NMA.

I. The RSO Violation

1. NRC Requirements

The Order states that Dr. Ben-Haim violated 10 C.F.R. § 30.10 by causing NMA to be in violation of 10 C.F.R. §§ 35.21, 35.13 and NMA License Condition 12. These requirements were presented and explained by Mr. Kinneman, Mr. DelMedico, and Dr. Siegel. Dr. Siegel was offered by the Staff as an expert witness. Tr. 356-57. We find Dr. Siegel qualified to testify as an expert regarding medical facilities that use nuclear material, such as NMA, and as an expert regarding application of the NRC's regulations.

Under 10 C.F.R. § 30.10, a contractor to a licensee may not knowingly cause the licensee to be in violation of any Commission requirement. Tr. 486 (Kinneman). Specifically, 10 C.F.R. § 30.10 provides that any contractor, including a supplier or consultant, who knowingly provides to any licensee information or other things, may not engage in deliberate misconduct that causes or would have caused, if not detected, the licensee to be in violation of any rule, regulation, or order, or any term, condition, or limitation of any license issued by the Commission. Tr. 480, 481 (Kinneman).

Deliberate misconduct by a person means an intentional act or omission that the person knows would cause a licensee to be in violation of any rule,

regulation, or order, or any term, condition, or limitation of any license issued by the Commission. Tr. 480-81 (Kinneman); 10 C.F.R. § 30.10(c)(1). In this regard, Mr. DelMedico testified that deliberately is the same as intentional. Tr. 750. A question was raised regarding whether a finding of careless disregard of requirements, as discussed in NUREG-1600, could also apply in this case. Tr. 701-02. Mr. DelMedico answered that a violation of 10 C.F.R. § 30.10, as alleged here, requires a finding of deliberate misconduct and that careless disregard is not a violation of 10 C.F.R. § 30.10. Tr. 702-04, 776.

Under 10 C.F.R. § 35.21, a licensee must appoint an RSO who meets the specific responsibilities spelled out therein. Tr. 279 (Kinneman). These duties include: investigating overexposures, accidents, spills, losses, thefts; establishing and collecting in one binder (or file) written policies and procedures for authorizing the purchase of radioactive material; receiving and opening packages; storing byproduct material; keeping an inventory; using byproduct material safely; taking emergency action if control of byproduct material is lost; performing periodic radiation surveys; performing checks of survey instrumentation; disposing of byproduct material; and training staff who work or frequent areas where byproduct material is used and stored. Tr. 280 (Kinneman); 10 C.F.R. § 35.21(b).

An RSO can instruct someone else to carry out the physical actions described in 10 C.F.R. § 35.21, but the RSO may not delegate the responsibility for ensuring that they are carried out. Tr. 279-80 (Kinneman); *see* 10 C.F.R. § 35.21(a) (''The licensee, through the [RSO], shall ensure that radiation safety activities are being performed in accordance with . . . regulatory requirements''). Neither may the RSO delegate the performance of assessments that the RSO is expected by virtue of training and experience to perform. Tr. 280 (Kinneman).

In the case of a medical facility, the individual in whom the responsibility for ordering byproduct material is embodied is the RSO. The RSO has the authority to delegate that responsibility to an individual working under the RSO's direction and supervision. The delegation is usually accomplished by a memorandum of delegation. Tr. 368-69 (Siegel).

Many of the activities of the RSO are carried out by a physicist or other consultant; however, in order for that to happen, the RSO must be active and must delegate those duties to the physicist or other person who carries them out. Tr. 290 (Kinneman).

Section 35.13(c) of the Commission's regulations provides that a licensee shall apply for and must receive a license amendment before it changes RSOs. 10 C.F.R. § 35.13(c). As previously noted, License Condition 12 of NMA's license states that the RSO for this license is Dr. Moskowitz. Staff Exh. 1.

The Board finds that Dr. Ben-Haim's actions would constitute a violation of 10 C.F.R. § 30.10 if he deliberately caused NMA to fail to appoint an RSO and have the RSO perform the duties delineated in 10 C.F.R. § 35.21. In addition,

Dr. Ben-Haim would be in violation of 10 C.F.R. § 30.10 if he deliberately caused NMA to change RSOs without a license amendment. Finally, Dr. Ben-Haim would be in violation of 10 C.F.R. § 30.10 if he deliberately caused NMA to operate without Dr. Moskowitz as RSO. Thus, we find that NMA would be in violation of all three requirements if Dr. Ben-Haim performed the functions of the RSO without the delegation of the requisite authority by Dr. Moskowitz.

2. Staff Claims

The Staff claims that Dr. Ben-Haim performed the functions of the RSO and admitted to OI that he was the de facto RSO. This occurred during a second interview of Dr. Ben-Haim by Special Agent Davis at NMA on April 22, 1997, during which Dr. Ben-Haim discussed the role of the RSO, among other things. Tr. 549 (Davis); *see* Staff Exh. 8, OI Exh. 23 (OI interview of Dr. Ben-Haim).

The purpose of the second interview was to compare the doses of technetium-99m that were sent to NMA from Medi-Physics with the individual patient records. Tr. 542 (Davis). Dr. Ben-Haim went over the records with Mr. Davis and thoroughly explained what happens from the time a physician requests a bone scan until the time the procedure is performed. Tr. 543-44 (Davis).

During the conversation, Mr. Davis mentioned the RSO and the tone of the conversation changed: Dr. Ben-Haim questioned the reasons for OI's many interviews. Tr. 545 (Davis). Dr. Ben-Haim stated to Mr. Davis, ''So I might have made some mistakes . . . I was here at NMA when I was needed, I set it all up, this was just one job, I have many other things to do.'' Tr. 546 (Davis). Mr. Davis testified that Dr. Ben-Haim informed him about the role of the RSO and additionally remarked that he was the de facto RSO. Tr. 549, 550 (Davis). Mr. Davis was absolutely certain that ''Dr. Ben-Haim stated that in doing his work at NMA that he was the de facto RSO.'' Tr. 549, 550 (Davis). At the end of the interview, Dr. Ben-Haim repeated that one of his mistakes was ''acting as the de facto RSO.'' Tr. 550, 580 (Davis).

Mr. Davis acknowledged on cross-examination that this was his first assignment at NRC's Region I OI office, and that a lot of things were new to him; however, he did not believe it was possible that he confused what was said. Tr. 564-65. He ''remembered specifically'' that Dr. Ben-Haim told him that he acted as the RSO for NMA. Tr. 578-79. Mr. Davis testified that he did not have any preconceptions regarding Dr. Ben-Haim's role at NMA before the second interview. Tr. 584.

Further, Dr. Ben-Haim told Mr. Davis that he should have been the RSO; that he had applied to be certified for an RSO but that he was turned down. Tr. 577-78. Mr. Davis understood that to mean that Dr. Ben-Haim should have been the RSO for NMA but was not. Tr. 601 (Davis). In that connection, Dr. Ben-Haim testified that the agent asked why he was not the RSO, and Dr. Ben-Haim replied

that he had applied for another facility and was rejected. ''Therefore, I knew I could not be the RSO and did not apply.'' Tr. 804 (Ben-Haim); Ben-Haim, ff. Tr. 786, at 4.

Dr. Ben-Haim denied having admitted acting as the de facto RSO for NMA. He testified that he said he was a ''Radiation Safety conscious consultant physicist.'' Tr. 798, 804; Ben-Haim, ff. Tr. 786, at 4. On cross-examination, Dr. Ben-Haim again denied telling Mr. Davis that he was acting as a de facto RSO. He admitted, however, that he told Mr. Davis that there was an overlapping between the RSO and physicist's work and that ''de facto [he was] doing [some of] the things that the RSO could do.'' Tr. 838 (Ben-Haim).

In light of the foregoing evidence, we find that the conversation of April 22, 1997, between Special Agent Davis and Dr. Ben-Haim occurred but incorporated details beyond those reported by Mr. Davis. We could not find in the record any substantial basis for attributing to Mr. Davis any bias that would discredit his testimony. Neither do we find any substantial evidence of confusion on the part of Mr. Davis as to what was said. Therefore, we conclude that Dr. Ben-Haim admitted to OI that he was the de facto RSO for NMA for certain activities.

More important, it appears that Dr. Ben-Haim in fact performed many of the duties of an RSO. He acknowledged that there may have been duties that he performed that may have overlapped with those of the RSO. These duties included ''radiation safety, as far as anything that has to do with instrumentation, mainly the way wipe tests are conducted.'' Tr. 858-59. In addition, these overlapping duties were ''[t]o make sure that nobody has access to a lab and is not exposed unnecessarily, none of the public'' and ''monitoring of the facilities, of the workplace, for the personnel.'' Tr. 859. When asked who was filling the functions of an Authorized User or RSO during the time NMA was in operation, Dr. Ben-Haim stated, ''[t]he overlapping functions that the physicist has to do, I was trying, to the best of my ability, to help with.'' Tr. 877.

Dr. Ben-Haim did perform several other activities at NMA: he performed certain equipment tests, such as the accuracy, constancy, and geometry checks for the dose calibrator (Tr. 815, 831); he found a nuclear technician to work at NMA (Tr. 835); he gave information to Ms. Smoligova regarding where to get technetium-99m and the specific radiopharmaceuticals and millicurie amounts that she should order (Tr. 835, 840-41); he made sure the laboratory had a key and was kept locked (Tr. 836); he made sure the NRC license was posted (Tr. 836); he told NMA personnel to get personal monitoring badges in December 1996 (Tr. 837).

As set forth earlier, as part of his defense, Dr. Ben-Haim testified that he prepared a form for NMA's dose calibrator geometry correction check; that the geometry correction check, which only needed to be performed one time, was prepared prior to the start of NMA's operations; and that Dr. Ben-Haim performed the measurements, prepared the graphs, signed the form, and left the

line blank where the RSO was to sign. Tr. 814-15, 834-35; BH Exh. 4. He did not sign that place of the form. Tr. 822. Dr. Ben-Haim did admit that to do so would have been blatantly false. Tr. 835. He also acknowledged that Dr. Moskowitz had never delegated the authority of the Authorized User or RSO to him. Tr. 826.

Based on the foregoing evidence, the Board finds that Dr. Ben-Haim performed many of the functions of the RSO, even though he knew Dr. Moskowitz had not delegated this authority to him. Dr. Ben-Haim characterized these activities as overlapping functions that a physicist could do as well as the RSO. Dr. Ben-Haim, however, did not receive delegation from Dr. Moskowitz for any activities for which he would need a delegation from the RSO and Dr. Ben-Haim knew, at least by December 1996, that Dr. Moskowitz was not performing the duties of the RSO. By regulation, as explained above, the RSO is responsible for ensuring that these duties are carried out. Therefore, by engaging in activities, which included some functions of the RSO, he facilitated NMA's conducting operations without the involvement of the RSO named on the license.

Dr. Ben-Haim called our attention to the Dose Calibrator Geometry Correction wherein he did not sign as the RSO for NMA. We do not give this evidence much weight in that it tends to prove not that Dr. Ben-Haim did or did not act as the RSO but rather that he knew he was not the RSO. The Staff need not show that Dr. Ben-Haim conducted RSO activities under a false claim that he was the RSO.

We find Dr. Ben-Haim caused NMA to fail to have the duties delineated in 10 C.F.R. § 35.21 performed by the RSO, at least beginning in December 1996. In addition, by acting as the de facto RSO, he caused NMA to change RSOs without the required license amendment. Finally, Dr. Ben-Haim caused NMA to operate without Dr. Moskowitz as RSO.

As noted earlier, Mr. Wilson conducted an OI interview with Marina Geylikman at Harlem Hospital in the Nuclear Medicine Department. Tr. 531. Ms. Geylikman had said her duties at NMA involved receiving deliveries of technetium-99m, performing surveys and wipe tests of the delivery container, and preparing the patients for injection of technetium-99m. Tr. 532. Ms. Geylikman told Mr. Wilson that Dr. Ben-Haim set the procedures for those activities in place and explained them to her. Tr. 532 (Wilson). She described Dr. Ben-Haim as ''her supervisor at [NMA] for the radioisotopes of technetium-99m and how to go about using those.'' Tr. 532, 612 (Wilson).

Mr. Wilson testified that he asked Ms. Geylikman if she knew who the RSO at Harlem Hospital was and she clearly knew who that person was. Tr. 532-33, 612-13. Mr. Wilson testified that Ms. Geylikman likened the RSO's duties at Harlem Hospital to what Dr. Ben-Haim did for NMA. Tr. 533. In case of an emergency, she was told by Dr. Ben-Haim to page him. She added that she had to page Dr. Ben-Haim on several occasions. Tr. 538-39, 613 (Wilson). (Dr.

Ben-Haim, of course, claimed that he was not physically present at the facility on Saturdays, when Ms. Geylikman was performing her services. Tr. 790 (Ben-Haim).) The investigators understood Ms. Geylikman to mean that, if there was a problem regarding any of the procedures that Dr. Ben-Haim established, she would contact Dr. Ben-Haim. Tr. 561 (Wilson). Mr. Wilson testified that the focus of his questions revolved around nuclear medicine procedures — ''in context, she was discussing nuclear medicine procedures put in place by Dr. Ben-Haim, and she said when there were problems encountered, she paged him.'' Tr. 613; *see also* Tr. 591. According to Mr. Wilson, Ms. Geylikman did not state that the problems for which she was to call Dr. Ben-Haim were limited to equipment problems. Tr. 640.

Ms. Geylikman testified that she came to NMA every Saturday when she was needed. Tr. 176. She would perform a wipe test on the package, open the package, and measure the dose for the patient. She testified that the material came already premeasured in a syringe but that she had to measure it before injecting the patient. After injecting the patient, she would perform the scan and develop the film. Tr. 177-78 (Geylikman).

During her testimony, Ms. Geylikman stated that at NMA she considered Dr. Ben-Haim to be ''a supervisor, just regarding this machine.'' Tr. 179. She said that Dr. Ben-Haim instructed her how to operate the machine and that it was the same machine that she had in West Orange where she previously worked with Dr. Ben-Haim. *Id.* Ms. Geylikman testified that no one at NMA explained to her the procedures for the scans because it is a common procedure for each nuclear medicine facility. Tr. 180. When asked if anyone instructed her on the wipe test, Ms. Geylikman replied that Dr. Ben-Haim showed her these things in West Orange, but not at NMA. *Id.* She testified that the forms, likewise, were the same as in West Orange and that she did not need any instruction. Tr. 181.

Ms. Geylikman testified that most of the time she was alone at NMA when she performed her duties. Tr. 191. Ms. Geylikman testified that Dr. Ben-Haim told her to contact him in the event of an emergency — ''if I could not, for example, do the scan, if the machine stopped . . . .'' Tr. 181. She acknowledged, however, that if there were an emergency with a patient, she would have to call a doctor. *Id.* When asked about her statements to OI, she did not recall her response to OI — ''Maybe I just misunderstood [the questions] because Dr. Ben-Haim routinely did this in the West Orange office.'' Tr. 184.

We find that the interview of Ms. Geylikman, as reported by Special Agent Wilson in his testimony and in the OI Report, occurred as Mr. Wilson stated. We could not find in the record any substantial basis for attributing to Mr. Wilson any bias that would discredit his testimony. Neither do we find any substantial evidence of confusion on the part of Mr. Wilson as to what was said. We are somewhat mystified by the inconsistency between what Ms. Geylikman told OI and what she said in her testimony. While the record is devoid of any evidence of

bias on the part of Ms. Geylikman, we find that Ms. Geylikman misunderstood what OI was asking. We, therefore, accept what she testified under oath as the truth regarding her knowledge of Dr. Ben-Haim's activities. Nevertheless, we find nothing in Ms. Geylikman's testimony that would alter our finding that Dr. Ben-Haim performed certain of the functions of the RSO at NMA without a delegation from Dr. Moskowitz, the RSO named on the license.

The essence of Ms. Geylikman's testimony is that Dr. Ben-Haim did not instruct her on performing wipe tests or filling out the forms because Dr. Ben-Haim had instructed her in these matters in a separate facility. We find this inconsistent with Dr. Ben-Haim's own proposal to Dr. Elamir wherein he says he will ''assure continuous monitoring of the laboratory,'' ''train your staff,'' and ''establish the necessary radiation health procedures.'' Further, we find this possibly inconsistent with Dr. Ben-Haim's admission to OI that he was the de facto RSO with respect to some functions and his testimony that he did many of the things the RSO could do. He had identified one such overlapping duty as ''radiation safety . . . mainly wipe tests.'' For these reasons, the preponderance of the evidence leads us to conclude that Dr. Ben-Haim performed certain of the duties of the RSO at NMA without a delegation from Dr. Moskowitz, the RSO named on the license.

3. Staff Analysis

Mr. Kinneman testified that Dr. Ben-Haim's actions caused the Licensee to be in violation of 10 C.F.R. § 35.21. Tr. 280. Mr. Kinneman found it hard to conclude that Dr. Ben-Haim would not have realized in his position as a physicist that there should have been some evidence that the RSO gave Dr. Ben-Haim a delegation of authority and gave him some direction to do those RSO duties. Tr. 293-94. Mr. Kinneman testified that Dr. Ben-Haim was associated with NRC activities over a period of time, was involved with various communications with the NRC over a period of time, was apparently knowledgeable of what was going on at the facility even though not present at all times. Tr. 303. Mr. Kinneman testified that on balance it appeared that Dr. Ben-Haim and Dr. Elamir had or should have had the information they needed to conclude that NMA was not in compliance with the NRC's requirements and yet the activities continued. Tr. 303. According to Mr. Kinneman, Dr. Ben-Haim reasonably should have known that the RSO did not exist because Dr. Ben-Haim did visit on some periodic basis, he had some contact with NMA, he is not unknowledgeable about how licensees operate, and, in fact, he was to advise the Licensee on such matters as compliance with the NRC's regulations. Tr. 336.

The Board adopts the Staff's analysis as stated above, at least with respect to the period from December 1996 on, and concludes that Dr. Ben-Haim's actions in acting as NMA's RSO during the period from December 1996 through early

February 1997 were intentional and, therefore, constituted a violation of 10 C.F.R. § 30.10. In so doing, we emphasize our prior finding that Dr. Ben-Haim, by virtue of his knowledge of the NRC's regulations and the fact that he personally prepared NMA's license application, including the provisions involving the RSO, knew the requirements that he caused NMA to violate.

4. Summary of Findings

In summary, we conclude: (1) Dr. Ben-Haim deliberately brought about the use of licensed material at NMA even though he knew that the RSO named on the NMA license did not perform the duties delineated in 10 C.F.R. § 35.21; (2) Dr. Ben-Haim knew, at least by December 1996, that Dr. Moskowitz, the RSO named on the license, was not functioning as the RSO and that, therefore, a license amendment was required for NMA to continue to operate. Thus, Dr. Ben-Haim deliberately caused NMA to operate without an RSO and without a license amendment to change the RSO; and (3) Dr. Ben-Haim deliberately caused NMA to operate without Dr. Moskowitz as RSO. Specifically, we find that Dr. Ben-Haim deliberately performed certain of the functions of the RSO, even though he knew Dr. Moskowitz had not delegated this authority to him. Therefore, Dr. Ben-Haim violated 10 C.F.R. § 30.10.

J. The Authorized User Violation

1. NRC Requirements

The Order states that Dr. Ben-Haim violated 10 C.F.R. § 30.10 by causing NMA to be in violation of 10 C.F.R. §§ 35.53(c)(3), 35.11(a) and (b), and NMA License Condition 13. These NRC requirements were presented and explained by Mr. Kinneman, Dr. Siegel, and Mr. DelMedico.

Mr. Kinneman testified that 10 C.F.R. § 35.53(c) requires that the Licensee retain a record of the measurement of each dosage, including prescribed dosage, of a photon-emitting radionuclide prior to medical use. Tr. 276; *see* 10 C.F.R § 35.53(a) and (c). The prescribed dosage is defined in 10 C.F.R. § 35.2 and means the quantity of radiopharmaceutical activity as documented in (1) a written directive or (2) the diagnostic clinical procedures manual or in any appropriate record in accordance with the directions of an Authorized User. Tr. 276-77 (Kinneman); 10 C.F.R. § 35.2.

Dr. Siegel testified that Part 35 requires a written directive, or explicit prescription, for two specific circumstances: (1) any time a dose of I-131

exceeding 30 microcuries is to be administered to a patient; and (2) for any therapeutic administration of a radiopharmaceutical. Tr. 360-61, 363.

According to Mr. Kinneman, the diagnostic clinical procedures manual is a collection of written procedures that includes each diagnostic procedure that has been approved by the Authorized User. Tr. 277. Dr. Siegel also testified that the clinical diagnostic procedures manual is a compilation of the procedures performed in a laboratory that contains information about what drug is used for the test, what the dose of the drug is, the route of administration of that drug, and then all of the other details about how the test is performed; how long to wait after injection before imaging; what kind of camera to use; what kind of collimator to use; what specific pictures to take and in what specific sequence. Tr. 361.

Dr. Siegel testified that the NRC regulations require that the Authorized User must be the one who approves the procedures manual. Tr. 362, 363. The Commission's regulations define a diagnostic clinical procedures manual as a ''collection of written procedures that describes each method . . . by which the licensee performs diagnostic clinical procedures; where each diagnostic clinical procedure *has been approved by the authorized user* and includes the radiopharmaceutical, dosage, and route of administration.'' *See* 10 C.F.R. § 35.2 (emphasis added). Dr. Siegel testified that it is not permissible for a physicist who is not a physician to put into effect a diagnostic clinical procedures manual without the approval of the Authorized User. Tr. 370-71.

Thus, a prescribed dosage has to be in a written directive, a diagnostic clinical procedures manual, or in any other written record from the Authorized User. ''The real key is that [it] has to be the authorized user that directs the dosage.'' Tr. 277 (Kinneman). Dr. Siegel likewise testified, ''the ultimate authorization to actually give [a] dose to a patient has to come from the authorized user.'' Tr. 430.

In response to whether it is permissible to administer a diagnostic radiopharmaceutical to a patient without a physician's prescription, Dr. Siegel testified that there is an implicit prescription that underlies the performance of all diagnostic nuclear medicine procedures, that for the vast majority of diagnostic administrations an explicit written prescription is not required, and the directions can range from an oral instruction from the Authorized User to the technologist to reliance on an implicit prescription contained in the clinical diagnostic procedures manual. Tr. 360, 361, 363. Dr. Siegel added that the procedures manual functions as the implicit prescription and that, based on the procedures established in a given laboratory, there may be authorization for the technologists to perform the test in accordance with the procedures manual as if they had received an explicit written prescription from the Authorized User. Tr. 361-62.

Mr. Kinneman testified that ''Authorized User'' is defined in 10 C.F.R. § 35.2 and means a physician, a dentist, or a podiatrist who meets the requirements that

are specified in that regulation. Tr. 277. The regulations in 10 C.F.R. § 35.25 require that an Authorized User must provide supervision of employees or staff that carry out licensed activities. Tr. 287 (Kinneman); 10 C.F.R. § 35.25. The Authorized User may instruct other people to carry out specific tasks, such as the administration of the radioactive material to the patient; however, the Authorized User must provide the supervision that is described in 10 C.F.R. § 35.25. The licensee must require that the supervised individual follow the instructions of the supervising Authorized User. *See* Tr. 287 (Kinneman); 10 C.F.R. § 35.25(a)(2).

Section 35.11(b) of the Commission's regulations provides that an individual may receive, possess, use, or transfer byproduct material in accordance with the regulations under the supervision of an Authorized User as provided in section 35.25, unless prohibited by license condition. An individual is prohibited from these activities except in accordance with a specific license or under the supervision of an Authorized User. 10 C.F.R. § 35.11(a). The Authorized User specifies what the dose to the patient is to be and that the Authorized User must authorize the person to order the radioactive material to be sent to the facility. Tr. 308 (Kinneman). While the RSO could order the material on behalf of the facility, the Authorized User must authorize the ordering of material for use in the patients. Thus, the RSO cannot direct the amount to give to each patient unless he is also the Authorized User. Tr. 310 (Kinneman). Therefore, according to Mr. Kinneman, even if Dr. Ben-Haim were the RSO, he would be precluded from authorizing the ordering of the dosage to give to a patient. Tr. 311.

Dr. Siegel testified that the physician who refers a patient for a diagnostic nuclear medicine procedure is not allowed to prescribe the dosage of radioactive material if the referring physician is not the Authorized User. Further, it would not be ordinary for a referring physician to specify the dose for a diagnostic procedure because the referring physician expects the test to be conducted properly — the dose itself is not something the referring physician is concerned about. Tr. 378-80 (Siegel).

Dr. Siegel testified that it is not permissible for a technologist to rely on the direction of a physicist in placing the order for a specific amount of a radiopharmaceutical. Tr. 370. Dr. Siegel further testified that while a physicist may train a technologist in the ordering of the radiopharmaceutical, the Authorized User and the RSO need to validate the instruction. Tr. 430-31. ''Otherwise the physicist is, in fact, acting as the RSO and the AU.'' Tr. 431.

As previously noted, NMA License Condition 13 provides that licensed material is ''only authorized for use by, or under the supervision of'' the Authorized User, Dr. Moskowitz. Staff Exh. 1. The Board finds that Dr. Ben-Haim's actions would constitute a violation of 10 C.F.R. § 30.10 if he deliberately caused NMA to fail to maintain a record of the measured amount of each prescribed dosage. That is, if he caused NMA to fail to maintain a

record of the quantity of radioactive material prescribed by the Authorized User as required in 10 C.F.R. § 35.53(c). Thus, we find that NMA would be in violation of 10 C.F.R. § 35.53(c)(3) if Dr. Ben-Haim determined the dosage to be ordered and administered without the approval of the Authorized User.

The Board also finds that Dr. Ben-Haim would be in violation of 10 C.F.R. § 30.10 if he deliberately caused NMA to allow NMA personnel to receive, possess, use, or transfer byproduct material without the supervision of the Authorized User. Finally, Dr. Ben-Haim would be in violation of 10 C.F.R. § 30.10 if he caused NMA to operate without Dr. Moskowitz as Authorized User. Thus, we find that NMA would be in violation of these two requirements if Dr. Ben-Haim performed the functions of the Authorized User without the supervision of Dr. Moskowitz.

2. Performance by Dr. Ben-Haim of Functions of Authorized User

Ms. Smoligova testified that, every Thursday or Friday, she ordered technetium-99m for bone scans for the patients that came to NMA. Tr. 125. Ms. Smoligova further testified that NMA performed bone scans only on Saturdays. Tr. 127.

Ms. Smoligova testified that when she met Dr. Ben-Haim, Dr. Elamir asked her if she could order some things for him, such as paper towels, injections, or needles — ''whatever they're going to need.'' Tr. 127-28. She testified that Dr. Elamir asked her if she could help Dr. Ben-Haim with ordering what he needed for nuclear medicine but never told her that she would order nuclear materials. Tr. 133, 138.

According to Ms. Smoligova, Dr. Ben-Haim told her to order the nuclear materials. *See, e.g.,* Tr. 139 (Q. ''Who told you to order the nuclear materials?'' A. ''Dr. Ben-Haim.''), Tr. 168 (Q. ''Did I ask you to do the ordering?'' A. ''Yes.''), Tr. 140, 167. Ms. Smoligova testified that Dr. Ben-Haim asked her after operations started if she was ordering the radiopharmaceuticals for the patients, and she told him yes. Tr. 147.

Ms. Smoligova identified Staff Exh. 8(a) as what Dr. Ben-Haim gave her regarding what she should order every Thursday or Friday for patients receiving scans. Dr. Ben-Haim gave her the document with the procedures and dosages written on it. Tr. 128-29 (Smoligova).

Staff Exh. 8(a) is a handwritten document that states at the top half:

RADIOPHARMACY:
MEDI-PHYSICS
1-800-242-8004
BONE SCAN — MDP - 25 mC
HEART — MYOVIEW
2 SINGLE DOSES
1 8 mCi 1 25 mCi

Staff Exh. 8(a). The bottom half contains telephone numbers and the name of the Licensee. *Id.*

Ms. Smoligova testified that Dr. Ben-Haim only gave her that one note and that he gave it to her prior to starting operations. Tr. 136. The note was not wrinkled: ''it was plain.'' Tr. 144 (Smoligova).

Ms. Smoligova testified that Dr. Ben-Haim told her that she should check how many patients were scheduled and, accordingly, how many bone scans she would need to order. Tr. 129-30. Ms. Smoligova testified that the receptionist would tell her how many patients there would be. Tr. 141, 142. Ms. Smoligova was certain Dr. Ben-Haim told her to order nuclear material for bone scans at 25 millicuries. She ordered the nuclear medicine because she was told to order the radiopharmaceuticals. Tr. 130, 131 (Smoligova).

Ms. Smoligova testified that when she dialed the number she provided her name, Dr. Ben-Haim's name, the name and address of NMA, and the order. Tr. 145, 153. The first few times she told them that she was calling for Dr. Ben-Haim. Tr. 145, 153 (Smoligova). On subsequent calls she just told them her name, the name and address of NMA, and the amount of unit doses needed for Saturday. She testified that she would say ''bone scan, MDP 25 millicurie'' and the amount of unit doses she needed. Tr. 153-54. They also asked her the time the patient was due in for the procedure. Tr. 154.

Ms. Smoligova's testimony is consistent with Dr. Siegel's statement that the procedure for ordering a radiopharmaceutical from a commercial nuclear pharmacy is simply to place a telephone call and request a dose. *See* Tr. 368, 410. Dr. Siegel testified that a radiopharmacy will not accept an order unless it has first been provided with a copy of a byproduct materials license. Tr. 368, 410.

Ms. Smoligova testified that Dr. Ben-Haim said that if there was a problem with the ordering she was to contact him. Tr. 130. When asked if Dr. Ben-Haim told her he was in charge or in control, she testified that he was in charge of the ordering. Tr. 160. When asked what she thought Dr. Ben-Haim's function was at NMA, she answered, ''[a]s a supervisor of the place which was open for nuclear medicine, for patients to get bone scans.'' Tr. 169.

Ms. Smoligova ordered the radiopharmaceuticals several times a month. Tr. 162 (Smoligova). She testified that she saw Dr. Ben-Haim ''quite often, at least from the beginning every week,'' although she never saw him when patients

were there, i.e., on Saturdays. Tr. 169-70. Dr. Ben-Haim confirmed he was not at the facility on Saturdays. Tr. 790.

Dr. Siegel and Mr. Kinneman testified regarding the characterization and import of Staff Exh. 8(a), which Dr. Ben-Haim wrote and gave to Ms. Smoligova. Dr. Siegel testified that Staff Exh. 8(a) would be incomplete as a diagnostic procedures manual because not only does a diagnostic procedures manual have to specify the drug that is to be used for a particular test and the dosage to be administered, but also the route of administration. Tr. 365, 367. Dr. Siegel testified that even if the route of administration had been included in the document, it would have been ''the barest bones clinical diagnostic procedures manual one could conceive of.'' Tr. 367. In fact, Dr. Siegel testified that he never saw anything that could be properly characterized as a diagnostic procedures manual from NMA. Tr. 396.

Dr. Siegel testified that if that paper were posted on the wall of a nuclear medicine laboratory and there was nothing anywhere else in the laboratory that even looked remotely like a procedures manual or instructions, one might logically conclude that it was intended to be something like a procedures manual. Tr. 403. As for whether it would be considered less as a manual if kept in a drawer rather than being posted, Dr. Siegel did not think so, since the physical state of a manual could be variable: it could be posted on the wall; kept in a book on a shelf; kept in a drawer; or kept on a computer. Tr. 429 (Siegel).

Dr. Siegel testified that if the document was essentially the only information/instruction that had been provided to the ordering technologist and the nuclear medicine technologist who actually performed the studies, then the document operationally represented the delegation of authority to order the radioactive materials, in which case it would put Dr. Ben-Haim in the position of having acted as the RSO. Tr. 397-98. Dr. Siegel testified that it also became the apparent set of instructions on how to perform the study, which put Dr. Ben-Haim in the position of having acted as the Authorized User. Tr. 398.

Dr. Ben-Haim testified that the piece of paper on which the information was written was ''arbitrarily qualified as a prescription'' by the Staff. He testified that there was no signature, no date, no name of patient, it was not meant to be presented to a pharmacy or a doctor, it was not specific to one radiopharmaceutical. He characterized it as general information, as it might appear on any pamphlet, and did not engage anybody. Tr. 811; Dr. Ben-Haim, ff. Tr. 786, at 5. *See also* Tr. 813, Dr. Ben-Haim, ff. Tr. 786, at 6 (''it is information only'').

Dr. Siegel did not consider the document to represent a prescription. Tr. 387. He testified that if the 25-millicurie dose were administered, based on Staff Exh. 8(a), one would conclude that it was the prescribed dose and that the person who wrote the document would have prescribed it. Tr. 365-66. The person who prepared the note would need to be an Authorized User. Tr. 366.

Mr. Kinneman likewise characterized the document as ''the closest thing that we have to a prescribed dosage'' as defined in the regulations. Tr. 324. Dr. Siegel added that the physical status of the instructions regarding what doses to order and whether someone had written a telephone number on it is not relevant and does not render the instructions invalid. Tr. 380-81.

Regarding the characterization of Staff Exh. 8(a), we find that this document contains written instructions regarding the radiopharmaceuticals and dosages to be ordered and administered to patients for medical uses. The Board does not find that this document is an explicit prescription, as one would typically receive from a doctor to be filled by a pharmacist; nor does the Board find that it is a clinical diagnostic procedures manual, as defined in the Commission's regulations. We find, instead, that this document is an instruction on the quantity of radioactive material to be ordered. We also find that the physical status of the prescribed dosage in the instant situation has no relevance to its nature and effect. That is, whether the document was wrinkled and was later annotated with extraneous information by Ms. Smoligova did not render it ineffectual in conveying instructions regarding the dose of radioactive material to be ordered and administered. Indeed, Ms. Smoligova ordered radioactive material based on that document.

Ms. Smoligova's testimony, as set forth above, is fully consistent with the information she provided to Special Agent Wilson. When Mr. Wilson conducted an interview with Ms. Smoligova, she said that her duties were primarily magnetic resonance imaging duties and that she had one duty regarding nuclear medicine: the ordering of radioisotopes on Friday so that they could be used on Saturday. Ms. Smoligova further told Mr. Wilson that she took direction from Dr. Ben-Haim on ordering the radioisotopes. Tr. 534-35 (Wilson). Further, she told OI that Dr. Ben-Haim had given her something in writing to cause her to order the radioisotopes each and every week. Mr. Wilson received a copy of the document (Staff Exh. 8(a)) on the day of the interview. Tr. 535-36. Finally, Ms. Smoligova informed OI that Dr. Ben-Haim told her if there were any problems or emergencies regarding her ordering duties she should contact him. Tr. 536-37 (Wilson).

Special Agent Wilson testified that, during OI's first interview with Dr. Ben-Haim, the OI investigators asked him how the technetium-99m was being ordered, and Dr. Ben-Haim ''really couldn't answer them. He didn't have an answer of how it was being ordered.'' Tr. 530. During Dr. Ben-Haim's second interview, Mr. Davis showed Dr. Ben-Haim a copy of the document received from Ms. Smoligova (Staff Exh. 8(a)). According to Mr. Davis, Dr. Ben-Haim recognized the document and identified the top portion as his handwriting. Tr. 547.

Mr. Davis testified that they discussed the process of ordering the technetium-99m. Tr. 544. Mr. Davis testified that Dr. Ben-Haim said that a nurse or a

secretary from one of Dr. Elamir's businesses would call the receptionist at NMA and give the name of an individual who was scheduled to have a bone scan on Saturday. That name would be placed in a log and, at a later time, the order would be called into Medi-Physics by Ms. Smoligova. Tr. 544.

Mr. Davis testified that ''in handing this document to Smoligova, Dr. Ben-Haim admitted to me that he was giving her the authorization to order the [technetium-99m] when it was needed.'' Tr. 547-48. Further, that Dr. Ben-Haim told him ''the Authorized User on the license is the only individual that would be able to delegate this duty'' and that the Authorized User on NMA's license was Dr. Moskowitz. Tr. 548. Mr. Davis testified that Dr. Ben-Haim admitted that he had not received the authority to delegate from Dr. Moskowitz and that Dr. Ben-Haim told him, ''It was impractical to always abide by the small rules.'' Tr. 548, 549 (Davis).

Mr. Davis also testified that Dr. Ben-Haim stated that he ''owed Dr. Elamir an apology'' and that he was ''aware that his actions were a mistake'' and that he placed the Licensee in jeopardy. Tr. 548-49. Dr. Ben-Haim repeated at the end of the interview that one of his mistakes was ''overseeing and delegating the authority to order the doses of [technetium-99m].'' Tr. 550, 580 (Davis). These sentiments are consistent with those expressed by Dr. Ben-Haim in his proposed findings.

However, in his direct testimony, Dr. Ben-Haim stated that he did not admit to OI giving Ms. Smoligova any authorization to order the radiopharmaceuticals. Dr. Ben-Haim, ff. Tr. 786, at 3, 5. Dr. Ben-Haim testified he was not aware that his actions were a mistake and placed the Licensee in jeopardy and denied that he said that he owed Dr. Elamir an apology. Tr. 802; Dr. Ben-Haim, ff. Tr. 786, at 3.

Dr. Ben-Haim testified that Ms. Smoligova received only one single piece of paper and not ''notes'' and that she did not take direction from Dr. Ben-Haim for ordering the Tc-99m. Tr. 803; Dr. Ben-Haim, ff. Tr. 786, at 4. Dr. Ben-Haim testified that Dr. Elamir designated Ms. Smoligova as the person in charge of ordering the radiopharmaceuticals from the pharmacy and that Dr. Elamir asked Dr. Ben-Haim to write down for her the pertinent information, which he did. Tr. 808, 809; Dr. Ben-Haim, ff. Tr. 786, at 3, 5.

Dr. Ben-Haim testified that he ''did not know that the Authorized User on the license is the only individual who, with respect to NMA, can delegate the ordering duty.'' Tr. 802. *See also* Tr. 802, 853, 854; Dr. Ben-Haim, ff. Tr. 786, at 3. Dr. Ben-Haim testified that common practice, as documented in the OI report of interview of John Carr, contradicts this. Tr. 802; Dr. Ben-Haim, ff. Tr. 786, at 3. We do not find Dr. Ben-Haim's argument credible because he was familiar with the NRC's regulations and NMA's license: he held himself out in the medical community as having knowledge of the NRC's requirements; he compiled and prepared NMA's license application; and he made it a practice to

know the NRC requirements in his consultant work. Tr. 822-23. In addition, as more fully discussed below, Mr. Carr's statement to OI did not pertain to the requirements placed on NMA and, thus, is inapposite to any discussion of them.

John Carr, Facility Manager, MPI Pharmacy Services, Medi-Physics, Inc., told OI that, prior to filling NMA's first order for nuclear material, Medi-Physics requested that a copy of NMA's license be faxed to Medi-Physics. *See* Staff Exh. 8, OI Exh. 25 (OI interview of John Carr). Mr. Carr told OI this was ''standard operating procedure for MPI.'' *Id.* Mr. Carr stated that NMA called in their orders on Friday, for Saturday delivery, and that the ''only requirement MPI has, by law, before delivering Tc-99 to a customer, is that the customer prove it has a valid materials license.'' He added: ''In this case, MPI was in possession of an NRC materials license for NMA that appeared to be legitimate.'' *Id.*

Dr. Ben-Haim admitted he faxed a copy of the license on October 18, 1996, to Mr. Carr in order for NMA to be able to buy radioactive material. Tr. 863-64. Dr. Ben-Haim testified that he had no doubt in his mind at the time he sent Mr. Carr the license that there was an Authorized User and an RSO. Tr. 865. Upon cross examination, Dr. Ben-Haim testified that he wrote ''Radiopharmacy,'' ''Medi-Physics,'' the 800 number, ''bone scan,'' a nuclear diagnostic procedure, ''MDP,'' and ''25 millicuries'' on the note he gave to Ms. Smoligova. Tr. 840-41. *See* Staff Exh. 8(a). Dr. Ben-Haim also testified that he wrote ''Heart,'' ''Myoview,'' and ''two single doses,'' ''8 millicuries'' and ''25 millicuries.'' Tr. 841. Dr. Ben-Haim admitted he gave this information to Ms. Smoligova, although he objected to the characterization that they were instructions to her. Tr. 844. Dr. Ben-Haim admitted, however, that he knew she would use the information to order the radiopharmaceuticals. *See* Tr. 844 (Q. ''Isn't it a fact that you knew she would use this information to order the radiopharmaceuticals?'' A. ''Yes.'').

Dr. Ben-Haim maintained that he did not tell her or authorize her to order the radiopharmaceuticals. Tr. 844. He added that, since he did not have the authority, ''I could not authorize and did not authorize.'' Tr. 811; Dr. Ben-Haim, ff. Tr. 786, at 5. He also denied that he himself ordered the radiopharmaceuticals. Tr. 844-45 (Q. ''Well, did you order the radiopharmaceuticals?'' A. ''No, I did not.''). However, following admission of Staff Exh. 15, when asked by the Board whether he placed the first order, Dr. Ben-Haim testified: ''No, I don't remember if I placed the first order. It's possible, possible, but I did not give my — John Carr knew me from — and I ordered from West Orange. He knew me and there was a license and I thought at that time that I could order *and I may have ordered.* I don't recollect.'' Tr. 886 (emphasis added).

During his cross-examination, Dr. Ben-Haim was confronted with a letter dated October 17, 1996. Tr. 846-49. Staff Exh. 15. Dr. Ben-Haim admitted that it was a three-paragraph letter that he wrote and faxed to Dr. Elamir on

October 17, 1996. Tr. 847. Dr. Ben-Haim admitted that he sent the letter two days before the first delivery of technetium-99m to NMA. Tr. 848.

Paragraphs two and three of the letter state:

> 2. Please let me know asap whether we have patients on Saturday, how many and what tests, so I may notify the technician and order the radiopharmaceuticals.
>
> 3. We will have to decide who will place the orders and coordinate the logistics in the future.

Staff Exh. 15.

Dr. Ben-Haim testified that ''we'' in the letter meant NMA and did not refer to himself. Tr. 849, 870. When asked, ''By 'we,' it means you and Elamir?'' Dr. Ben-Haim replied, ''No, not me. I meant NMA. I didn't mean a person.'' Tr. 870. When asked who would be speaking for the corporation, Dr. Ben-Haim replied, ''Elamir would decide.'' Tr. 870. Dr. Ben-Haim maintained that he was not the one who authorized the ordering and did not implement the ordering. Tr. 884.

Dr. Ben-Haim admitted that, in paragraph 2 of the letter, it was his plan to see to it that the radiopharmaceuticals were to be ordered and that, in paragraph 3, he was one of the people who was going to help decide the ordering process. Tr. 850. He admitted that, in writing the letter, it was either his intent to order the radiopharmaceuticals or tell the technician to order the radiopharmaceuticals. Tr. 869.

Dr. Ben-Haim had only known Dr. Elamir about a week before he became the consultant for NMA. He agreed that he had far greater knowledge about nuclear materials than Dr. Elamir had. Tr. 850. He also admitted that Dr. Elamir had little experience with NRC requirements. Tr. 826. Finally, Dr. Ben-Haim admitted that Dr. Moskowitz did not delegate the authority of the Authorized User or RSO to him. Tr. 826.

3. Board Analysis

We find that the overwhelming weight of the evidence supports a finding that Dr. Ben-Haim directed Ms. Smoligova, an MRI technologist, to order a specific radiopharmaceutical in 25-millicurie-unit doses for nuclear diagnostic procedures. The Board bases its finding on the testimony of Ms. Smoligova that Dr. Ben-Haim gave her written instructions on how much radioactive material to order, the specific radiopharmaceutical, and from what source, together with her testimony that he told her to place the orders. Further, Dr. Ben-Haim admitted that he knew that Ms. Smoligova would use the information to order the radiopharmaceuticals.

Dr. Ben-Haim stated in his defense that he did not know the only individual who could delegate the ordering duty was the Authorized User. We do not accept that Dr. Ben-Haim, who was knowledgeable of the NRC's regulations and who personally put together the license application for NMA, was not aware of this requirement. Dr. Ben-Haim further stated that OI's report of John Carr's interview contradicts the requirement. We find nothing in John Carr's interview that supports Dr. Ben-Haim's statement. Indeed, there is a difference between what a radiopharmacy must do to comply with state and federal requirements and what a nuclear diagnostic facility must do to satisfy NRC requirements. Finally, we reject as circular reasoning Dr. Ben-Haim's assertion that, since he did not have the authority to authorize the ordering, he did not authorize the ordering. Certainly, he did not need to have the authority to order the material in order to cause the material to be ordered without the knowledge of, or direction from, the Authorized User, which is the essence of the 10 C.F.R. § 30.10 violation.

The Board was also persuaded by the testimony of Special Agent Davis regarding his interview with Dr. Ben-Haim on April 22, 1997. As previously noted, we find nothing in the record before us to suggest that Mr. Davis either was biased or (with respect to the Authorized User matter) misunderstood the conversation. We therefore find, despite Dr. Ben-Haim's protests to the contrary, that he admitted to OI that he authorized Ms. Smoligova to order the radiopharmaceuticals, that he knew the Authorized User on the license was the only person who could delegate that duty, and that Dr. Moskowitz had not delegated that duty to him. We also find that Dr. Ben-Haim told Mr. Davis that ''[i]t was impractical to always abide by the small rules'' and that this was a true reflection of Dr. Ben-Haim's state of mind.

Finally, we find that Dr. Ben-Haim's October 17, 1996 letter to Dr. Elamir sufficiently demonstrates Dr. Ben-Haim's intent to bring about the ordering of radiopharmaceuticals. The record does not reflect whether, at the time that letter was written, Dr. Ben-Haim knew that there was no functioning Authorized User. The October 17, 1996 letter issues instructions of the type an experienced physicist would know an Authorized User would issue or approve, but it does not reflect knowledge that NMA was operating without an Authorized User. In fact, the Staff's August 27, 1997 Order did not include October 1997 during the period when either the Authorized User or RSO violations assertedly took place.

In the October 17, 1996 letter, Dr. Ben-Haim wrote that he needed to know the number of patients coming in on Saturday and the tests to be performed so that he might ''notify the technician and order the radiopharmaceuticals.'' We find that, based on this information, he determined the 25-millicurie standard dosage (although not the dosage subsequently administered to each patient) and authorized its ordering and subsequent use. We do not accept his arguments that the letter means anything other than what it says.

Ms. Geylikman, the nuclear medicine technologist who performed the bone scans, testified that the radioactive material as it was ordered was always 25 millicuries and that it came in unit doses of 25 millicuries for each patient. Tr. 191-92. She stated that 25 millicuries is a standard dose for an injection and that she would be the one who would determine precisely how much to give the patient. Tr. 199-200. She added that it makes some difference if the person is large or small and that she knew how to adjust for the difference. Tr. 188, 192. Ms. Geylikman, however, also testified that she did not determine how much radioactive material to inject, but that each patient came with a doctor's order that said ''what to do, what kind of scan to do, and how much is supposed to be.'' Tr. 191, 198-99. Ms. Geylikman clarified in response to our questioning that the doctors' orders did not specify the amount of radioactive material to inject. In this regard, the Board asked whether, when the patients came to NMA bearing doctors' orders for bone scans, it was she who determined the amount of radioactive material to inject. She replied, ''Actually, yes. And the same at hospital, it's the same. We know the standard order, the standard dose between 20 and 25, maybe 22, 23. It doesn't matter.'' Tr. 200.

The Board then asked, ''And you made some record of [dosage] for each . . . patient?''

Ms. Geylikman, replied, ''Yes.''

''And the amount?''

''Yes.''

''But that would not be on a prescription as such?''

''No.'' Tr. 202.

Ms. Geylikman's clarification is consistent with Dr. Siegel's testimony that the referring physician would not likely specify the dose for a diagnostic procedure. *See* Tr. 378-80. With respect to altering doses, Dr. Siegel testified that it is not infrequent that nuclear medicine facilities have a procedure that says something to the effect that if a dose of 25 millicuries is specified, an acceptable dose is that number plus or minus 10%. Tr. 369. Further, that a facility would create a policy on what allowable dose ranges are and that in many facilities the allowable range is not in writing. Tr. 416-17; Tr. 370 (Siegel). He testified that a technologist is not authorized to determine the range, but that the only one who is authorized to write the prescription, which includes decisions about deviations from standard doses as specified in the clinical procedures manual, is the Authorized User. Tr. 370, 374. The decision to use 10 millicuries, 15 millicuries, or 20 millicuries is a decision made either on a patient-by-patient basis, by the Authorized User, or made on a laboratory-by-laboratory basis where they wish to be in the dose range. Tr. 373, 374 (Siegel).

Dr. Siegel further testified that nuclear medicine technologists are not considered licensed practitioners and would be unable to write a prescription and, therefore, would be unable to vary the dose based on their own medical judg-

ment (Tr. 375). He added that it is not permissible for a technologist to rely on the direction of a physicist who is not a physician in administering an amount to the patient (Tr. 370).

Based on the above testimony of Ms. Geylikman, we find that she injected the radioactive material into the patients using 25 millicuries as a standard dose because the material was ordered in unit doses of 25 millicuries and that is how the nuclear pharmacy provided it. And they came in unit doses of 25 millicuries because Dr. Ben-Haim determined that dosage and had them ordered as such. We find that Dr. Ben-Haim deliberately brought about the use of radioactive material at NMA without the authorization or involvement of the Authorized User.

Mr. Kinneman testified that as part of his responsibilities he had to review the information contained in the OI report and determine what actions needed to be taken as a result (Tr. 107; *see* Staff Exh. 8). He reached his conclusions based on the OI report, and he assisted in preparing the order against Dr. Ben-Haim (Tr. 107-08 (Kinneman)).

Mr. Kinneman viewed 10 C.F.R. § 35.53(c)(3) to have been violated when Dr. Ben-Haim provided the information and direction to the individuals who actually did order the doses and who administered the doses to the patients (Tr. 278-79). Stated otherwise, Dr. Ben-Haim directed the individual who ordered the dose, and the dose was waiting for the nuclear medicine technician to administer it to the patient (Tr. 327-28 (Kinneman)). Therefore, since there was no Authorized User, the activities had occurred in the absence of the Authorized User. Tr. 279 (Kinneman). Mr. Kinneman added that Dr. Ben-Haim should have known that there was no RSO or Authorized User at NMA (Tr. 445, 446). Mr. Kinneman concluded that there was intention to continue without the RSO and Authorized User (Tr. 448).

Mr. DelMedico testified that Dr. Ben-Haim violated 10 C.F.R. § 30.10 if he knew the instructions he was providing would bring about the possession of byproduct material at NMA and he knew that before NMA could possess byproduct material the approval of Dr. Moskowitz was needed. Tr. 683-84.

The Board adopts most of the Staff's analysis. Dr. Ben-Haim was responsible for ordering byproduct material, and he knew that it would be administered without there being an Authorized User assigned to the facility. Dr. Ben-Haim was also aware of the normal doses that would be administered, but he was not aware of the particular doses that would be administered to individual patients. That amount was determined by the technician, Ms. Geylikman, and was based on her own past practice.

In short, we conclude that Dr. Ben-Haim's actions in determining the doses to be ordered without the involvement of the Authorized User was intentional and, therefore, constituted a violation of 10 C.F.R. § 30.10. His knowledge that doses in this general range would be administered to patients without an Authorized

User also violates 10 C.F.R. § 30.10, even though he did not direct and was not aware of particular doses administered. In this regard, we emphasize our earlier finding that Dr. Ben-Haim was knowledgeable and held himself out to have expertise in the NRC's requirements and that he personally read and prepared NMA's license application. He, therefore, knew what the requirements were when he caused NMA to violate them.

4. Summary of Findings on Authorized User Violation

In summary, we conclude that Dr. Ben-Haim caused NMA to be in violation of 10 C.F.R. § 35.53(c)(3), by causing NMA to fail to maintain a record of the quantity of radioactive material prescribed by the Authorized User, through his actions of deliberately determining the dosages to be ordered, and the general ranges of what would be administered to patients, without the Authorized User having prescribed any dosage. Since no Authorized User was involved in the determination of the dosage, there was no prescribed dosage as defined in 10 C.F.R. § 35.2. That some records were kept, at the behest of Dr. Ben-Haim, is not in itself to be condemned — indeed, it may serve as an ameliorative factor even though those records were not prescribed by the Authorized User, as required. Thus, the records that NMA kept did not fulfill the requirements of 10 C.F.R. § 35.53(c)(3), which requires the record to include the ''prescribed dosage.''

We also find that Dr. Ben-Haim intentionally caused NMA to allow NMA personnel to receive, possess, use, and transfer byproduct material without the supervision of the Authorized User in violation of 10 C.F.R. § 35.11(a) and (b). Finally, we find that Dr. Ben-Haim intentionally caused NMA to operate without any Authorized User, a clear violation of NMA's license, if not from the start of operations, at least from December 1996 on. Therefore, we conclude that Dr. Ben-Haim violated 10 C.F.R. § 30.10 by deliberately causing NMA to be in violation of the above requirements.

K. The Appendix K Violation

We address separately that aspect of the Order that alleges that Dr. Ben-Haim caused NMA to be in violation of a provision of its license that sets forth both an RSO and an Authorized User responsibility. This ''Appendix K'' violation touches upon both roles and, therefore, we elected to address it separately from those portions of our findings dealing specifically with the RSO and Authorized User violations.

Under Condition 16 of NMA's license, the Licensee is required to conduct its program in accordance with the ''statements, representations, and procedures

contained in the documents, including any enclosures, listed below.'' Staff Exh. 1. One such document is the license application. *Id.* License Condition 16 incorporates the application as a part of the license, ''as part of the requirements that the licensee must follow and as the basis for issuing the license.'' Tr. 82 (Kinneman).

Dr. Ben-Haim testified that he was familiar with the information in NMA's license application at supplemental Item 10, Radiation Safety Program. He read Item 10.6, which states: ''Ordering and receiving. We will establish and implement a model guidance for ordering and receiving radioactive material that was published in Appendix K to Regulatory Guide 10.8, Revision 2.'' Tr. 824; *see* Staff Exh. 2. He also read Appendix K, Regulatory Guide 10.2, Revision 2 and attached it to NMA's license application. Tr. 824. *See* Staff Exh. 2. Dr. Ben-Haim read paragraph number 1 under the heading, ''Model Guidance.'' Tr. 825. That provision states:

> The radiation safety officer, RSO, or a designee must authorize each order for radioactive materials and ensure that the requested materials and quantities are authorized by the license for use by the requesting authorized user and that possession limits are not exceeded.

See Staff Exh. 2.

Under the NMA license, Appendix K, only the RSO or a designee may authorize each order for radioactive materials and ensure that the requested materials and quantities are authorized by the license for use by the requesting Authorized User and that possession limits are not exceeded. Tr. 285 (Kinneman). *See* Staff Exh. 2. Mr. Kinneman testified that Dr. Ben-Haim's actions caused the Licensee to be in violation of this requirement because Dr. Ben-Haim provided the direction to the individual who actually ordered the licensed material by saying how much should be ordered and where it should be ordered from. Tr. 286.

Dr. Ben-Haim testified that Appendix K says that the RSO or a designee can order, but that it does not specify whose designee. Tr. 808-09. ''I do not know that only the RSO or a designee of the RSO. It doesn't say that. It says or a designee.'' Tr. 808. Dr. Ben-Haim testified on cross-examination that he ''was not sure by whom'' and did not know what ''designee'' means. Tr. 825-26. When asked whether he thought that designee meant Dr. Elamir, he stated that he ''did not know,'' although he admitted that Dr. Elamir had little experience with NRC requirements. Tr. 826.

We are unconvinced that Dr. Ben-Haim did not know that designee meant anything other than a designee of the RSO. The subject of the sentence is clear and lends itself to no other rational interpretation. We therefore find that Dr. Ben-Haim deliberately caused the Licensee to be in violation of a condition of its license and thus he violated 10 C.F.R. § 30.10. In making our finding, we

agree with the Staff that NMA's license incorporates, by the terms of License Condition 16, all parts of NMA's license application, such that a violation of a provision in the application constitutes a violation of the license.

III. SANCTION IMPOSED

Mr. R. Joseph DelMedico, a Senior NRC Enforcement Specialist in the NRC's Office of Enforcement, described the rationale for the sanction imposed against Dr. Ben-Haim in the Staff's Order. DelMedico, ff. Tr. 659, at 1-13. He testified that the August 27, 1997 Order was issued to Dr. Ben-Haim because the NRC Staff concluded that he deliberately caused NMA to be in violation of NRC requirements and therefore violated 10 C.F.R. § 30.10(a). This conclusion was based on the inspection report and OI Report. DelMedico, ff. Tr. 659, at 7; Tr. 668.

Mr. DelMedico testified that the Enforcement Policy, NUREG-1600, is the Commission's policy for exercising its authority to take actions to enforce its regulatory requirements. DelMedico, ff. Tr. 659, at 4. *See* Staff Exh. 13. In his view, according to the Enforcement Policy, enforcement actions may be taken against individuals in situations including deliberately causing a licensee to be in violation of NRC requirements, and recognizing a violation of procedural requirements and deliberately not taking corrective action. DelMedico, ff. Tr. 659, at 5. According to the Enforcement Policy, section VIII, orders to unlicensed individuals may include provisions that would prohibit involvement in NRC-licensed activities for a specified period of time and require the person to tell a prospective employer or customer engaged in licensed activities that the person has been subject to an NRC order. *Id.* at 7. The Enforcement Policy, section VIII, further states that the particular sanction to be used for enforcement actions involving individuals should be determined on a case-by-case basis. *Id.* at 8.

Factors for deciding whether to issue an enforcement action to an unlicensed individual (such as Dr. Ben-Haim) are set forth under section VIII of the Enforcement Policy. *Id.* at 5. These factors are:

1. The level of the individual within the organization.
2. The individual's training and experience as well as knowledge of the potential consequences of the wrongdoing.
3. The safety consequences of the misconduct.
4. The benefit to the wrongdoer, e.g., personal or corporate gain.
5. The degree of supervision of the individual, e.g., how closely the individual is monitored or audited, and the likelihood of detection.
6. The employer's response, e.g., disciplinary action taken.

7. The attitude of the wrongdoer, e.g., admission of wrongdoing, acceptance of responsibility.
8. The degree of management responsibility or culpability.
9. Who identified the misconduct.

DelMedico, ff. Tr. 659, at 5-6; Staff Exh. 13 (NUREG-1600), at 18.

Mr. DelMedico identified the following factors that were considered in formulating the enforcement action against Dr. Ben-Haim:

> Aharon Ben-Haim is a consultant who had contracted with the licensee to prepare for State and NRC inspections, assure continuous monitoring of the laboratory in compliance with NRC regulations, and assure that proper procedures were used in the handling of radioactive material. It was apparent to the NRC Staff that Aharon Ben-Haim occupied a position of specialized knowledge, trust, and authority in the eyes of [NMA], as well as any other licensees for whom he might consult. This gave Aharon Ben-Haim the opportunity to have broad influence over the degree of NRC compliance at such facilities.
>
> Aharon Ben-Haim had experience in NRC compliance matters. In fact, he himself prepared the NRC license application with commitments to follow a number of procedures that he later caused the licensee to violate.
>
> Since Aharon Ben-Haim was a consultant as opposed to an employee, his misconduct was unlikely to receive a significant response from the licensee, such as demotion, probation, or firing for cause. Presumably, if the licensee terminated Aharon Ben-Haim's consulting contract, he could still go on to consult at other facilities without the type of detailed check on previous employment that would occur for the hiring of an employee.
>
> There was tangible gain to Aharon Ben-Haim from his misconduct because the licensee's continued operation, even though it did not have a radiation safety officer or authorized user, would allow Aharon Ben-Haim to continue to earn consulting fees.
>
> The underlying licensee violations caused by Aharon Ben-Haim's conduct continued in duration from October 19, 1996 through January 25, 1997.
>
> . . . Aharon Ben-Haim's attitude toward the non-compliances caused by his actions was that it was ''impracticable to always abide by the small rules.''

DelMedico, ff. Tr. 659, at 9-10.

According to Mr. DelMedico, if the factors weigh against an individual, consideration is given to increasing the sanction for that individual; and if they weigh in favor of an individual, consideration is given to reducing the sanction based on that factor. Tr. 728-29. These factors do not necessarily carry equal weight. Tr. 729 (DelMedico).

Regarding the gain Dr. Ben-Haim was expected to receive from engaging in this particular misconduct, Mr. DelMedico found tangible gain because the Licensee's continued operation allowed Dr. Ben-Haim to continue to earn consulting fees. Tr. 693. In particular, Dr. Ben-Haim's agreement with NMA provided for a yearly fee of $16,000 payable quarterly at the beginning of each quarter. Tr. 693 (DelMedico); *see* Staff Exh. 8, OI Exh. 7 at 2. When asked

by the Board whether the Staff's deliberation was influenced by the fact that there were no safety consequences of Dr. Ben-Haim's deliberate misconduct, Mr. DelMedico testified that the Staff was concerned with the potential safety consequences of an individual who could influence a wide number of licensees, and that the Staff was more concerned with potential safety consequences than actual safety consequences. Tr. 722.

Mr. DelMedico testified on cross-examination that the most important factor is the attitude of the wrongdoer. Tr. 729-30. Regarding this factor, he stated that the Commission has addressed the issue of attitude as follows:

> The Commission believes that in addressing the issue of future involvement of an individual in licensed activity, where safety is crucial, it is proper to consider the individual's attitude toward compliance with safety practices and regulations. Recognition and admission of past errors indicates a more positive attitude than continuing denial or hostility, and thus enhances the Commission's reasonable assurance that licensed activities will be conducted in a manner that protects public health and safety. However, attitude is only one factor and is not controlling in the overall determination of appropriate action.

DelMedico, ff. Tr. 659, at 11; *see* Staff Exh. 14, at 40,676.

In the opinion of Mr. DelMedico, the second important factor is the severity level of the underlying violations. Tr. 730. The violations that were caused by Dr. Ben-Haim's actions would be categorized at Severity Level II under section IV of the Enforcement Policy. DelMedico, ff. Tr. 659, at 9. The severity level of the violations, however, is one consideration of many. Tr. 755. Other factors would have been whether Dr. Ben-Haim engaged in deliberate misconduct at another facility or whether the deliberate misconduct was self-reported to the NRC. Tr. 731 (DelMedico).

We find that the Staff considered factors appropriate in determining the sanction to be imposed against Dr. Ben-Haim. But it appears not to have considered, or at least to have de-emphasized, other relevant factors that we regard as worthy of consideration in this case.

In particular, we are guided (as was the Staff) by the importance the Commission places on the individual's attitude toward compliance with the Commission's requirements. We believe that the evidence supports a finding that Dr. Ben-Haim displayed a cavalier attitude toward compliance with the Commission's requirements and that he considered that it was ''impractical to always abide by the small rules.'' We observed during the course of the hearing that Dr. Ben-Haim was not forthcoming in all aspects of his testimony, and we determined that his attitude to that extent falls short of what is required of a consultant to NRC licensees and applicants providing advice regarding compliance with NRC requirements. For example, we find that portions of Dr. Ben-Haim's testimony were successfully impeached when he was confronted with his October 17, 1996 letter. He had testified that he did not authorize

the ordering of radioactive material and that his involvement in this regard was minimal. Yet, the letter that he wrote to Dr. Elamir, which conveys a sense of urgency, shows that he was an active and knowing participant in the ordering of radiopharmaceuticals and, in fact, was the initiator of this activity.

The letter does not, on its face, reflect whether Dr. Ben-Haim knew at that time whether Dr. Moskowitz was acting as RSO and Authorized User. Nor does the record reflect how Dr. Elamir responded to the letter or, indeed, whether he informed Dr. Ben-Haim on the status of the RSO or Authorized User. Thus, we do not regard the letter as evidence of willful violation on the part of Dr. Ben-Haim.

We also agree with the Staff that it was appropriate to consider that Dr. Ben-Haim occupied a position of authority in the eyes of NMA and other entities for whom he may have consulted. Further, Dr. Ben-Haim was not a person unfamiliar with the Commission's requirements — indeed, he prepared the application for the very license that he caused NMA to violate. The Board finds that the Staff correctly took these factors into account, as well as those pertaining to the tangible gain to Dr. Ben-Haim from the violations, and the fact that as a consultant, his conduct might otherwise go unchecked.

Under the Enforcement Policy, section IV.C, willful violations, which include deliberate violations, are of particular concern to the Commission because its regulatory program is based on licensees and their consultants acting with integrity; and thus deliberate violations cannot be tolerated by the Commission. DelMedico, ff. Tr. 659, at 9; Staff Exh. 14. The Commission relies on the licensee and its contractors and its employees to conduct their operations with integrity and in complete compliance with NRC regulations. It is a matter of trust. Tr. 690 (DelMedico). To this end, Mr. DelMedico testified that ''it only takes once — one time of deliberate misconduct for the Commission to lose confidence in the ability of the individual to conduct licensed activities in compliance with Commission requirements.'' Tr. 719.

Mr. DelMedico further explained that there is a serious question as to how, in the absence of having an inspector there daily or some other form of continuous audit, the Commission can possibly have confidence that an individual who engaged in deliberate misconduct, even if only one time, would not do the same thing another time, either at the same facility or at another one. Tr. 715-16. The Order against Dr. Ben-Haim concluded that the NRC could not have confidence that licensed activities could be conducted safely and in compliance with NRC requirements if Dr. Ben-Haim were to be permitted to be involved in licensed activities. DelMedico, ff. Tr. 659, at 11-12. We agree with the Staff's assessment in this regard and find that the Commission has made it clear that it cannot tolerate willful violations, even if committed only once.

Mr. DelMedico testified that the sanction in this case was established with a view to three specific goals: (1) protection of the public health and safety by

prohibiting a person who has been known to engage in deliberate misconduct from involvement in NRC-licensed activities; (2) deterring other individuals from engaging in deliberate misconduct that involves licensed activities; and (3) rehabilitation of the individual. DelMedico, ff. Tr. 659, at 11-12. In his view, the duration of a sanction against an individual who has engaged in deliberate misconduct should be chosen with the intent that the sanction will restore the Commission's confidence in that individual's ability to conduct licensed activities with integrity and candor at the end of the sanction period. DelMedico, ff. Tr. 659, at 13.

According to Mr. DelMedico, a 5-year suspension from licensed activities is a sufficient time such that, should Dr. Ben-Haim decide to become involved in licensed activities in the future, he will appreciate the importance of strict compliance with all Commission requirements. DelMedico, ff. Tr. 659, at 13. This was the same period initially sought against Dr. Elamir, for essentially the same enunciated rationale, but with respect to whom the Staff later settled for a 3-year suspension. *Magdy Elamir, M.D.,* LBP-98-25, 48 NRC 226.

The Board recognizes that the Staff applied appropriate factors in assessing its proposed penalty against Dr. Ben-Haim but believes that other factors also need be considered. In the first place, Dr. Ben-Haim's conduct resulted in no safety consequences, only the potential for such consequences. One of the explicit relevant factors identified by Mr. DelMedico — the third factor included in Part VIII of NUREG-1600, Staff Exhibit 13, at 18 — was thus apparently de-emphasized in the Staff's assessment.

Further, it is unclear to us whether Dr. Ben-Haim's knowledge of the violations commenced prior to December 1996. Even though at that time Dr. Ben-Haim was fully aware of the RSO and Authorized User violations, he should not, in our view, be charged with knowing, intentional violations prior to that date. We note that Mr. DelMedico evaluated the intentional conduct as commencing as early as October 19, 1996 (DelMedico, ff. Tr. 659, at 10) but do not believe the record supports an intentional violation prior to December 1996. Thus, the two documents (Staff Exhs. 8(a) and 15) that the Staff relies on to demonstrate intentional violations at the time they were written (October 1996) do not, in our opinion, demonstrate a wilfulness or intent to violate NRC regulations at the time the documents were written.

Further, the Staff has given no credence to Dr. Ben-Haim's acknowledgment of and apologies for his wrongdoing. Though late in coming, we believe that Dr. Ben-Haim's acknowledgement and apologies set forth in his proposed findings are worthy of some recognition.

Finally, the Staff did not give adequate consideration to factor 8 outlined by Mr. DelMedico, the degree of management culpability in the violations. Even though Dr. Elamir was not technically knowledgeable in radiological matters, it was clearly his business responsibility to hire an RSO and Authorized User.

There is no record that he ever did so, although he apparently advised Dr. Ben-Haim that he was negotiating for an RSO (Tr. 440 (Kinneman), 527 (Wilson)). Further, only Dr. Elamir could know with certainty that there was no RSO in the employ of NMA but there is no record that he ever explicitly informed Dr. Ben-Haim of that critical fact. It was the Staff position that Dr. Ben-Haim had the duty to infer that there was no functioning RSO present. However, such inferences require information, and inferences adverse to an employer require a high degree of certainty. Nevertheless, Dr. Ben-Haim made such an inference sometime in December 1996 and approached Dr. Elamir. However, according to uncontradicted testimony, Dr. Elamir was unresponsive. Thus, Dr. Ben-Haim decided, wrongfully as it turned out, not to ''make waves'' and to let the matter pass. From that point on, we find that he willfully permitted and acquiesced in the continued operation of NMA contrary to NRC regulations. Perhaps he should have acted more decisively with Dr. Elamir; however, Dr. Ben-Haim was not a company officer and did not have the authority to order operations to cease. Thus, it appears that Dr. Ben-Haim's culpability was to some degree subordinate to Dr. Elamir's and accordingly less serious than asserted by the Staff, even though still deserving of sanction.

Moreover, it appears that Dr. Ben-Haim was compromised by Dr. Elamir at the inspection conducted by the Staff on January 29, 1997. The Staff had informed Dr. Elamir prior to the inspection that it wanted either Dr. Elamir or the RSO to be present at the inspection. Dr. Elamir requested Dr. Ben Haim to attend but there is no record to reflect that Dr. Ben-Haim was informed that he was appearing in the place of the RSO that was requested. Given that situation, it is small wonder that the Staff came to believe that Dr. Ben-Haim had arrogated the role of RSO to himself. We find that appearance resulted from the actions or omissions of Dr. Elamir and was not evidence in itself that Dr. Ben-Haim knowingly acted as RSO.

In addition, the Staff has compared Dr. Ben-Haim's violations with those for Severity Level II, which under the Enforcement Policy are applied both to the imposition of orders (as here) and to the assessment of civil penalties. NUREG-1600 (Staff Exh. 13). With respect to civil penalties, the Enforcement Policy states that the gravity of the violation is the primary consideration but that ''ability to pay'' may also be considered: ''it is not the NRC's intention that the economic impact of a civil penalty be so severe that it puts a licensee out of business.'' NUREG-1600, *citing* 60 Fed. Reg. at 34,387.

Similar considerations may be applied to suspension orders. Given the circumstance that Dr. Ben-Haim was age 65 when the Order was issued and would be age 70 at the end of the 5-year suspension, the suspension sought by the Staff could very well be practically equated to a death sentence against further involvement in nuclear activities. (An order barring further participation could have been, but was not, sought.)

Beyond that, the Commission has clearly indicated that the length of a suspension is discretionary. Mr. DelMedico testified that penalties in cases such as this could range anywhere from ''no action at all'' to a 10-year suspension (Tr. 699.)

Comparing the proposed 5-year suspension of Dr. Ben-Haim with the 3-year suspension recently approved by the Staff and sanctioned by a Licensing Board comprised of the same Administrative Judges as this one with respect to Dr. Elamir — *see* LBP-98-25, *supra*[5] — the 5-year period of time for the proposed suspension of Dr. Ben-Haim is excessive. The following additional factors must also be taken into account: (1) Dr. Ben-Haim's age — 65 at the onset of the suspension (*see* Exhs. BH-6, BH-8); (2) his admission of his mistakes and his apology set forth in his proposed findings; (3) the fact that the violations resulted in no safety consequences (only the potential for such consequences); (4) the fact that the willful and intentional violations did not commence prior to December 1996; and (5) the fact that Dr. Ben-Haim's violation was at least influenced by Dr. Elamir. Based on these additional factors, we find that only a 3-year prohibition from NRC-licensed activities is appropriate and justified, coupled with the reporting requirements imposed by the Staff (which we do not modify) for any NRC-licensed activities performed for 5 years following expiration of the suspension. The suspension of Dr. Ben-Haim will expire July 31, 2000.

IV. CONCLUSIONS OF LAW

The Board has considered all of the evidence presented by the parties pertaining to the Staff's Order prohibiting Dr. Ben-Haim's involvement in NRC-licensed activities. Based upon a review of the entire record in this proceeding and the proposed findings of fact and conclusions of law submitted by the parties, and based on the findings of fact set forth herein, which are supported by reliable, probative and substantial evidence in the record, the Board has decided all matters in controversy and reaches the following conclusions.

Based on the foregoing findings of fact, the Board finds that Dr. Ben-Haim caused NMA to be in violation of the following Commission regulations: 10 C.F.R. §§ 35.11(a) and (b), 35.13, 35.21, 35.53(c)(3). The Board also finds that Dr. Ben-Haim caused NMA to be in violation of License Conditions 12, 13, and 16. We find that these actions were deliberate on the part of Dr. Ben-Haim, for the period beginning in December 1996, and, thus, he violated 10 C.F.R. § 30.10.

[5] We acknowledge, however, that the 3-year suspension of Dr. Elamir was probably based in part on the fact that there was a settlement among the parties in that proceeding but also note that the fact of settlement should have little to do with the trust that the Commission may be able to place in the individual.

Based on those violations and the testimony and documentary evidence submitted in this proceeding, the Board finds that the Staff has sufficiently met its burden of proof (except with respect to the length of the proposed suspension) and has shown by a preponderance of the evidence that the Order should be sustained (but modified to reduce the suspension from 5 to 3 years). Under the Order, the Staff also has discretion to reduce further the suspension, upon request by Dr. Ben-Haim.

V. ORDER

On the basis of the foregoing opinion, including findings of fact, conclusions of law, and the entire record, it is, this 8th day of February 1999, *ORDERED*:

1. The Staff's August 27, 1997, ''Order Superseding Order Prohibiting Involvement in NRC-Licensed Activities (Effective Immediately),'' is *MODIFIED* and, as so modified, *SUSTAINED.*

2. This Initial Decision is effective immediately and, in accordance with 10 C.F.R. § 2.760 of the Commission's Rules of Practice, shall become the final action of the Commission forty (40) days from the date of its issuance, unless any party petitions for Commission review in accordance with 10 C.F.R. § 2.786 or the Commission takes review *sua sponte. See* 10 C.F.R. § 2.786.

3. Within fifteen (15) days after service of this Decision, any party may seek review of this Decision by filing a petition for review by the Commission on the grounds specified in 10 C.F.R. § 2.786(b)(4). The filing of the petition for review is mandatory for Dr. Ben-Haim to exhaust his administrative remedies before seeking judicial review. 10 C.F.R. § 2.786(b)(2).

4. The petition for review shall be no longer than ten (10) pages and shall contain the information set forth in 10 C.F.R. § 2.786(b)(2). Any other party may, within ten (10) days after service of a petition for review, file an answer supporting or opposing Commission review. Such an answer shall be no longer than ten (10) pages and, to the extent appropriate, should concisely address the

matters in 10 C.F.R. § 2.786(b)(2). A petitioning party shall have no right to reply, except as permitted by the Commission.

THE ATOMIC SAFETY AND
LICENSING BOARD

Charles Bechhoefer, Chairman
ADMINISTRATIVE JUDGE

Dr. Jerry R. Kline
ADMINISTRATIVE JUDGE

Dr. Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 8, 1999

[Appendix A has been omitted from this publication but can be found in the NRC Public Document Room, 2120 L Street, NW, Washington, DC 20555.]

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Richard F. Cole, Special Assistant

In the Matter of **Docket No. 40-8681-MLA-4**
(ASLBP No. 98-748-03-MLA)
(Re: Material License Amendment)

INTERNATIONAL URANIUM (USA) CORPORATION
(Receipt of Material from Tonawanda, New York)

February 9, 1999

The Presiding Officer affirmed the grant of a license to Applicant to receive Ashland 2 material from Tonawanda, New York. He rejected the argument of the State of Utah that ''the Amendment does not comply with Commission Guidance because the material is not byproduct material and must therefore be disposed of at an appropriate facility rather than being subject to 'sham disposal.' '' Instead, the Presiding Officer reasoned that the material being received by IUSA is ore because it ''is processed primarily for its source material content when the extraction of source material is the principal reason for *processing* the ore. Under those circumstances, the material falls within the NRC's jurisdiction over the uranium fuel cycle.''

BYPRODUCT MATERIAL: ORE; 42 U.S.C. § 2014e(2)

Under 42 U.S.C. § 2014e(2) the phrase ''processed primarily for its source material content'' should be given its natural meaning. The adverb ''primarily'' modifies the verb ''processed.'' Therefore, ore is processed primarily for its

source material content when the extraction of source material is the principal reason for *processing* the ore. Under those circumstances, the material falls within the NRC's jurisdiction over the uranium fuel cycle.

BYPRODUCT MATERIAL: ORE; ALTERNATE FEED GUIDANCE

The Proposed Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores, 57 Fed. Reg. 20,525, 20,533 (1992) (''Alternate Feed Guidance'') makes it clear that if source material is extracted from a material at a licensed uranium mill, then the material is considered to be ''ore,'' providing that it does not contain hazardous waste and that it is processed so that a useable product, uranium, is extracted from it.

INITIAL DECISION
(Denying the Relief Requested by the State of Utah)

The State of Utah's Written Presentation pursuant to 10 C.F.R. § 2.1233 is titled, ''Brief in Opposition to International Uranium (USA) Corporation's Source Material License Amendment,'' December 7, 1998 (Brief). This brief and the responses to it[1] form the basis for the determination of whether the State's concerns should be sustained or dismissed.

The license amendment Utah complains of, Amendment 6, allows the International Uranium (USA) Corporation (IUSA) to process as an alternate feedstock at its mill certain uranium-bearing material from the Ashland 2 site located in Tonawanda, New York. The Ashland 2 site is administered by the Army Corps of Engineers (''USACE'') under the Department of Energy's (''DOE's'') Formerly Utilized Sites Remedial Action Program (FUSRAP).[2]

The State's principal argument is that the Amendment does not comply with Commission guidance because the material is not byproduct material and must therefore be disposed of at an appropriate facility rather than being subject to ''sham disposal.'' It maintains that ''11e.(2) byproduct material requires that the ore be 'processed * * * primarily for its source material content' and thus would not permit . . . sham disposals.'' (Emphasis in original.) Brief at 4-5, *citing*

[1] The International Uranium (USA) Corporation's (IUSA) Reply was filed on January 19, 1999, and the Staff of the U.S. Nuclear Regulatory Commission's (Staff) Reply was filed on January 29, 1999.

[2] The FUSRAP program was established by the Atomic Energy Commission (''AEC'') in 1974, to clean up and control radioactive contamination at sites associated with activities that were previously carried out on behalf of the Manhattan Engineering District, its successor the AEC, and other related entities during the early days of the nation's nuclear program. *See generally* U.S. Department of Energy, *The Formerly Utilized Sites Remedial Action Program (FUSRAP): Building Stakeholder Partnerships to Achieve Effective Cleanup,* DOE/EM-0233 (April 1995).

Proposed Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores, 57 Fed. Reg. 20,525, 20,533 (1992) (''Proposed Guidance'').

I conclude that the State misconstrues the Atomic Energy Act, which defines as byproduct materials ''the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.'' Atomic Energy Act of 1954 as amended, 42 U.S.C. § 2014e(2).

The State interprets ''processed primarily for'' to require a test of motive or purpose. It argues that the IUSA is processing this material primarily for the fee it is being paid for *receiving* the material and it attempts to show that the fee exceeds the amount of money that will be recovered by extracting uranium from the material.

While the State's argument has some superficial appeal, the phrase ''processed primarily for its source material content'' should be given its natural meaning. The adverb ''primarily'' modifies the verb, ''processed.'' Therefore, ore is processed primarily for its source material content when the extraction of source material is the principal reason for *processing* the ore. Under those circumstances, the material falls within the NRC's jurisdiction over the uranium fuel cycle.[3] Accordingly, when the extraction of uranium is the principal reason that ore is processed, it meets the test of this section and is byproduct material.[4] If, on the other hand, the material were processed primarily to remove some other substances (vanadium, titanium, coal, etc.) and the extraction of uranium was incidental, then the processing would not fall within the statutory test and it would not be byproduct material within the meaning of the Atomic Energy Act. That is, the adverb, ''primarily,'' applies to what is removed from the material by the process and not to the motivation for undertaking the process.

This reading is consistent with the Uranium Mill Tailings Radiation and Control Act of 1978, as amended (UMTRCA), 2(b)(2), 42 U.S.C. § 7901, which states that a purpose of that Act is

> 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.

Moreover, the legislative history of the definition of byproduct material incorporated into Section 11e(2) of the Atomic Energy Act shows that it was intended to focus on the nuclear fuel cycle. NRC Chairman, Joseph M. Hendrie, testified:

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[3] *See* Chairman Hendrie's remarks on p. 110.

[4] There are two reasons to remove uranium: the value of the material that is removed and the reduced expense of disposing of the material. Ordinarily, material processed at a nuclear fuel cycle facility would be considered to be processed primarily to remove uranium.

> [T]he intent of the language is to keep NRC's regulatory authority primarily in the field of the nuclear fuel cycle. Not to extend this out into such things as phosphate mining and perhaps even limestone mining, which are operations that do disturb the radium-bearing crust of the Earth and produce some exposures, but those activities are not connected with the nuclear fuel cycle. . . .

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 Before the Subcomm. on Energy and Power of the House Comm. on Interstate and Foreign Commerce, 95th Cong. 343-44 (1978) (statement of Joseph N. Hendrie, Chairman of Nuclear Regulatory Commission).

This definition of byproduct material reaches a sound practical result in this case. The State of Utah describes the transaction in this case, at 6-8 of its Brief, as follows:

> The Ashland 2 material is located on a U.S. Army Corps of Engineer's (''USACE'' or ''Corps'') Formerly Utilized Site Remedial Action Program (''FUSRAP'') site at Tonawanda, New York. ICF Kaiser is the Corps' prime contractor for the cleanup of the FUSRAP Tonawanda site. As discussed in Mr. Herbert's Testimony, the State obtained a copy of ICF Kaiser's request, price analysis, and summary of waste disposal alternatives submitted to the Corps in support of the award of a contract to IUSA ''for material handling and disposal services'' for the Ashland 2 material. *See* Exhibit 3 attached to Mr. Herbert's testimony.[5] According to ICF Kaiser's Price Analysis, ICF Kaiser conducted a market survey to ''determine the firms who regularly provide material handling and waste disposal services.'' All the firms identified, with the exception of IUSA, are permitted as waste disposal facilities (*i.e.,* Envirocare, Envirosafe, Laidlaw, and Waste Control Specialists).
>
> Under the contract, ICF Kaiser will pay transportation costs to deliver the Ashland 2 material to the White Mesa mill. IUSA will collect a material handling and disposal fee of $90/cubic yard of Ashland 2 material received at the mill. IUSA initially estimated that the Ashland 2 material would contain a maximum of 25,000 dry tons. However, IUSA has now informed the State that the amount of Ashland 2 material it will receive will be as much as 45,000 cubic yards. Herbert Testimony at 6. Based on this latest estimate of the amount of material IUSA will receive, the material handling and disposal fees total $4,050,000. Herbert Testimony at 9. Additionally, Mr. Herbert used the current market price of yellowcake and various estimates of Ashland 2's uranium concentration to calculate possible value of uranium that could be processed from the Ashland 2 material. Without waste-specific density data, Mr. Herbert used the assumption that the density of the Ashland 2 material ranges from 80 to 100 lbs/cubic foot. Herbert Testimony at 6.

[5] The State has independently obtained a copy of the signed contract between IUSA and ICF Kaiser. IUSA has asserted to the State that this contract should be treated as confidential. As the information in the contract is not inconsistent with the information that ICF Kaiser presented to the Corps, the State will forego, for now, introducing the IUSA-ICF Kaiser contract into evidence in this proceeding. However, IUSA has itself disclosed contract cost information to NRC in the Ashland 2 license amendment request. *See* Attachment 3 thereto (*USACE Value Engineering Proposal for Ashland 1 and Ashland 2*).

The range of potential uranium values, based on weight percent of uranium-238 listed in Tonawanda FUSRAP documents, is as follows:

Value	Density	Uranium Content
$ 68,040	80 lbs/cubic foot	0.008 percent
$ 85,050	100 lbs/cubic foot	0.008 percent
$221,130	80 lbs/cubic foot	0.026 percent
$276,413	100 lbs/cubic foot	0.026 percent
$493,290	80 lbs/cubic foot	0.058 percent
$616,613	100 lbs/cubic foot	0.058 percent

Herbert Testimony at 8. Thus, the gross value from uranium extraction — which does not take into account the costs of extracting the material — ranges from $68,000 to a little more than $600,000 depending on the actual density of the material and its total uranium content. *Id.*

I conclude that the scenario presented by the State of Utah is a good practical argument for *permitting* the milling of uranium contained in the Ashland 2 materials. First, IUSA produced the lowest bid for recycling these materials. Why? As the State of Utah has explained, IUSA would remove some uranium from the materials and would make at least a small profit on that activity. Second, from an environmental standpoint, it is preferable to extract uranium before burying waste materials that contained it. Third, even the State of Utah projects a net profit from the milling activity. Hence, it is reasonable to predict that the milling will actually occur. Since the milling will occur, it is not a ''sham'' as the State has argued. It is real.[6]

Here is the way that IUSA expressed this same point on page 55 of its Reply:

IUSA will be recycling substantial quantities of a valuable material. As already discussed, even based on the conservative numbers calculated by the State, IUSA is likely to recover between 8,000 to 70,000 pounds of uranium from its processing of the Ashland 2 material. In all likelihood, if IUSA were not processing the Ashland 2 material this substantial quantity of valuable uranium would be lost to disposal. Recovering and recycling such a substantial quantity of valuable uranium is an important benefit, and provides an additional justification for IUSA's certification.[7] This was perceived to be a benefit by USACE, the agency administering remediation of the Ashland 2 site, which is one of the reasons why

[6] It seems to me that the only ''sham'' that stops material from being byproduct material is if it is not actually milled. If it is milled, then it is not a sham.

[7] Indeed, as EPA has noted, recycling can be legitimate and beneficial even if it is not profitable. *See generally* 63 Fed. Reg. at 28,556.

IUSA was chosen by USACE and committed contractually to process the Ashland 2 materials for the recovery of uranium;[8]

Second, by recovering uranium from the Ashland 2 material, IUSA's processing makes the material less radioactive, thereby reducing the hazards associated with its ultimate disposition and, in effect, making it safer for disposal. This was also perceived to be a benefit by the USACE and hence is another reason that IUSA was chosen to and contractually committed to process the Ashland 2 materials for the recovery of uranium;

Third, recycling the Ashland 2 material provides a benefit to the government, and therefore to the public at large, by allowing the FUSRAP program to reduce its inventories of unwanted materials and accomplish environment clean-up in a manner that is environmentally sound, that is cost efficient, and that allows for the recovery of a valuable product that would otherwise be disposed;

Fourth, the Ashland 2 materials are 11e.(2) byproduct materials that originated from conventional ores and are therefore chemically, radiologically and physically similar to the existing Mill tailings and should be expected to be able to be processed for the recovery of uranium at the Mill; and,

Finally, IUSA has a history of successfully extracting uranium from alternate feed materials and has developed credibility with the NRC, not only for being technically competent, but also for fulfilling its proposals to recover uranium from alternate feeds.

The Alternate Feed Guidance is not supportive of the position, taken by the State of Utah, that material is to be considered byproduct only if the primary economic motivation is to remove uranium rather than to dispose of waste. For example, on page 4 of its Brief, the State quotes the following out of context:

> the potential of converting material that would have to be disposed of as [Low Level Radioactive Waste (''LLW'')] or mixed waste into ore, for processing and disposal as 11e.(2) byproduct material. The possibility of converting such wastes to 11e.(2) byproduct material can be very attractive to owners of such material. . . . An owner of such material could pay a mill operator substantially less to process it for its uranium content and dispose of the resulting 11e.(2) byproduct material than to dispose of the material as waste at an appropriate facility.

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[8] Thus, in its value engineering proposal for disposition of the Ashland 2 material, the USACE specifically listed among the advantages associated with IUSA's processing of the material:

> ADVANTAGES
>
> 1. Conforms to Congressional and regulatory mandates which encourage use of recycling.
>
> 2. Reduces radioactivity of the material to be disposed of.
>
> 3. Recycles uranium and other minerals.
>
> . . . .
>
> 7. Actual cost savings for treatment and disposal versus cost of direct disposal can only be greater than projected in this proposal, depending upon the actual content of recoverable uranium or other minerals found in the waste stream.

See USACE Value Engineering Proposal, Proposal No. C-11, originally included with IUSA's license amendment application, by letter from Michelle R. Rehmann to Joseph J. Holonich (May 8, 1998). [*See* IUSA Response, Exh. 7.]

Proposed Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores, 57 Fed. Reg. 20,525, 20,533 (1992) (''Alternate Feed Guidance'').

I find the interpretation of the State of Utah to be misleading because this same Alternate Feed Guidance, at 20,532-33, makes it clear that if source material is extracted from a material at a licensed uranium mill, then the material is considered to be ''ore,'' providing that it does not contain hazardous waste[9] and that it is processed so that a useable product, uranium, is extracted from it. Accordingly, I conclude that IUSA meets the requirements of statute and guidance. It is not involved in a sham. It is milling ore and its license was appropriately granted to it.[10]

ORDER

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 9th day of February 1999, ORDERED that:

1. The relief requested by the State of Utah in its December 7, 1998, ''Brief in Opposition to International Uranium (USA) Corporation's Source Material License Amendment'' is *denied.*

2. This Decision is reviewable under 10 C.F.R. § 2.1253, pursuant to the procedures set forth in 10 C.F.R. §§ 2.786 and 2.763. The petition for review must be filed within 15 days of the service of this Decision..

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

[9] The State of Utah has satisfied itself that the Ashland 2 material does not contain hazardous waste. Utah Brief at 3. The adequacy of the Staff's safety review is irrelevant. *Curators of the University of Missouri,* CLI-95-1, 41 NRC 71, 121 (1995).

[10] The State has failed to show any material respect in which the Staff's environmental review of this license amendment was deficient. The assertion that the State's regulations may be more stringent than the NRC's does not demonstrate the inadequacy of the environmental review.

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) **February 17, 1999**

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 approves a notice of withdrawal, with prejudice, submitted by Intervenors Castle Rock Land and Livestock, L.C., and Skull Valley Company, Ltd., and denies the request of Intervenor State of Utah to adopt their contentions as late-filed.

RULES OF PRACTICE: WITHDRAWAL OF INTERVENOR

With an intervenor's approved exit from a proceeding, those admitted contentions for which it is the sole sponsor also depart. Accordingly, in the absence of prior timely adoption by another intervenor, those contentions can be preserved for further consideration only if an intervenor shows that the issues are admissible under the late-filing standards of 10 C.F.R. § 2.714(a)(1). *See Houston Lighting & Power Co.* (South Texas Project, Units 1 and 2), ALAB-799, 21 NRC 360, 382-83 (1985).

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (GOOD CAUSE FOR LATE FILING)

Although the Appeal Board in the *South Texas* proceeding was concerned that a blanket stricture on the later adoption of a withdrawing party's contentions would complicate litigation and settlement by encouraging ''nominal'' contention co-sponsorship at a proceeding's outset, *see* ALAB-799, 21 NRC at 384, that consideration is not implicated when, as is apparent from its previous late-filed pleading seeking to adopt all other Intervenors' contentions, an Intervenor sought early on to impose those complexities in this proceeding and failed to make the appropriate arguments. Under the circumstances, no reason exists to provide a second bite at the apple, especially when the Intervenor's ultimate justification is based on no more than the ''trusted others to vigorously pursue'' line of argument rejected in *South Texas. See id.* at 382-83.

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (GOOD CAUSE FOR DELAY)

A failure to demonstrate good cause for late-filing requires there be a ''compelling showing'' regarding the other four late-filing factors. LBP-98-7, 47 NRC 142, 208 (1998).

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (OTHER MEANS AND OTHER PARTIES TO PROTECT INTERVENORS' INTERESTS; ASSISTANCE IN SOUND RECORD DEVELOPMENT; DELAY)

Late-filing factors two and four — availability of other means to protect the petitioner's interests and extent of representation of petitioner's interests by other parties — are accorded less weight in the balance than factors three and five — assistance in developing a sound record and broadening the issues/delaying the proceeding. *See* LBP-98-7, 47 NRC at 208; *see also* LBP-98-29, 48 NRC 286, 294 (1998).

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (DELAY)

Late-filing factor five — broadening the issues/delaying the proceeding — clearly does not weigh in favor of admission when the contentions otherwise would not be part of the proceeding because of the sponsoring intervenor's withdrawal. *See South Texas,* ALAB-799, 21 NRC at 382 (rejecting argument applicant will not be prejudiced if required to litigate previously admitted

contentions of withdrawing intervenor because applicant already knew those issues would be explored).

MEMORANDUM AND ORDER
(Approving Notice of Withdrawal and Denying Request to Adopt Contentions as Late-Filed)

Applicant Private Fuel Storage, L.L.C. (PFS), has requested agency authorization to construct and operate a 10 C.F.R. Part 72 independent spent fuel storage installation (ISFSI) on the Utah reservation of the Skull Valley Band of Goshute Indians (Skull Valley Band). Pending with the Licensing Board is the December 21, 1998 notice of Intervenors Castle Rock Land and Livestock, L.C., and Skull Valley Company, Ltd. (Castle Rock), declaring their intent to withdraw from this proceeding convened to adjudicate various Intervenor concerns about the PFS application. In response to that notice, intervenor State of Utah (State) has requested that it be permitted to litigate two of the three contentions for which Castle Rock has had sole responsibility as well as all portions of those Castle Rock contentions that previously were consolidated with other Intervenors' issues by the Licensing Board. Applicant PFS opposes the State's request in toto, while the NRC Staff accepts it in part and opposes it in part.

For the reasons set forth below, we accept the Castle Rock notice of withdrawal, with prejudice, and dismiss all the Castle Rock unconsolidated contentions and portions of the consolidated contentions.

I. BACKGROUND

On December 21, 1998, Castle Rock filed a notice of withdrawal, declaring that they ''hereby voluntarily and with prejudice withdraw from this proceeding . . . .'' Notice of Withdrawal of [Castle Rock] (Dec. 21, 1998) at 1. In the letter accompanying that request, Castle Rock asked that the Board approve the withdrawal notice. *See* Letter from Bryan T. Allen, Counsel for Castle Rock, to the Licensing Board (Dec. 21, 1998) at 1. The Board permitted party comments on the Castle Rock withdrawal notice, and the State, PFS, and the Staff responded.

Regarding the Castle Rock contentions, or portions of contentions, admitted by the Board in LBP-98-7, 47 NRC 142 (1998), the State declared that notwithstanding the Castle Rock departure from this proceeding, it wished to pursue (1) two of the three Castle Rock contentions — Castle Rock 17 and 20 — that were admitted but not consolidated with other Intervenor contentions; and (2) all facets of the seven contentions that contained consolidated portions

of Castle Rock contentions. *See* [State] Response to Castle Rock's Notice of Withdrawal (Jan. 5, 1999) at 1 [hereinafter State Response]. According to the State, most of the Castle Rock contentions are ''inextricably intertwined'' with the State's contentions so as to preclude any dissection of their contentions from the other parties' issues. Nonetheless, for those that are not, the State asserted it meets the late-filing criteria of 10 C.F.R. § 2.714(a)(1) so as to permit their adoption now. *Id.*

PFS and the Staff contended that with Castle Rock's withdrawal, all three unconsolidated contentions and different portions of the seven consolidated contentions should be dismissed. *See* Applicant's Response to Notice of Withdrawal of [Castle Rock] (Jan. 5, 1999) [hereinafter PFS Response]; NRC Staff's Response to Castle Rock's Notice of Withdrawal (Jan. 5, 1999) [hereinafter Staff Response]. PFS sought dismissal of portions of five consolidated contentions — Utah E/Castle Rock 7/Confederated Tribes F; Utah K/Castle Rock 6/Confederated Tribes B; Utah O/Castle Rock 8 and 10; Utah S/Castle Rock 7; and Utah T/Castle Rock 10, 12, and 22 — while the Staff declared that parts of only three — Utah E/Castle Rock 7/Confederated Tribes F; Utah O/Castle Rock 8 and 10; and Utah T/Castle Rock 10, 12, and 22 — should be excised. *See* PFS Response at 5-9; Staff Response at 4-5. In addition, PFS declared that any State attempt to have the admitted Castle Rock contentions (or portions thereof) remain in the proceeding under the late-filed contention criteria of 10 C.F.R. § 2.714(a)(1) should be rejected. *See* PFS Response at 9-10.

In simultaneous reply filings submitted on January 15, 1999, the State, PFS, and the Staff offered their positions concerning the earlier party filings. With regard to the consolidated contentions, the State asserted those issues should be left as specified in LBP-98-7 because of the way the Board initially structured the proceeding, the amount of resources the State has devoted to the case in reliance on its current structure, and the implications that can be drawn from uncoupling the consolidated contentions. *See* [State] Reply to NRC Staff's and Applicant's Responses to Castle Rock's Notice of Withdrawal (Jan. 15, 1999) at 2-4 [hereinafter State Reply]. Alternatively, the State maintained it should be permitted to litigate the Castle Rock consolidated contentions, as well as the unconsolidated contentions, as late-filed because they independently are admissible under the section 2.714(a)(1) criteria. *See id.* at 4-13. PFS, on the other hand, declared the Castle Rock consolidated and unconsolidated contentions identified in its initial filing should be dismissed because the State's attempt to retain them in this proceeding is impermissibly late-filed. *See* Applicant's Reply to [State] Response to Castle Rock's Notice of Withdrawal (Jan. 15, 1999) [hereinafter PFS Reply]. With one minor revision, the Staff maintained its position regarding the dismissal or retention of the Castle Rock consolidated and unconsolidated contentions. *See* NRC Staff's Reply to [State]

Response to Castle Rock's Notice of Withdrawal (Jan. 15, 1999) [hereinafter Staff Reply].

II. ANALYSIS

With Castle Rock's exit from this proceeding, which we approve, those admitted contentions for which it is the sole sponsor also depart. Accordingly, in the absence of prior timely adoption by another intervenor, those contentions can be preserved for further consideration only if an intervenor shows that the issues are admissible under the late-filing standards of 10 C.F.R. § 2.714(a)(1). *See Houston Lighting & Power Co.* (South Texas Project, Units 1 and 2), ALAB-799, 21 NRC 360, 382-83 (1985). We have described and applied those criteria in several other instances in this proceeding. *See* LBP-99-3, 49 NRC 40, 46 (1999) (citing cases).

With the exception of contention Castle Rock 21, the State now seeks to preserve all of Castle Rock's admitted contentions, whether those issues stand alone or have been consolidated with another party's contentions. Neither PFS nor the Staff contest the fact that two of the seven consolidated contentions — Utah AA/Castle Rock 13 and Utah DD/Castle Rock 16 — should remain intact as State contentions. We now redesignate those issues as Utah AA and Utah DD. As to the others, however, in addition to considering the State's arguments about the scope of certain consolidated contentions, each Castle Rock contention the State seeks to preserve must be judged in accordance with the late-filing standards of section 2.714(a)(1).

A. Unconsolidated Contentions — Castle Rock 17 and Castle Rock 20

DISCUSSION: State Response at 10-15; PFS Response at 9-10; Staff Response at 10-15; State Reply at 2-3; PFS Reply at 2-6; Staff Reply at 4-8.

RULING: Relative to factor one — good cause for late-filing — we are unable to find that the State has made the showing needed to place this important factor on the admissibility side of the section 2.174(a) balance. The State (unlike Intervenor Confederated Tribes of the Goshute Reservation (Confederated Tribes), *see infra* p. 120) did not initially express a ''shared concern'' with Castle Rock about certain of their issues, a factor the *South Texas* Appeal Board found significant in concluding that a subsequent attempt to adopt other contentions of a departing intervenor was not supported by good cause. *See* ALAB-799, 21 NRC at 383-84 & n.106. Instead, the State in this instance waited until approximately one month later to seek to adopt these Castle Rock contentions (as well as the contentions of all other Intervenors), albeit without addressing the late-filing standards, which was a defect we later found warranted

rejection of its request. *See* LBP-98-7, 47 NRC at 163, 182. Despite these differences, however, the result here is the same as in *South Texas.*

Acknowledging the *South Texas* Appeal Board's concern that a blanket stricture on the later adoption of a withdrawing party's contentions would complicate litigation and settlement by encouraging ''nominal'' contention co-sponsorship at a proceeding's outset, *see* ALAB-799, 21 NRC at 384, in this instance that consideration is not implicated. As is apparent from its previous late-filed pleading seeking to adopt all intervenor contentions, the State sought early on to impose those complexities in this proceeding. Having failed to make the appropriate arguments at that time, we see no reason it now should have a second bite at the apple, especially when its ultimate justification is based on no more than the ''trusted others to vigorously pursue'' line of argument rejected in *South Texas. See id.* at 382-83.

As we have observed elsewhere, a failure to demonstrate good cause for late-filing requires there be a ''compelling showing'' regarding the other four late-filing factors. LBP-98-7, 47 NRC at 208. As the Staff has noted, *see* Staff Reply at 7, factors two and four — availability of other means to protect the petitioner's interests and extent of representation of petitioner's interests by other parties — generally favor late admission of these contentions. These criteria, however, are accorded less weight in the balance than factors three and five — assistance in developing a sound record and broadening the issues/delaying the proceeding. *See* LBP-98-7, 47 NRC at 208; *see also* LBP-98-29, 48 NRC 286, 294 (1998). In this instance, the State's showing relative to factor three provides perhaps only minimal support for accepting these contentions. *See id.* at 208-09. On the other hand, factor five clearly does not weigh in favor of admission, given that, as they now stand, these two issues otherwise would not be part of this proceeding. *See South Texas,* ALAB-799, 21 NRC at 382 (rejecting argument applicant will not be prejudiced if required to litigate previously admitted contentions of withdrawing intervenor because applicant already knew those issues would be explored).

Thus, even with the modest support afforded by factors two, three, and four, the State has not made the compelling showing required to overcome the lack of good cause for its late-filing. The State's request to permit it to litigate contentions Castle Rock 17 and 20 therefore is denied.

B. Consolidated Contentions

1. Utah E/Castle Rock 7/Confederated Tribes F

DISCUSSION: State Response at 5, 6-10; PFS Response at 6; Staff Response at 4-5; State Reply at 4-6; Staff Reply at 10-11.

RULING: As the Staff correctly points out, *see* Staff Response at 4 & n.6, the Board previously ruled that Confederated Tribes had properly adopted Castle Rock 7, although in doing so we failed to acknowledge that portions of that contention had been admitted and consolidated with this issue statement. *Compare* LBP-98-7, 47 NRC at 215 *with id.* at 237. As a consequence, all portions of this consolidated contention remain in this proceeding. The contention is redesignated as contention Utah E/Confederated Tribes F.

2. Utah K/Castle Rock 6/Confederated Tribes B

DISCUSSION: State Response at 5, 7-10; PFS Response at 6-7; Staff Response at 4-5; State Reply at 8-12; PFS Reply at 8-15; Staff Reply at 14-15.

RULING: Initially, we find unpersuasive the State's consolidated contention-related arguments regarding inextricable intertwining, lead party status, and maintaining the status quo.[1] The first point is not borne out by a careful review of the contentions, the second does not account for the separate status each party retains under the ''lead party'' scheme,[2] and the third does not account for the general Commission policy of encouraging settlements.

As a consequence, based on a review of the admitted portions of these consolidated contentions and their supporting bases, absent a State showing it has met the late-filing standards relative to Castle Rock 6, this contention is now limited to the activities affecting the PFS facility or the Rowley Junction intermodal transfer point (ITP) specified in our ruling on Utah K,[3] and the concern about wildfires specified in Confederated Tribes B. Further, upon balancing the late-filing standards, for the reasons we have noted already, *see supra* pp. 118-19, we find the State lacks good cause for late-filing. Nor, for the reasons we specified earlier, *see supra* p. 119, does a balancing of the other four factors produce the ''compelling showing'' necessary to overcome the lack of good cause.

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[1] Nor do we find persuasive the asserted contrary authority in the Licensing Board decision in *Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), LBP-94-22, 40 NRC 37, 39 (1994), relied upon by the State, *see* State Response at 7-8, given that (1) the earlier Licensing Board case relied on for the *Vogtle* standard dealt with the admission of a contention in the context of a motion to reopen the record, a significantly different concept; and (2) the State's failure to make a convincing timeliness argument so as to meet the *Vogtle* standard.

[2] In establishing the ''lead party'' procedure, we made it clear that while consultation and accommodation should be the norm between the lead party and any other parties involved with a consolidated contention, it is possible for a nonlead party that disagrees with a lead party to bring disputes to the Board's attention. *See* LBP-98-7, 47 NRC at 243 n.29.

[3] As we declared in LBP-98-7, 47 NRC at 190, this would encompass relative to (1) the PFS facility, those activities at or emanating from the Tekoi Rocket Engine Test facility, Dugway Proving Ground, Salt Lake City International Airport, Hill Air Force Base, and the Utah Test and Training Range; or (2) the Rowley Junction ITP, those activities at or emanating from the facilities specified above, or hazardous materials that pass through the ITP from the Laidlaw APTUS hazardous waste incinerator, the Envirocare low-level radioactive and mixed waste landfill, or Laidlaw's Clive Hazardous Waste Facility and Grassy Mountain hazardous waste landfill.

The State's request to litigate the admitted portions of Castle Rock 6 that were consolidated with the admitted portions of Utah K and Confederated Tribes B thus is denied and the scope of the consolidated contention is limited as specified above. This contention is redesignated as Utah K/Confederated Tribes B.

3. Utah O/Castle Rock 8 and 10

DISCUSSION: State Response at 6, 7-10; PFS Response at 7; Staff Response at 5; State Reply at 6-7; PFS Reply at 9-15; Staff Reply at 10-15.

RULING: As we have previously indicated, *see supra* p. 120, we find unpersuasive the State's consolidated contention-related arguments regarding inextricable intertwining, lead party status, and maintaining the status quo.

Further, based on a review of the admitted portions of these contentions and their supporting bases, absent a State showing it has met the late-filing standards relative to Castle Rock 8, paragraph one of this consolidated contention encompasses only routine facility operations, thereby excluding firefighting activities. And with respect to the late-filing standards, for the reasons we already have noted, *see supra* pp. 118-19, we find the State lacks good cause for late-filing. Nor, for the reasons we specified earlier, *see supra* p. 119, does a balancing of the other four factors produce the ''compelling showing'' necessary to overcome the lack of good cause.

Accordingly, the State's request to litigate the admitted portion of Castle Rock 8 concerning firefighting activities that was consolidated with the admitted portions of Utah O is denied. Paragraph one of that contention is revised as follows:

> 1. Contaminant pathways from the Applicant's sewer/wastewater systems; routine facility operations; and construction activities.

Further, this contention is redesignated as Utah O.

4. Utah S/Castle Rock 7

DISCUSSION: State Response at 4, 7-10; PFS Response at 7-8; Staff Response at 4-5; State Reply at 12-13; PFS Reply at 8-15; Staff Reply at 10-15.

RULING: We find the portion of contention Castle 7 at issue, i.e., paragraph c, is within the ambit of contention Utah S, so there is no need to revise this contention, other than to redesignate it as Utah S.[4]

[4] To the extent PFS has a concern about the viability of this contention relative to spent nuclear fuel disposal costs and offsite transportation radiological accidents, *see* PFS Response at 8 n.12, it remains free to seek summary disposition on such matters. *See* LBP-98-10, 47 NRC 288, 295 n.10 (1998).

5. Utah T/Castle Rock 10, 12, 22

DISCUSSION: State Response at 5, 7-10; PFS Response at 8-9; Staff Response at 4-5; State Reply at 7; PFS Reply at 9-15; Staff Reply at 8-15.

RULING: Initially, we find unpersuasive the PFS and Staff arguments seeking dismissal of those portions of the consolidated contention concerning the Utah Groundwater Protection Rules and the Utah Division of Air Quality Rules, which appear to be relevant to the air and water quality authorizations ultimately at issue in paragraphs four and five of the contention.

In connection with the other matter at issue regarding this contention, we once again find unpersuasive the State's consolidated contention-related arguments regarding inextricable intertwining, lead party status, and maintaining the status quo. *See supra* p. 120. Further, based on a review of the admitted portions of these contentions and their supporting bases, absent a State showing it has met the late-filing standards relative to Castle Rock 12, this contention is revised to excise the portion of paragraph six regarding the Skull Valley Band's Clean Water Act (CWA) permitting authority. That paragraph should now read as follows:

> 6. The Applicant's analysis of other required water permits lacks specificity and does not satisfy the requirements of 10 C.F.R. § 51.45 in that the Applicant merely states that it ''might'' need Army Corps of Engineers and State approvals in connection with any Clean Water Act (CWA) Section 404 dredge and fill permit for wetlands along the Skull Valley transportation corridor; and PFS will be required to consult with the State on the effects of the intermodal transfer site on the neighboring Timpie Springs Wildlife Management Area.

Relative to the late-filing standards, for the reasons we already have noted, *see supra* pp. 118-19, we find the State lacks good cause for late-filing relative to the Skull Valley Band's CWA permitting authority. Nor, for the reasons we specified earlier, *see supra* p. 119, does a balancing of the other four factors produce the ''compelling showing'' necessary to overcome the lack of good cause.[5]

Accordingly, the State having failed to establish it has met the late-filing standards in connection with portion of paragraph six regarding the Skull Valley Band's Clean Water Act (CWA) permitting authority, the scope of that paragraph is limited as set forth above. We redesignate this contention as Utah T.

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[5] We also note that the language in the PFS environmental report (ER) regarding the Skull Valley Band's CWA authority that apparently was the focus of this Castle Rock concern is not in the most recent ER revision. *Compare* [PFS] Environmental Report [for] Private Fuel Storage Facility at 9.1-4 (rev. 0 June 1997) *with id.* at 9.1-7 (rev. 1 Aug. 1998).

III. CONCLUSION

With Castle Rock's withdrawal, with prejudice, from this proceeding, its admitted contentions and its contentions admitted as part of a consolidated issue statement, but which now have no other sponsor, are no longer litigable. Although the State attempts to have these contentions admitted as late-filed under the 10 C.F.R. § 2.714(a)(1) criteria, we find its efforts are unavailing. As a result, we dismiss from this proceeding all Castle Rock contentions, including portions of otherwise consolidated contentions that are attributable solely to Castle Rock.[6]

For the foregoing reasons, it is, this 17th day of February 1999, ORDERED that:

1. The December 21, 1998 notice of withdrawal of Intervenor Castle Rock is *accepted* and *approved,* with prejudice.

2. The following contentions are *dismissed* from this proceeding: Castle Rock 17; Castle Rock 20; Castle Rock 21.

3. The following contentions are *revised* as set forth in Section II above: Utah E/Castle Rock 7/Confederated Tribes F; Utah K/Castle Rock 6/Confederated Tribes B; Utah O/Castle Rock 8 and 10; Utah S/Castle Rock 7; Utah T/Castle Rock 10, 12, 22; Utah AA/Castle Rock 13; Utah DD/Castle Rock 16.

THE ATOMIC SAFETY AND
LICENSING BOARD[7]

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 17, 1999

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[6] Having modified the titles of certain contentions, in a separate issuance today we revise the general schedule for this proceeding to reflect those changes. *See* Licensing Board Order (Revised General Schedule) (Feb. 17, 1999) at 1 (unpublished).

[7] Copies of this Memorandum and Order were sent this date by Internet e-mail transmission to counsel for (1) the Applicant PFS; (2) Intervenors Skull Valley Band, Ohngo Gaudadeh Devia, Confederated Tribes, Castle Rock, Southern Utah Wilderness Alliance, and the State; and (3) the Staff.

Judge Kline was unavailable to participate in final deliberations regarding, or to sign, this Memorandum and Order.

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) **February 18, 1999**

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 denies an Intervenor request to amend contentions concerning the validity of the Applicant's physical security plan (PSP) as the PSP relies on the local county sheriff's office to exercise law enforcement authority at the PFS ISFSI located on the reservation of the Skull Valley Band of Goshute Indians.

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (GOOD CAUSE FOR LATE FILING)

Having received a copy of an agreement concerning the provision of local law enforcement services for a Native American tribe's reservation where a proposed ISFSI is to be located, the Intervenor was under an obligation, particularly once the Licensing Board indicated the agreement had some relevance to the proceeding, to act promptly to uncover any additional problems with the pact. When there apparently were no complex scientific or technical analysis involved,

the more than 2-month period the Intervenor took to inquire was too long for it to claim that good cause existed for its late-filed request to submit additional issues.

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (GOOD CAUSE FOR DELAY)

A failure to demonstrate good cause for late filing requires there be a ''compelling showing'' regarding the other four late-filing factors. LBP-99-6, 49 NRC 114, 119 (1999).

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (OTHER MEANS AND OTHER PARTIES TO PROTECT INTERVENORS' INTERESTS; ASSISTANCE IN SOUND RECORD DEVELOPMENT; DELAY)

Late-filing factors two and four — availability of other means to protect the petitioner's interests and extent of representation of petitioner's interests by other parties — are accorded less weight in the balance than factors three and five — assistance in developing a sound record and broadening the issues/delaying the proceeding. *Id.*

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (ASSISTANCE IN SOUND RECORD DEVELOPMENT)

With regard to late-filing factor three — assistance in developing a sound record — when legal issues are a focal point of a late-filed contention, the need for an extensive showing regarding witnesses and testimony may be less compelling. *See* LBP-98-29, 48 NRC 286, 301 n.18 (1998).

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (DELAY)

Late-filing factor five — broadening the issues/delaying the proceeding — clearly does not support an intervenor's request to amend its security contentions when litigation regarding a local law enforcement agency's legal obligations under an agreement to provide law enforcement services to a Native American tribe is likely significantly to broaden and delay the proceeding by raising a substantive challenge to the agreement, as opposed to the essentially procedural challenge to its adoption protocols that already is before the Licensing Board,

as well as the possibility of having to await the outcome of legal actions in other judicial forums.

MEMORANDUM AND ORDER
(Denying Motion to Amend Security Contentions)

As part of its challenge to the pending 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) on the Utah reservation of the Skull Valley Band of Goshute Indians (Skull Valley Band), Intervenor State of Utah (State) previously sought and gained admission of several contentions regarding the adequacy of the physical security arrangements for the PFS facility. *See* LBP-98-17, 48 NRC 69, *granting reconsideration of* LBP-98-13, 47 NRC 360 (1998). In particular, the Board admitted portions of contentions Security-A, Security-B, and Security-C

> on the issue whether a June 1997 cooperative law enforcement agreement [(CLEA)] that permits the Tooele County sheriff's office to exercise law enforcement authority on the Skull Valley Band reservation has been properly adopted by Tooele County, thereby allowing the county sheriff's office to fulfill its role as the designated [local law enforcement agency (LLEA)] for the PFS facility.

LBP-98-17, 48 NRC at 71. The State now seeks to amend these admitted contentions to permit litigation of a new question regarding the participation of the Tooele County sheriff's office in responding to incidents at the PFS facility, a request both PFS and the NRC Staff oppose.

For the reasons that follow, we deny the State's security contentions amendment request.

I. BACKGROUND

The State's motion, which was submitted to the Board on December 17, 1998, is footed on a December 2, 1998 letter from the Tooele County Attorney that is attached to the State's pleading. *See* [State] Motion to Amend Security Contentions (Dec. 17, 1998), Exh. 3 [hereinafter State Motion]. Responding to an October 14, 1998 written inquiry from the Executive Director of the State's Department of Environment Quality about the extent of the assistance Tooele County will render for law enforcement on the Skull Valley Band reservation, *see id.,* Exh. 2, in that letter the Tooele County Attorney stated:

> I do not believe Tooele County is obligated to provide law enforcement protection to [PFS] and their proposed storage site. Tooele County patrols areas as requested by Skull Valley Tribal government. If they desire to include the [PFS] site we will have to revise the CLEA and negotiate to provide this service. At the time the CLEA was signed there was no discussion or contemplation that [PFS] would be part of the agreement. Moreover, the county has not yet entered into any agreement that has any bearing on locating the PFS storage facility on the reservation.

Id., Exh. 3, at 1.

According to the State, this statement by the Tooele County Attorney, who approved the existing CLEA as to form, establishes that PFS cannot satisfy the requirements of 10 C.F.R. § 73.51(d)(6) and 10 C.F.R. Part 73, App. C, § 3.d, which respectively require that an ISFSI applicant must (1) show a documented liaison with a designed LLEA to permit timely response to unauthorized penetration activities; and (2) provide a listing of available LLEAs, as well as a description of their response capabilities and criteria and a discussion of working arrangements or agreements for communication with such LLEAs. Because the December 2 letter shows that Tooele County will not provide law enforcement protection to the PFS facility under the existing CLEA, the State asserted it has (1) raised an additional admissible legal challenge; (2) added substance to the already admitted basis for contention Security-C regarding LLEA response time; and (3) provided support for broadening the bases of admitted contentions Security-A and Security-B concerning security force staffing, equipment, and training. *See* State Motion at 5-6. Finally, the State asserted that in connection with its proposed amendment of contentions Security-A, Security-B, and Security-C, it fulfills the five late-filing criteria of 10 C.F.R. § 2.714(a)(1).

Both PFS and the Staff opposed the PFS motion in pleadings filed December 29, 1998. PFS declared the State's motion should be rejected because (1) it failed to establish a balancing of the section 2.714(a)(1) standards support late-filed admission of its new assertions; and (2) the State's amended contentions would advocate stricter requirements than those imposed by the agency's regulations. *See* Applicant's Answer to [State] Motion to Amend Security Contentions (Dec. 29, 1998) at 1 [hereinafter PFS Response]. On the second point, PFS maintained that section 73.51(d)(6) requires only that the LLEA be able to respond to unauthorized activities at the PFS site, not patrol or provide preventative protection. Because assistance of the latter type is the subject of the Tooele County Attorney's December 2 letter, PFS argued that the State is seeking impermissibly to amend the existing contentions on a basis that goes beyond the requirements of the existing regulations. *See id.* at 8-10. For its part, the Staff challenged the State's request, arguing it (1) had not met its burden under the section 2.714(a)(1) late-filing criteria; and (2) failed to provide authoritative support for its new challenge to the facial validity of the existing CLEA

as it vests the Tooele County sheriff's office with jurisdiction to undertake law enforcement activities on the Skull Valley Band reservation. *See* NRC Staff's Response to [State] Motion to Amend Security Contentions (Dec. 29, 1998) at 3-11 [hereinafter Staff Response].

II. ANALYSIS

Because the State once again is seeking to interpose new matters into this proceeding, it must meet the five-factor balancing test found in 10 C.F.R. § 2.714(a)(1). And as before, we look first to the important factor of good cause for late filing. In this instance, the bone of contention posited by PFS and the Staff is not the amount of time the State took to lodge its motion after receiving the Tooele County Attorney's letter, which was less than 2 weeks, or even the nearly 2 months it apparently took Tooele County officials to answer the State's information inquiry. At issue instead is the amount of time the State took to request the information in the first instance. The State's letter, dated October 14, 1998, was posted some 4 months after the CLEA was first provided by PFS at a June 17, 1998 prehearing conference, *see* Tr. at S-15 to S-16, and more than 2 months after this Board admitted the CLEA-related issue on reconsideration.

The precipitating event for a late-filed contention often is a subject of some dispute. For present purposes we will assume the State had no reasonable basis for looking further into the CLEA until we granted its reconsideration request in our August 5, 1998 issuance. Even in this posture, however, we are unable to find the State's unexplained 2-month delay in directing questions to county officials has any legitimate justification that would provide good cause for its late filing. Having received a copy of the CLEA, the State was under an obligation, particularly once we indicated that agreement had some relevance to this proceeding, to act promptly to uncover any additional problems with that pact. In this instance, which apparently did not involve any complex scientific or technical analysis, we find the more than 2-month period the State took to inquire too long for it to claim that good cause existed for its late filing.

With this failure to demonstrate good cause for late filing comes the requirement that the State make a ''compelling showing'' regarding the other four late-filing factors. *See* LBP-99-6, 49 NRC 114, 119 (1999). As to factors two and four — availability of other means to protect the petitioner's interests and extent of representation of those interests by other parties — we find, as the Staff suggests, *see* Staff Response at 5-6, that they weigh in the State's favor. They are, however, accorded less weight in the balance than the other two criteria. *Id.*

Looking to factor three — assistance in developing a sound record — because legal issues are a focal point of the State's motion, the need for an extensive showing regarding witnesses and testimony may be less compelling. *See* LBP-

98-29, 48 NRC 286, 301 n.18 (1998). At the same time, the State seeks to use this matter as a vehicle to gain further consideration of previously rejected factual contentions regarding the adequacy of security force staffing and equipment, albeit without the requisite evidentiary proffer regarding these elements, thereby diluting somewhat the support factor three provides on the admission side of the balance.

Finally, factor five — broadening the issues/delaying the proceeding — clearly does not support the State's request to amend its security contentions. Litigation regarding the Tooele County sheriff office's legal obligations under the CLEA is likely significantly to broaden and delay this proceeding, raising as it does a substantive challenge to the agreement, as opposed to the essentially procedural challenge to its adoption protocols that is now before the Board, as well as the possibility of awaiting the outcome of legal actions in other judicial forums.

In sum, even with the modest support afforded by factors two, three, and four, the compelling showing needed to overcome the lack of good cause under factor one is lacking. The State's request to amend several of its security contentions therefore must be denied.[1]

III. CONCLUSION

In seeking to amend its security contentions to introduce questions regarding the validity of the CLEA as it provides that Tooele County will afford law enforcement services on the Skull Valley Band's reservation, Intervenor State of Utah has failed to demonstrate that the five factors governing late admission of contentions under 10 C.F.R. § 2.714(a)(1) support entertaining those revisions. We thus reject the State's motion to amend its security contentions.

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[1] Having found that under a balancing of the section 2.714(a)(1) late-filing factors the State's amendment request should not be entertained, we need not reach the question of its admissibility. Nonetheless, we note that even if it had met those criteria, we would not be inclined to permit the amendment given (1) the import of section 73.51(d)(6)'s reference to LLEA ''response''; and (2) the failure of the statements in Tooele County Attorney's letter to call into question our previous pronouncement that ''nothing on the face of the cooperative agreement gives us cause to question its validity as it provides [law enforcement] jurisdiction on the Skull Valley Band's reservation for the designated LLEA.'' LBP-98-13, 47 NRC at 370 n.9.

Nevertheless, with the CLEA's provisions regarding yearly review and termination, *see* State Motion, Exh. 1, at 3, the potential exists for further developments that may call into question the substance of LLEA jurisdiction, *see* Staff Response at 10. Nothing in our ruling today precludes party requests for the admission of appropriate issues if future events warrant.

For the foregoing reasons, it is, this 18th day of February 1999, ORDERED that the December 17, 1998 motion of the State to amend its security contentions is *denied.*

THE ATOMIC SAFETY AND
LICENSING BOARD[2]

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 18, 1999

[2] Copies of this Memorandum and Order were sent this date by Internet e-mail transmission to counsel for (1) the 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.

Judge Kline was unavailable to participate in final deliberations regarding, or to sign, this Memorandum and Order.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Richard F. Cole, Special Assistant

In the Matter of **Docket No. 40-8681-MLA-5**
(ASLBP No. 99-758-02-MLA)
(Re: Material License Amendment)

INTERNATIONAL URANIUM (USA) CORPORATION
(Receipt of Additional Material from Tonawanda, New York) **February 19, 1999**

A hearing was denied to three public Petitioners because they had failed to demonstrate that the proposed action will cause them ''injury in fact.''

RULES OF PRACTICE: HEARING REQUIRES INJURY IN FACT

The Presiding Officer explains that in our democratic system of government, we rely on elected officials to represent our interests. It is only when we suffer a particularized injury or ''injury in fact'' that we may challenge a governmental action in an administrative proceeding.

MEMORANDUM AND ORDER
(Dismissing Certain Petitions)

On December 29, 1998, the Presiding Officer issued an order authorizing Petitioners Ken Sleight, Navajo Utah Commission, and the Concerned Citizens

of San Juan County (CCSJC) to file amended petitions in response to objections to their petitions raised by International Uranium (USA) Corporation (IUSA) and the NRC Staff (Staff). Memorandum and Order (Amended Petitions to Intervene), served December 29, 1998, *citing* NRC Staff Notice of Intent to Participate and NRC Staff Response to Requests for Hearing Filed by Ken Sleight, Navajo Utah Commission, Concerned Citizens of San Juan County, dated December 17, 1998, at 4-9.

Specifically, the Presiding Officer stated that ''it was important non-sovereign petitioners show that they will suffer personal injury or environmental effect, given the many miles that separate them from the IUC site.'' Order at 1-2. In response to a request by CCSJC, in an e-mail, dated January 5, 1999, the Presiding Officer extended the deadline for filing amended returns to a receipt date of January 15, 1999.

In a filing dated January 12, 1999, served by first class mail on that date, CCSJC filed an amended petition.[1] Concerned Citizens of San Juan County Response to NRC and IUSA Opposition to Petition, dated January 12, 1999 (Amended Petition). None of the other Petitioners filed the authorized response. For the reasons stated below, I have determined that none of the nongovernmental petitioners has shown a particularized injury. Accordingly, all the nongovernmental petitions are *dismissed.*

In our constitutional, representative government, the first line of defense of any citizen is that the legislature and the government officials elected or appointed to execute the laws will act reasonably and with due respect for private rights. In addition, citizens have been given the right to intervene in formal or informal proceedings when they are personally aggrieved by a governmental action. This additional protection is available only when there is a personal grievance.

It is fundamental that any person or group intervening in a Commission proceeding must demonstrate that the proposed action will cause ''injury in fact'' to its interests and that those interests are arguably within the ''zone of interests'' protected by the statutes governing the proceeding. *E.g., Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 32 (1993); *Public Service Co. of New Hampshire* (Seabrook Station, Unit 1), CLI-91-14, 34 NRC 261, 266 (1991), *citing Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), CLI-83-25, 18 NRC 327, 332 (1983).

The amended petition filed by CCSJC does not show an injury to its organizational interests and does not identify a member, by name and address, who will suffer injury as a result of the proposed amendment. *See Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), ALAB-549, 9

[1] While the Staff did not receive this filing until January 19, 1999, and the service list indicates that a copy was served on the Office of the Secretary, the Staff has addressed the merits of CCSJC's amended filing.

NRC 644, 646-47, *aff'g,* LBP-79-10, 9 NRC 439, 447-48 (1979). In addition, CCSJC has not shown that a named member (with standing in an individual capacity) has authorized the organization to represent his or her interests in the proceeding. *Id.*; *Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377, 393-94, 396 (1979); *Babcock and Wilcox Co.* (Pennsylvania Nuclear Services Operations, Parks Township, Pennsylvania), LBP-94-4, 39 NRC 47, 50 (1994). Gene Stevenson, the Bluff Water Manager who signed the petition and the amended petition, has not shown that he is authorized to file a request for hearing on behalf of the organization.[2]

The surface and drinking water concerns discussed further in the amended petition, *see, e.g.,* Amended Petition at 2-4, indicate that CCSJC has grievances about the operation of the White Mesa Mill in general, particularly that the mill ''is not required to apply for a Utah groundwater permit,'' *id.* at 3. CCSJC does not particularize an injury stemming from the proposed amendment. Such concerns fall short of demonstrating that the organization or its members will suffer distinct and palpable harm as a result of the proposed amendment. *See Three Mile Island,* CLI-83-25, 18 NRC at 333, *citing Transnuclear Inc.* (Ten Applications for Low-Enriched Uranium Exports to EURATOM Member Nations), CLI-77-24, 6 NRC 525, 531 (1977) (a ''generalized grievance'' shared in substantially equal measure by all or a large class of citizens will not result in distinct and palpable harm to support standing); *International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-98-6, 47 NRC 116, 117 (1998) (a petitioner must show an injury that is ''distinct and palpable, particular and concrete, as opposed to being conjectural or hypothetical''), *citing Steel Co. v. Citizens for a Better Environment,* ___ U.S. ___, 118 S. Ct. 1003, 1016 (1998); *Warth v. Seldin,* 422 U.S. 490, 501, 508, 509 (1975); *Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 72 (1994).

In essence, because CCJSC has failed (1) to show a harm that is distinct and apart from that caused by the initial licensing and continued operation of the facility, *see Energy Fuels Nuclear, Inc.,* LBP-94-33, 40 NRC 151, 153-54 (1994), and (2) to show organizational standing based on an injury to its organizational interest or to a member (identified by name and address) who has authorized the filing of the petition on his or her behalf, its petition is *denied.* CCSJC failed to particularize an injury on which its standing might be based.

With respect to the other Petitioners, application of the standards for intervention (in the context of the action challenged) indicates that Mr. Sleight and the NUC also do not have standing to intervene as parties to the proceeding. Each has failed to demonstrate that, as a result of the amendment, it will likely

[2] *See Detroit Edison Co.* (Enrico Fermi Atomic Power Plant, Unit 2), LBP-78-37, 8 NRC 575, 583 (1978); *see also Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), LBP-90-29, 32 NRC 89, 92 (1990).

suffer injury that is ''distinct and palpable, particular and concrete, as opposed to being conjectural or hypothetical.'' *See White Mesa,* CLI-98-6, 47 NRC at 117, *citing Steel Co. v. Citizens for a Better Environment,* 118 S. Ct. at 1016; *Warth v. Seldin,* 422 U.S. at 501, 508, 509; *Sequoyah Fuels Corp.,* CLI-94-12, 40 NRC at 72. They have not shown a harm that is distinct and apart from that caused by the initial licensing and continued operation of the facility. *See Energy Fuels Nuclear,* LBP-94-33, 40 NRC at 153-54. They were invited to cure this weakness in their petitions but they failed to amend their petitions to establish standing.

While Mr. Sleight mentions the processing and storage of material from the Ashland 1 (as well as the Ashland 2) site, the injuries claimed stem from general concerns about operations at White Mesa and general objections to nuclear-related activities in the region and its perceived effect on his business, his other activities in the region, the local economy, and cultural resources. Such general ''injuries'' are not caused by the contested license amendment and are not sufficient to support standing. *See Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 95 n.10 (1993) (standing requires more than general interests in the cultural, historical, and economic resources of a geographic area), *citing Sierra Club v. Morton,* 405 U.S. 727, 734-35 (1972). Moreover, Mr. Sleight's claims of harm from the processing of the Ashland 1 material are speculative since he does specify a credible means by which the proposed action could directly harm him, and thus, he fails to describe an injury that is ''distinct and palpable'' from his general concerns about the continued operation of the facility. *See White Mesa,* CLI-98-6, 47 NRC at 117-18; *Sequoyah Fuels Corp.,* CLI-94-12, 40 NRC at 72; *Energy Fuels Nuclear,* LBP-94-33, 40 NRC at 153-54.

The Navajo Utah Commission of the Navajo Council states that it is a local governing body designated by the Intergovernmental Relations Commission (IGR) of the Navajo Council that, by resolution, has ''the authority to review all matter affecting the communities in the seven chapter areas of Utah, making appropriate recommendations to, and requests of, the Navajo Nation and other pertinent agencies.'' NUC Petition at 1.

The NUC is located in Montezuma Creek which is approximately 40 miles from White Mesa. While Native Americans have a unique relationship with the federal government, they must satisfy NRC requirements for standing in order to be admitted as a party to an NRC proceeding. *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261, 272 (1998), *citing Umetco Minerals Corp.,* LBP-94-18, 39 NRC 369 (1994). The resolution and the comments in the petition amount to a generalized grievance concerning the operation of the White Mesa mill and do not identify a distinct and palpable harm from the proposed licensing action. *See Three Mile Island,* CLI-83-25, 18 NRC at 333. The fear of nuclear materials and concerns about

the cumulative impacts of nuclear activities and testing unrelated to the proposed amendment cannot provide a basis for standing in this proceeding. In addition, NUC has not identified (by name and address) the particular Navajo people who have authorized NUC to represent their interests and who will likely be harmed as a result of the proposed amendment *See South Texas,* ALAB-549, 9 NRC at 646-47. Moreover, NUC has not shown that the milling to be authorized by the proposed amendment will result in tailings that are more hazardous than that already authorized under the license. *See International Uranium (USA) Corp.* (White Mesa Uranium Mill), LBP-97-14, 46 NRC 55, 56 (1997), *aff'd,* CLI-98-6, 47 NRC 116, 117 (1998). Therefore, the NUC Petition is denied.[3]

ORDER

For all the foregoing reasons and based on the entire record in this matter, it is, this 19th day of February 1998, ORDERED

1. The Petitions for a Hearing filed by Ken Sleight, the Concerned Citizens of San Juan County (CCSJC) and the Navajo Utah Commission (NUC) of the Navajo Utah Council of San Juan County are *dismissed.*

2. Appeals of this Order may be filed pursuant to 10 C.F.R. § 2.1205(o). Any appeal must be filed within ten (10) days of service of this Order and may be taken by filing and serving upon all parties a statement that succinctly sets out, with supporting argument, the errors alleged. Any other party may support or oppose the appeal by filing a statement within fifteen (15) days of the service of the appeal brief.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

[3] If the NUC can demonstrate that it is a recognized governmental entity, the Presiding Officer could exercise his discretion and allow NUC admission as a 10 C.F.R. § 2.1211(b) participant if another intervention petition were granted.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Thomas D. Murphy, Special Assistant

In the Matter of **Docket No. 40-8968-ML**
(ASLBP No. 95-706-01-ML)
(Re: Leach Mining and Milling License)

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101, Albuquerque, NM 87120)

February 19, 1999

After examining the steps taken by the Staff and Applicant to comply with NHPA and NAGPRA, the Presiding Officer found them in compliance with the requirements of those acts. He concluded that Intervenors failed to present regulatory standards and to show how they had been violated. He also concluded that it is permissible to segment a project for NHPA purposes when the project is planned to be performed over an extended period of time.

NHPA: FINDING OF NO EFFECT

When no historic properties are found, after an agency properly documents and notices a finding that a project will have no effect on historical properties, the government agency ''is not required to take further steps in the section 106 process.'' 36 C.F.R. § 800.4(d). In this regard, it is important that local historic preservation departments, including the New Mexico State Historic Preservation Department (''NMSHPD'') and the Navajo Nation Historic Preservation Department (''NNHPD''), responded to NRC Staff consultation requests with letters

concurring with the conclusion of NRC Staff that there would be ''no effect'' on *all* cultural resources within the parcels.

NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT (NAGPRA): NONGOVERNMENTAL PROJECT

NAGPRA applies only to the disposition of Native American cultural items ''excavated or discovered *on federal or tribal lands.*'' It does not apply to privately owned lands, even if the owner engages in federally licensed activity.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): CULTURAL RESOURCES PLAN

Intervenors failed to show a deficiency in the Staff's Cultural Resources Management Plan. Hence, their NEPA claims are without merit.

PARTIAL INITIAL DECISION

(Issues Related to the National Historic Preservation Act (NHPA) and the Native American Graves Protection and Repatriation Act (NAGPRA) and Cultural Resources)

This is the second in a series of planned Partial Initial Decisions (PIDs). The issues covered by this Decision involve allegations that the Nuclear Regulatory Commision's Staff (Staff) failed to follow NHPA and the NAGPRA in issuing the license (SUA-1508) to HRI. Intervenors ENDAUM and SRIC assert that the Staff failed to identify adequately historic properties eligible for the National Register and traditional cultural properties. In addition, Intervenors allege the Staff violated NHPA by authorizing activity on Sections 8, 12, and 17 before the section 106 review is complete.[1] Intervenors also contend that the Staff failed to comply with the NAGPRA by not receiving concurrence from the appropriate Native American tribes. Finally, ENDAUM and SRIC allege that the FEIS fails to address impacts on cultural resources.

Many of the issues covered in this PID are not new to this case. In LBP-98-5, 47 NRC 119, 124-25 (1998), the Presiding Officer in this case revoked

[1] ''Brief in Opposition to Hydro Resources, Inc.'s Application for Materials License with Respect to: Compliance with the National Historic Preservation Act, Native American Graves Protection and Repatriation Act and Related Cultural Resource Issues,'' filed by Eastern Navajo Diné Against Uranium Mining (ENDAUM) and the Southwest Research and Information Center (SRIC) on December 7, 1999 (Brief). Hydro Resources, Inc. (HRI), filed a Response on January 11, 1999 (HRI Response) and the Staff of the Nuclear Regulatory Commission (Staff) filed a response on January 19, 1999 (Staff Response).

a temporary stay and denied a stay. The merits of those issues were similar to those asserted here. In order to avoid plowing old ground, let us set forth what was already said about these issues:

> The brunt of the irreparable harm Petitioners allege is that the NRC has issued a license to HRI to conduct mining activities without having complied with the provisions of section 106 of the National Historic Preservation Act. Because of this noncompliance, Petitioners allege that construction activities will irreparably harm cultural resources that have great meaning and importance in the history and day-to-day lives of the various Indian people of the region. However, Petitioners' motion, legal citations, and accompanying affidavits largely ignore HRI's phased approach to compliance with NHPA § 106 in its mining development. Petitioners are silent on the acceptability of the phased approach in complying with the requirements of the NHPA. Applicant's approach is to complete cultural resource inventories and preservation plans on various sections of the development prior to each section being developed instead of the whole inventory being completed on the whole development before mining commences. In essence, Petitioners argue that HRI fails to comply with the NHPA unless the whole resource inventory and protection plan is established before any mining development can begin. However, for the purposes of meeting the Commission's requirements for a stay, the focus is not on methodology but on whether construction activities could wreak actual damage on cultural resources that have not been inventoried and adequately addressed in mining plans. It is this type of damage the NHPA was intended to prevent. Applicant's arguments and support affidavits establish at this stage of the proceeding that Applicant's phased approach to compliance with the terms of section 106 of the NHPA ensures that actual damage will not occur.
>
> Applicant and NRC Staff adequately address the appropriateness of the phased approach to compliance with section 106 of the NHPA with regard to cultural resources. HRI states that it may only begin activities at Section 8 of its Church Rock properties, and it is prohibited from proceeding with mining activities at other locations until it completes a full-scale restoration demonstration at Section 8. Staff proffers evidence that resource inventories have been conducted on the only area Applicant can mine in the immediate future. Staff Exhibit 2 at 159-60. Moreover, as noted above, section 9.12 of the HRI license requires the NRC to find that all disturbances associated with the proposed development will be completed in compliance with the National Historic Preservation Act of 1966 and the Archeological Resources Protection Act of 1979.
>
> The weight of the evidence of record at this point clearly favors Applicant. First, phased compliance with section 106 of the NHPA does not appear to violate the statute. Staff has offered evidence that this approach to compliance with the NHPA has been successfully employed at other mining projects, and Petitioners have not demonstrated a legal or practical bar to this approach. Second, the State Historic Preservation Officer and the Navajo Nation Historic Preservation Department have agreed to this approach of phased compliance, and other interested parties have not objected. Third, there appears from the affidavits to be no disagreement that the only parcel of land that Applicant may develop under the conditions of its NRC license has been satisfactorily inventoried and is in compliance with the NHPA. In short, Petitioners have failed to make a strong showing at this juncture that they are likely to prevail on the merits. Having failed in its attempt to demonstrate that it is likely to succeed on the merits, it becomes mandatory for Petitioners to demonstrate the threat of irreparable injury from the Staff's licensing action for the granting of a stay.

The Nuclear Regulatory Commission also visited this legal territory in CLI-98-8, 47 NRC 314, 323-24 (1998). In its opinion, the Commission stated [(footnotes omitted)]:

> [W]e are not convinced by Petitioners' argument that the NRC and HRI are prohibited from taking a ''phased review'' approach to complying with the NHPA — the legal position that forms the foundation of Petitioners' NHPA arguments regarding severe, immediate, and irreparable injury. The statute itself contains no such prohibition, federal case law suggests none, and the supporting regulations are ambiguous on the matter, even when read in the light most favorable to Petitioners.

In footnote 17, the Commission refers to 36 C.F.R. § 800.3(c), which states:

> *Timing.* Section 106 requires the Agency Official to complete the section 106 process prior to . . . the issuance of any license or permit. The Council [on Historic Preservation] does not interpret this language to bar an Agency Official from . . . authorizing non-destructive planning activities preparatory to an undertaking before complying with section 106, or to prohibit phased compliance at different stages in planning.

These earlier statements in this case were issued in the context of determining a stay motion and should, at the very least, be understood and addressed by a party that disagrees.

I. NHPA AND RELATED ISSUES

Intervenors argue, based in part on the testimony of three experts — Dr. Klara B. Kelley, Mr. William A. Dodge, and Mr. Abie Francisco — that HRI's license application fails to satisfy federal law and regulations governing national historic sites, Native American graves and funerary objects, and related cultural resources. They also argue that the Final Environmental Impact Statement (NUREG-1508; Hearing Record ACN 9703200270) (FEIS) fails to adequately address the impact of the projects on cultural properties.

My analysis of these arguments has disclosed serious flaws. In one important instance, Intervenors cite a portion of a regulation and inexplicably omit to mention that a part of the regulation differs from their position.[2] In another instance, Intervenors' witness criticizes the difference in research methods among the studies relied on by HRI but does not provide a legal standard against which the adequacy of these studies may be found wanting.[3] In still another instance, which is typical of other criticisms that they level, Intervenors criticize

[2] Brief at 11, citing 36 C.F.R. § 800.3(c) without explaining that it does not bar phased compliance with the provisions of the Act.

[3] Brief at 15.

HRI and the Staff for not following ''the standard practice for compliance with federal and tribal cultural resources laws'' but they do not cite a regulation requiring that kind of compliance.[4] Indeed, it is a general fallacy of the brief that it points to ''defects'' that Intervenors' experts believe they have found but it does not argue persuasively that the HRI and Staff studies have failed to meet an identified regulatory standard.

Nor have Intervenors described in detail the planning steps taken by HRI and the Staff, who argue that they complied step-by-step with regulatory directions, and shown why those steps were insufficient.

ENDAUM and SRIC ignore the regulatory authority for phased compliance, even though the Commission has already spoken to this issue. On page 3 of their brief, they cite 36 C.F.R. § 800.3(c) as requiring the completion of ''the section 106 process'' before a license is issued. They do not mention the second sentence of section 800.3(c), which authorizes ''phased compliance'' and appears to create some problems for their case. Accordingly, Intervenors have not stated why the second sentence should be interpreted, distinguished, or ignored in order to sustain Intervenors' opposition to phased compliance. Nor does Intervenor acknowledge that Alan Downer, the NNHPD Director, agreed that incremental NHPA review of HRI's project in 5-year segments was appropriate,[5] and he committed the NNHPD to reviewing reports on Navajo traditional cultural properties (TCPs) as those reports were submitted.[6]

Nor is the testimony of William A. Dodge, a witness for ENDAUM and SRIC, helpful. He lays out his view of the law but does not provide insight into the proper treatment of the regulatory approval for ''phased compliance.'' Brief at Attachment 2, *generally.*

As I have said, Intervenors' Brief does not explain what official action was taken by the NRC and what regulations apply to that action. For example, the NRC argues that it followed a process that is authorized by the regulations and that is different from the one believed to be applicable by SRIC and ENDAUM. As the Staff explained on pages 7-8 of the Staff Response (January 19, 1999):

> ENDAUM's and SRIC's analysis of the NHPA regulations fails to consider 36 C.F.R. § 800.4(d) and 36 C.F.R. § 800.5(b). The first of these provisions applies when no historic properties are found, and states that after properly documenting and noticing such a finding, the government agency ''is not required to take further steps in the section 106 process.'' 36 C.F.R. § 800.4(d). The latter provision applies when historic properties are present, but it is found that the undertaking will have no effect on such properties. In this situation, after properly documenting and noticing such a finding, the government agency is not required to

[4] *Id.* at 16.

[5] Letter dated October 31, 1996 (NNHPD Response); Appendix C to FEIS NUREG-1508.

[6] As discussed *infra,* after the FEIS was published in February 1997, the Museum of New Mexico's Office of Archaeological Studies authored a report (MNM Report), excerpts of which (at 15-22 and 159-61) were attached to the Staff's Stay Response as Exhibit 2.

take any further steps in the section 106 process unless the SHPO ''objects within 15 days of receiving such notice.'' 36 C.F.R. § 800.5(b).[7]

As HRI states, HRI Response at 4, 6, 7-8:

NRC Staff completed the Section 106 process with respect to Church Rock Section 8 and concluded that operations would have ''no effect'' on ''any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register.'' *See* Letter from J. Holonich, Chief, Uranium Recovery Branch, NRC to Lynne Sebastian, State Historic Preservation Officer, NM (May 20, 1998). To reach this determination, the Staff adequately identified historic properties considered eligible for inclusion in the National Register of Historic Places and considered the effect of Section 8 operations on historic properties in consultation with the affected tribes, pueblos, and organizations.[8]

* * *

[T]wo reports are relevant to Church Rock Section 8: Ernest C. Becenti Sr.'s report (''the Becenti Report'')[9] and Blinman, *Cultural Resources Inventory of Proposed Uranium Solution Extraction and Monitoring Facilities at the Church Rock Site and Proposed Surface Irrigation Facilities North of the Crown point Site, McKinley County, New Mexico* (''MNM Report'').[10] The Becenti Report is only one page in length with attachments and has been incorporated into the MNM report in its entirety. *See* MNM Report.

* * *

As indicated in the consultation letter from NRC Staff to Lynne Sebastian, New Mexico State Historic Preservation Officer (''SHPO''), ''no traditional cultural properties were identified at or near any of the project areas,'' *i.e.,* Sections 8, 17, and 12. *See* Letter from J. Holonich, Chief, Uranium Recovery Branch, NRC to Lynne Sebastian, State Historic Preservation Officer, NM (May 20, 1998) at 1. Importantly, both the New Mexico State Historic Preservation Department (''NMSHPD'') and the Navajo Nation Historic Preservation Department (''NNHPD'') responded to NRC Staff consultation requests with letters concurring with the conclusion of NRC Staff that there would be ''no effect'' on *all* cultural resources within the parcels.[11] Both the consultation request and the MNM Report

[7] In Mr. Dodge's description of the ''Section 106 four step compliance process,'' he too omits any reference to 36 C.F.R. § 800.4(d). *See* Dodge Testimony at 7-9. In his one-sentence description regarding 36 C.F.R. § 800.5(b) (*id.* at 8), he fails to mention that the NHPA process may be concluded absent any objection made by the SHPO, and later seems to assume that the NHPA section 106 process always progresses to step four consultations. Contrary to Mr. Dodge's statements there, the NHPA regulations require that a memorandum of agreement be entered into by the consulting parties only when it is found that an undertaking will have adverse effects on historic properties. *See id.* at 17; *see* 36 C.F.R. § 800.5(e)(4). Here, no such finding has been made.

[8] Although, as referenced above, Intervenors ENDAUM and SRIC assert that NRC Staff failed to ''adequately take into account the *Project's* effect on historic properties in consultation with the affected tribes, pueblos, and organizations,'' pursuant to the Presiding Officer's September 22, 1998 Order, Intervenors may only raise issues concerning Church Rock Section 8 at this time. *See* September 22 Order at 2. Thus, HRI has focused its response on issues pertaining to Church Rock Section 8.

[9] Becenti Report, Letter from Mark Pelizza, HRI, to J. Holonich, NRC, Attachment 6, Hearing Record ACN 9605080097 (May 3, 1996).

[10] Hearing Record ACN 9704140140 (April 4, 1997).

[11] *See* Blinman Affidavit ¶5[; *see* Hearing File, Vol. 11 (State Response, June 3, 1999; Navajo Nation Response, June 24, 1999).]

make it clear that no traditional cultural properties were found within Church Rock Section 8.[12] Thus, NRC Staff did consider the presence of non-Navajo TCPs but found none based on the MNM Report and response to consultation requests. Moreover, since no traditional cultural properties were identified and since eligible archeological sites will be avoided,[13] the concurrence of the NMSHPO and NNHPO as to ''no effect'' completes consultation on both archeological and traditional cultural property resources, *see* Blinman Affidavit at ¶ 5; thus, the ''no effect'' determination applies to both the archeological and traditional cultural property resources.

I am persuaded that the concurrence of the NMSHPO and NNHPO as to ''no effect'' completes consultation on both archeological and traditional cultural property resources and that HRI and the Staff have fulfilled their NHPA responsibilities. Intervenors have not demonstrated that there is a defect in the NRC's proof of compliance with 36 C.F.R. § 800.4(d).[14] I do not accept by Mr. Dodge's testimony that the NRC letters included in Appendix B to his testimony were limited in scope; the letters contain a finding of ''no effect.'' Dodge Testimony at 26, Appendix B.

This phase of the licensing proceeding has been limited specifically to issues affecting either the issuance of the entire license or ''operations at Church Rock Section 8 or with respect to the transportation or treatment of materials extracted from Section 8.'' Memorandum and Order (Scheduling and Partial Grant of Motion for Bifurcation), September 22, 1998 (unpublished) at 2-3. Since ''phased compliance'' is permitted under 36 C.F.R. § 800.3(c), the scope of the NHPA issue is limited to Church Rock related questions. Intervenors appear at times to have made arguments that are broader than the subject matter

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[12] Notably, the complete report of the archeological and traditional cultural property inventory results from the HRI project was provided to all concerned tribes concurrent with the NMSHPD and NNHPD review in compliance with the NHPA Section 106 process. *See* Blinman Affidavit at 14. No comments, requests for more information, or requests for more time were received either within the comment period or since. *Id.*

[13] HRI's license contains Condition 9.12 which states:

> Before engaging in any construction activity not previously assessed by the NRC, the licensee shall conduct a cultural resource inventory. All disturbances associated with the proposed development will be completed in compliance with the National Historic Preservation Act of 1966, as amended, and its implementing regulations (36 CFR Part 800), and the Archaeological Resources Protection Act of 1979, as amended, and its implementing regulations (43 CFR Part 7).
>
> In order to ensure that no unapproved disturbance of cultural resources occurs, any work resulting in the discovery of previously unknown cultural artifacts shall cease. The artifacts shall be inventoried and evaluated in accordance with 36 CFR Part 800, and no disturbance shall occur until the licensee has received written authorization to proceed from the State and Navajo Nation Historic Preservation Offices.

License No. SUA-1508, Hearing Record ACN 9801160066. Thus, in the event of a discovery of a TCP, HRI will halt work resulting in the discovery until it receives written authorization to proceed from the SHPO and the NNHPO.

[14] The responses of NMSHPD and NNHPD make the attacks on the credibility of Mr. Becenti moot. Brief at 19-22. Even were that not true, Intervenors have failed to cite a standard for determining at this time that the Becenti Report should be ignored. On the merits, based on HRI's defense of Mr. Becenti, HRI Response at 8-13, I am convinced of his credibility. Nor does Intervenors' witness, Mr. Francisco, differ materially from the findings of Mr. Becenti; the differences are primarily spiritual or theological, as Mr. Francisco does not identify any specific cultural resources.

of this portion of the case. In any event, they have not raised serious doubts that the NRC failed to comply with NHPA with respect to the Church Rock site or the portion of the Crownpoint site on which effluents from the Church Rock site will be treated.

II. NAGPRA ISSUE

Despite Intervenors claims under NAGPRA, that act does not apply to this case. It applies only to the disposition of Native American cultural items ''excavated or discovered *on federal or tribal lands.*'' Federal lands are defined as ''land other than tribal lands which are controlled or owned by the United States.'' 25 U.S.C. § 3001(5). Neither Section 8 nor the land on which Section 8 fluids will be processed is either tribal land or federal land. Hence, NAGPRA is inapplicable and the Intervenors claims under NAGPRA fail.[15]

III. NEPA ISSUE

I also conclude that Intervenors' NEPA claims are without basis. The key question here is whether the Staff, in the FEIS, adequately considered cultural issues. The FEIS discusses cultural resource impacts, as summarized in SRIC's brief at 52-53. Subsequently, the MNM report was completed, distributed for comment, and concurred in by the SHPO. *See* p. 141, above. Then the Staff issued a license. I conclude that the license contains conditions that demonstrate attention to this area of concern.

In the FEIS, the NRC Staff recommended that HRI implement a final cultural resources management plan for all mineral operating lease areas and other lands affected by license activities pursuant to National Historic Preservation Act § 106 review and consultation processes. FEIS at 4-111, 4-112. The NRC Staff's recommended cultural resources management plan would include archaeological and traditional cultural property surveys of lease areas, identification of protection areas where human activity would be prohibited, and archaeological testing before subsurface disturbance occurs. The plan would also include archaeological monitoring during ground disturbing construction, drilling, and operation activities. Both the FEIS and the license require that if unidentified cultural resources or human remains are found during project activities, the activity would cease, protective action and consultation would occur, and artifacts and human remains would be evaluated for their significance. *Id.* HRI agreed

[15] Section 10.4(b) of 43 C.F.R., which applies to inadvertent discoveries of ''human remains, funerary objects, sacred objects, or objects of cultural patrimony,'' is applicable.

to these recommendations. FEIS at 4-111, NRC License SUA 1508 § 9.12; *see also* COP Rev. 2.0 at 23. Moreover, for the reasons discussed at length above, there were no ''deficiencies'' in the section 106 process for Church Rock Section 8; Intervenors merely refuse to accept the ''phased review'' of the project that is permitted by law.

ORDER

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 19th day of February 1999, ORDERED that:

1. The relief requested by Eastern Navajo Diné Against Uranium Mining (ENDAUM) and the Southwest Research and Information Center (SRIC) in their joint ''Brief in Opposition to Hydro Resources, Inc.'s Application for Materials License with respect to: Compliance with the National Historic Preservation Act, Native American Graves Protection and Repatriation Act and Related Cultural Resource Issues,'' December 9, 1999, is *denied.*

2. This Decision is reviewable under 10 C.F.R. § 2.1253, pursuant to the procedures set forth in 10 C.F.R. §§ 2.786 and 2.763. The petition for review must be filed within 15 days of the service of this Decision.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Thomas D. Murphy, Special Assistant

In the Matter of **Docket No. 40-8968-ML**
(ASLBP No. 95-706-01-ML)
(Re: Leach Mining and Milling License)

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101, Albuquerque, NM 87120)

February 19, 1999

Relief is denied because Intervenors failed to show that the NRC's licensing action violated any NRC regulatory requirements. Performance-based licensing, as reflected in the Staff's actions in issuing a license to Applicant, is valid. There is no need for the Commission to approve a regulation explicitly approving performance-based licensing.

PERFORMANCE-BASED LICENSING: HEARING RIGHTS

Since Applicant's license requires that an amendment be sought if he subsequently seeks to vary the terms of this license, which contains many detailed conditions, there is no loss of public hearing rights.

PERFORMANCE-BASED LICENSING: EXTENSIVE LICENSING RECORD

That there is an extensive record resulting from interaction between Applicant and Staff in no way affects the validity of the license.

PERFORMANCE-BASED LICENSING: EXTENSIVE LICENSING RECORD; LICENSE CONDITIONS

It is permissible to impose licensing conditions that are contained in a license and, in addition, to incorporate in the license by reference promises made by Applicant in the course of lengthy discussions with the Staff.

PARTIAL INITIAL DECISION
(Performance-Based Licensing Issues)

This third Partial Initial Decision (PID) covers performance-based licensing issues, which were raised by the Eastern Navajo Diné Against Uranium Mining (ENDAUM), the Southwest Research and Information Center (SRIC), and Grace Sam and Marilyn Morris (Sams) (collectively, Intervenors).[1]

There are many issues raised by the Intervenors, but on careful analysis the issues appear to be either irrelevant or incorrect. Issues covered by this Decision involve allegations that performance-based licensing (PBL) violates the Atomic Energy Act (AEA), the NRC regulations, and the Administrative Procedure Act (APA). Intervenors allege that the AEA does not authorize PBL, that the NRC doesn't authorize PBL by policy or regulation, that the AEA requires license amendments to be approved by the NRC, and that notice and hearing requirements of the AEA are violated. ES Brief at 10-18; Sams Brief at 4-9. This Decision also considers Intervenors' claim that the National Environmental Policy Act (NEPA) is violated. ES Brief at 18-21. Finally, the Intervenors contend that, in violation of the APA, the PBL license condition issued by the Staff is arbitrary and capricious, consists of many documents filed over a decade, and therefore creates substantial doubt as to the actual license terms. ES Brief at 21-29.

Intervenors challenge the validity of what they call ''performance-based licensing'' but they are inconsistent in what they consider to be covered by that term. For example, ENDAUM and SRIC challenge the incorporation in the

[1] ENDAUM and SRIC filed their brief on December 7, 1998 (ES Brief) and the Sams filed on December 11, 1998 (Sams Brief). Hydro Resources, Inc. (HRI), filed its response on January 11, 1999, and the Staff of the Nuclear Regulatory Commission (Staff) filed its response on January 19, 1999.

license, by reference, of the provisions contained in the HRI license application and they describe this as a part of performance-based licensing and as creating ambiguity and confusion. *Id.* at 2. Adopting a different line of argument, the Sams Brief challenges the validity of section 9.4 of the license, which permits HRI to make certain limited changes in its operations ''without prior NRC review or approval.'' In their Brief, at 3, the Sams characterize their objection to section 9.4 as follows:

> It permits HRI to make changes in its facilities, processes, or standard operating procedures, without obtaining prior NRC approval, so long as the changes are consistent with NRC regulations, the Consolidated Operations Plan, Revision 2.0 (''COP'') [Notebook No. 10.3, Acc. No. 9708210179, 8/15/97], the Final Environmental Impact Statement to Construct and Operate the Crownpoint Uranium Solution Mining Project, Crownpoint, New Mexico, NUREG-1508 (''FEIS'') [Notebook No. 10, Acc. No. 9703200270, 2/28/97]), and the Safety Evaluation Report (''SER'') [Notebook No. 10.3, Acc. No. 9709050033, 8/28/97]. Materials License SUA-1508 at 2.[2] In the event a desired change does not meet this condition, HRI must seek NRC approval for the change by submitting an application for a license amendment. *Id.* Perhaps most critically, LC 9.4 imbues HRI with the authority to determine whether its desired change complies with the aforementioned condition. It states in relevant part:
>
> > If any of these conditions are not met for the change, test, or experiment under consideration, the licensee is required to submit a license amendment application for NRC review and approval. The licensee's determinations as to whether the above conditions are met will be made by a Safety and Environmental Review Panel (SERP). All such determinations shall be documented, and the records kept until license termination. All such determinations shall be reported annually to the NRC, pursuant to LC 12.8. The retained records shall include written safety and environmental evaluations, made by the SERP, that provide the basis for determining whether or not conditions are met.

Intervenors also argue that performance-based licensing denies the public its right to a hearing on a license ''amendment.''[3] 42 U.S.C. § 2239(a)(1)(A); 10 C.F.R. § 2.1205. They overlook the fact that the very condition that concerns them requires that HRI seek a license amendment if it wishes to change any provision of its license or of the documents that control its license.

Intervenors have not persuaded me that the NRC has done anything improper with the carefully crafted definition of amendment contained in section 9.4 of HRI's license. (ML SUA-1508, at 2-3.) My study of this language demonstrates that the license has been carefully thought through so that HRI might make low-risk changes in its mode of operation without advance approval but *may not alter its license* or make high-risk changes in its operations. I conclude that the

[2] Note that these terms provide that HRI *may not vary any condition of its license* without applying for an amendment.

[3] Sams Brief at 5; ES Brief at 16-18.

definition is a very sensible interpretation of ''amendment,''[4] and Intervenors have not identified any authority that persuades me that it is an improper definition to use in interpreting the applicable regulations, 10 C.F.R. §§ 2.1201(a), 2.1205, and 40.44. It is also consistent with the following language, from a case cited to me by Intervenors, approving an analogous practice for nuclear power reactors:

> The Commission has issued regulations specifically allowing a licensee to modify its facilities without NRC supervision, unless the modification is inconsistent with the license or involves an ''unreviewed safety question.'' 10 C.F.R. § 50.59(a)(1). If the proposed change is inconsistent with the license, or does involve an unreviewed safety question . . . the licensee must apply to the Commission for a license amendment. . . .

Citizens Awareness Network v. United States Nuclear Regulatory Commission, 59 F.3d 284, 287 (1st Cir. 1995). Nor have Intervenors directed me to any definition of ''amendment'' that would indicate that this license condition is improper.[5]

Intervenors do not identify any regulatory provisions that prohibit performance-based licensing (PBL). They argue that there is ''nothing in either the Atomic Energy Act or its implementing regulations that authorizes the issuance of performance-based source material licenses.'' ES Brief at 10. Literally speaking, they are correct in that assertion. However, the assertion that PBL is not adopted in the regulations is irrelevant. There is no requirement of law that there be a regulation adopting performance-based licensing. What is required is that the Staff continue to conform to the existing regulations in the administration of any licensing regime, including PBL.

ENDAUM and SRIC have presented some specific arguments concerning the alleged inadequacy of the license because of PBL. For example, they contend that future mining cannot be conducted on Section 17 of HRI's Church Rock site because that mining would contaminate the restored, postmining groundwater quality in the adjoining Section 8. Brief at 27 n.22. This and other specific arguments may or may not have merit. They are not, however, properly part of this Partial Initial Decision.

Intervenors have many specific concerns in this case and they have been permitted to make written presentations concerning the inadequacy of this license in these different areas. If this license is inadequate, they have the opportunity to demonstrate that with respect to specific substantive issues. There is no need to litigate those same issues in this Partial Initial Decision, which covers

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[4] *See* Sams Brief at 8-9; ES Brief at 16-18.

[5] In *San Luis Obispo Mothers for Peace v. NRC,* 781 F.2d 1287, 1312 (D.C. Cir. 1984), the Court found that the extension of the term of a low-power operating license for a nuclear power plant was an ''amendment.'' In that case, the term of the amendment was stated in the license. Hence, the amendment changed a term of the license. Under the HRI license, such a change also would be an amendment.

Intervenors' PBL concerns. The decisions on the other concerns should cast additional light on whether or not the PBL clause creates potentially unsafe or environmentally unsound conditions. If specific defects in the license are shown, then those defects can be remedied or the license can be invalidated. *See* ES Brief at 25-29.

Intervenors are critical of the record upon which the NRC Staff based its licensing determination. They describe the record as follows:

> HRI filed its original license application in the spring of 1988, and has amended it a number of times. . . . Between 1992 and 1997, HRI also submitted a large number of reports, analyses, and responses to NRC comments, in support of its license application. (citation omitted). During this period, the NRC Staff requested additional information from HRI on 99 discrete issues in at least six rounds of requests. These Requests for Additional Information (hereinafter ''RAIs'') cover a broad range of health and safety and environmental issues, such as ground water restoration standards, historic sites and cultural resources. In response, HRI submitted thousands of additional pages of new data and explanatory information. NRC Staff's reviews of HRI's responses to RAIs also generated requests for clarification, in response to which HRI repeatedly revised and supplemented its responses.[6]

I conclude that the Intervenors' complaints about the record are in error. The huge record is testament to the years-long process of HRI submitting relevant information, NRC Staff casting a critical eye on that information and requesting supplementary information, HRI submitting the requested supplementary information, and NRC Staff carefully scrutinizing that information, until the Staff was satisfied that all requirements had been met. After reviewing these many submissions by HRI over a 10-year period, NRC Staff imposed some license conditions and determined that HRI's license application satisfied the requirements for a license. I am not persuaded that there is anything wrong with this process or with its outcome.

Intervenors also argue that LC 9.4 (the PBL license condition) provides HRI virtual carte blanche to ''unilaterally'' modify its license in any manner it might see fit and that NRC somehow abdicates its responsibility to safeguard public health and the environment by issuing a license containing such a condition. One need only read LC 9.4 in conjunction with LC 9.3 to see that this is not so.

License Condition 9.3 makes clear that ''[W]henever the licensee uses the word 'will' or 'shall' in the aforementioned licensee documents'' (i.e., the materials listed in Attachment A to the License Application and the COP Rev. 2), it denotes an enforceable license requirement.[7] Thus, among HRI's forty-nine submittals listed in Attachment A, there are extensive commitments, the many ''wills'' and ''shalls.'' Pursuant to LC 9.3, these constitute enforceable

[6] *See* ENDAUM and SRIC Brief at 21.
[7] Source Material License SUA-1508, LC 9.3.

license requirements. The performance-based License Condition 9.4 expressly states that the only changes, tests, or experiments allowable under the PBL must not conflict with any specifically stated license requirement. The number and breadth of express requirements in HRI's license restrict application of PBL to a very few, discrete, operational changes.

Not only must any changes not conflict with any license requirements, but such changes cannot result in any ''degradation in the safety or environmental commitments made in the'' COP Rev. 2.0 or the approved reclamation plan.[8] In addition, such changes must be ''consistent with NRC's findings in NUREG-1508, the Final Environmental Impact Statement (. . .) and the Safety Evaluation Report. . . .''[9]

Whether any proposed operational change satisfies the license condition would have to be determined by HRI's three-member Safety and Environmental Review Panel (''SERP''). All such determinations must be documented and reported annually to the NRC. Intervenors argue that this ''cedes'' to HRI the authority to determine whether an amendment is necessary to safeguard human health, safety, and the environment. Sams Brief at 4. To the contrary, I have concluded that this process does not cede power to HRI since the NRC continues to have an important regulatory role. NRC may, after an annual review or an inspection, determine that the change did not satisfy the condition (and in fact required a license amendment) and bring an enforcement action against HRI.

Furthermore, contrary to Intervenors' assertion that HRI's license ''does not set forth most of the conditions that must be met by HRI'' in its proposed mining and milling operation in Church Rock and Crownpoint, New Mexico (''the mining operations''),[10] I find that the license clearly sets forth important license conditions. In addition, there is nothing wrong with incorporating additional requirements in the license by reference to identified documents. HRI's license specifically binds it to the commitments and specifications contained in its application and the FEIS, SER, and COP filed in support of the application.

Intervenors also argue that HRI's license leaves HRI's operation practically unregulated. This is far from the truth. License Condition 9.3 provides:

> The licensee shall conduct operations in accordance with all commitments, representations, and statements made in its license application submitted by cover letter dated April 25, 1988 (as supplemented by the license submittals listed in Attachment A), and in the Crownpoint Uranium Project Consolidated Operations Plan (COP), Rev. 2.0, dated August 15, 1997 — except where superseded by license conditions contained in this license. Whenever the

[8] *Id.,* LC 9.4(A)(2).
[9] *Id.,* LC 9.4(A)(3).
[10] ENDAUM and SRIC Brief at 1.

licensee uses the words ''will'' or ''shall'' in the aforementioned licensee documents, it denotes an enforceable license requirement.[11]

HRI must conduct its operations ''in accordance with all commitments, representations, and statements made in its license application'' as supplemented by the forty-nine documents referenced in Attachment A to the license application plus HRI's Crownpoint Uranium Project Consolidated Operations Plan (''COP'') Rev. 2.0.

I conclude that HRI has carried its burden of proof because none of Intervenors' arguments cast serious doubt on the validity of HRI's license within the scope of this PID. Hence, with respect to all arguments made within the scope of this PID, I conclude that the license was properly issued to HRI pursuant to 10 C.F.R. § 40.32, which provides:

An application for a specific license will be approved if:

(a) The application is for a purpose authorized by the Act; and

(b) The applicant is qualified by reason of training and experience to use the source material for the purpose requested in such manner as to protect health and minimize danger to life or property; and

(c) The applicant's proposed equipment, facilities and procedures are adequate to protect health and minimize danger to life or property; and

(d) The issuance of the license will not be inimical to the common defense and security or to the health and safety of the public; and

(e) In the case of an application for a license . . . to possess and use source . . . material for uranium milling . . . or for the conduct of any other activity which the Commission determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his designee, before commencement of construction of the plant or facility in which the activity will be conducted . . . has concluded, after weighing the environmental, economic, technical and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. . . .

10 C.F.R. § 40.32.

ORDER

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 19th day of February 1999, ORDERED that:

1. The relief requested by Eastern Navajo Diné Against Uranium Mining (ENDAUM) and the Southwest Research and Information Center (SRIC) in their joint ''Brief in Opposition to Hydro Resources, Inc.'s Application for Materials

[11] Source Materials License SUA-1508, LC 9.3.

License with respect to: Performance Based Licensing Issues,'' December 7, 1998, is *denied.*

2. This Decision is reviewable under 10 C.F.R. § 2.1253, pursuant to the procedures set forth in 10 C.F.R. §§ 2.786 and 2.763. A petition for review must be filed within 15 days of the service of this Decision.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Richard F. Cole, Special Assistant

In the Matter of **Docket No. 40-8681-MLA-5**
(ASLBP No. 99-758-02-MLA)
(Re: Materials License Amendment)

INTERNATIONAL URANIUM (USA) CORPORATION
(Receipt of Additional Material from Tonawanda, New York) **February 19, 1999**

A hearing was denied to a Petitioner that based its standing on economic-competitor injuries that are not associated with any environmental harm associated with the proposed licensing action.

MEMORANDUM AND ORDER
(Dismissal of Envirocare)

On December 7, 1998, Petitioner Envirocare of Utah, Inc. (''Envirocare'') filed a Request for Hearing challenging the Nuclear Regulatory Commission's (''NRC'') amendment of International Uranium (USA) Corporation's (''IUSA'') Source Material License SUA-1358 to allow for the receipt and ''processing'' of uranium-bearing material from the Ashland 1 site (Formerly Utilized Sites Remedial Action Program, ''FUSRAP'') near Tonawanda, New York. In its Request for Hearing, on pages 1-2, Envirocare states that it disagrees with prior Commission decisions but it acknowledges that *Quivira Mining Co.*

(Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1 (1998) and *International Uranium (USA) Corp.* (Receipt of Material from Tonawanda, New York), CLI-98-23, 48 NRC 259 (1998) may well affect its standing in this case. Envirocare states, on page 2 of its Request, that:

> While its appeals are pending, Envirocare hereby files this request, in good faith, to preserve its right to participate as a party in a hearing on IUSA's latest license amendment application.

Because the Request bases Envirocare's standing on economic-competitor injuries that are not associated with any environmental harm associated with the proposed licensing action and that are therefore not cognizable under the National Environmental Policy Act or the Atomic Energy Act, I am convinced that this case is on all fours with the cases with which Envirocare has cited and which it contests. Accordingly, the Request for a Hearing is *dismissed.*

IT IS SO ORDERED.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

G. Paul Bollwerk, III, Presiding Officer
Thomas D. Murphy, Special Assistant

In the Matter of **Docket No. 40-8948-MLA**
(ASLBP No. 99-760-03-MLA)

SHIELDALLOY METALLURGICAL CORPORATION
(Cambridge, Ohio Facility) **February 23, 1999**

In this proceeding concerning the application of Shieldalloy Metallurgical Corporation (SMC) to amend the 10 C.F.R. Part 40 license for its Cambridge, Ohio facility to authorize SMC to possess radioactive slag, the Presiding Officer denies a petition for leave to intervene, finding that the Petitioners lack standing as of right.

RULES OF PRACTICE: INTERVENTION

Intervention in NRC licensing adjudications, whether formal or informal, generally arises in one of three ways: (1) an individual seeks to intervene on his or her own behalf; (2) an organization seeks to intervene to represent the interests of one or more of its members; or (3) an organization seeks to intervene on its own.

RULES OF PRACTICE: INTERVENTION PETITION (PLEADING REQUIREMENTS)

When an individual seeks to intervene on his or her own behalf, that person must establish that (1) he or she will suffer a distinct and palpable injury in

fact within the zone of interests arguably protected by the statutes governing the proceeding (e.g., the Atomic Energy Act, the National Environmental Policy Act of 1969); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. *See Atlas Corp.* (Moab, Utah Facility), LBP-97-9, 45 NRC 414, 423, *aff'd,* CLI-97-8, 46 NRC 21 (1997).

RULES OF PRACTICE: STANDING TO INTERVENE (FACTUAL REPRESENTATIONS)

In order to establish the factual predicates for the various standing elements, when legal representation is present, it generally is necessary for the individual to set forth any factual claims in a sworn affidavit. *See id.* at 427 n.4.

MEMORANDUM AND ORDER
(Denying Petition to Intervene)

By letter dated December 21, 1998, attorney Michael Bruce Gardner requests an informal adjudicatory hearing to contest a request by Shieldalloy Metallurgical Corporation (SMC) to amend the 10 C.F.R. Part 40 source materials license for its Cambridge, Ohio facility. In the petition, Mr. Gardner claims he is acting on behalf of unnamed persons residing in Guernsey County, Ohio, whose interests are affected by that amendment. Both SMC and the NRC Staff oppose this hearing request, asserting there has been no demonstration of standing and a failure to show the areas of concern specified in the petition regarding the SMC amendment are germane to the subject matter of this proceeding.

The Presiding Officer concludes the petition fails to establish standing to intervene. The hearing request thus is dismissed.

I. BACKGROUND

In a notice issued November 17, 1998, the NRC Staff indicated it was considering issuing a license amendment to Source Material License No. SMB-1507, which authorizes Licensee SMC to possess radioactive slag that resulted from previous alloy production processes conducted at its Cambridge facility. As described in the notice and SMC's September 14, 1998 amendment request, the license revision would (1) allow SMC to take possession of slag and associated soil that was gathered from offsite locations in 1997 and is currently kept in roll-off containers at a temporary staging area at SMC's Cambridge facility;

and (2) permit SMC to remove this offsite slag/soil from the containers and transfer it to an existing slag pile on the SMC facility. *See* 63 Fed. Reg. 64,976, 64,976 (1998); NRC Staff Notice of Intent to Participate and NRC Staff Response to Request for Hearing Filed by Michael Bruce Gardner (Jan. 11, 1999) unnumbered Attachment 1, at unnumbered p. 7 (Auxlier & Associates, Inc., Environmental Report (July 24, 1998) at 3) [hereinafter Staff Answer]. Prior owners of the Cambridge facility apparently sold or gave away the offsite slag for use as fill material, primarily in the 1980's. *See* Staff Answer, unnumbered Attachment 1, at unnumbered p. 5 (Environmental Report at 1).

By a timely hearing petition filed on December 21, 1998, purportedly acting on behalf of certain unnamed citizens of Guernsey County, Ohio, attorney Michael Bruce Gardner asserted that the requested amendment should be disallowed as (1) violating various Ohio state statutory and regulatory provisions and NRC requirements in 10 C.F.R. Part 61; (2) increasing the costs of proper disposal of offsite radioactive slag from the Cambridge facility that was not accounted for in the amendment; and (3) increasing the public health and safety risk from needless handling of radioactive material. *See* Dec. 21, 1998 Letter from Michael Bruce Gardner to NRC Secretary at 1-2 [hereinafter Petition]. On December 30, 1998, this Presiding Officer and the Special Assistant were appointed to consider the December 21, 1998 hearing request. *See* 64 Fed. Reg. 915 (1999).

In a December 31, 1998 answer to the petition, SMC declared that the unnamed Guernsey County citizens Mr. Gardner purported to represent lacked standing as of right and had failed to specify areas of concern that were germane to the subject matter of this materials license amendment proceeding. *See* Answer to Michael Bruce Gardner Request for Hearing Regarding Docket No. 40-8948, [SMC] License Number SMB-1507 (Dec. 31, 1998) at 1-3. In its January 11, 1999 answer, besides declaring it wished to be a party to this proceeding in accordance with 10 C.F.R. § 2.1213, the Staff asserted the petition had failed to demonstrate standing or germane areas of concern. *See* Staff Answer at 12-15.

In a January 14, 1999 issuance, the Presiding Officer provided Mr. Gardner with an opportunity to respond to the SMC and Staff answers and allowed for SMC and Staff replies to that response. *See* Presiding Officer Order (Schedule for Further Filings Regarding Hearing Request) (Jan. 14, 1999) at 1 (unpublished). Mr. Gardner did so on February 5, 1999, declaring the proposed amendment would (1) affect the aesthetic, recreational, environmental, and economic interests of certain unnamed Guernsey County citizens; and (2) violate various provisions of Ohio and federal law, including the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. §§ 9601-9657, and 10 C.F.R. Part 61. *See* Unnamed Citizens of Guernsey County's Joint Reply to Answers of NRC Staff and [SMC] to Request

for Hearing (Feb. 5, 1999) at 6-18 [hereinafter Response]. Thereafter, in replies filed on February 12 and 22, 1999, respectively, both the Staff and SMC again declared that the December 21, 1998 petition should be dismissed for failing either to establish the requisite standing or to specify germane areas of concern. *See* NRC Staff Response to ''Unnamed Citizens of Guernsey County's Joint Reply to Answers of NRC Staff and [SMC] to Request for Hearing'' (Feb. 12, 1999) at 2 [hereinafter Staff Reply]; Reply of [SMC] to ''Unnamed Citizens'' Joint Reply to Request for Hearing Filed by Michael Bruce Gardner (Feb. 22, 1999) at 2-6.[1]

II. ANALYSIS

Intervention in NRC licensing adjudications, whether formal or informal, generally arises in one of three ways: (1) an individual seeks to intervene on his or her own behalf; (2) an organization seeks to intervene to represent the interests of one or more of its members; or (3) an organization seeks to intervene on its own. In this instance, it is apparent that only the first type of intervention is at issue. *See* Response at 16 (''Organizational standing is not at issue here. Citizens are unorganized in that respect and assert only their own legal rights are adversely affected.'')

When an individual seeks to intervene on his or her own behalf, that person must establish that (1) he or she will suffer a distinct and palpable injury in fact within the zone of interests arguably protected by the statutes governing the proceeding (e.g., the Atomic Energy Act, the National Environmental Policy Act of 1969); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. *See Atlas Corp.* (Moab, Utah Facility), LBP-97-9, 45 NRC 414, 423, *aff'd,* CLI-97-8, 46 NRC 21 (1997). Further, in order to establish the factual predicates for these various elements, when legal representation is present, it generally is necessary for the individual to set forth any factual claims in a sworn affidavit. *See id.* at 427 n.4.

In connection with these standards, the intervention petition is deficient on several counts. Although the petition makes various claims about purported injuries, the only specific factual assertion it contains is that there are ''two individuals who own real property within a mile of the SMC facility known to

[1] On February 16, 1999, the Staff notified the Presiding Officer and the other participants that, in accordance with 10 C.F.R. § 2.1205(m), notwithstanding the pendency of the December 21, 1998 hearing petition it had decided to issue the requested amendment. *See* Feb. 16, 1999 Letter from John W.N. Hickey, NRC Office of Nuclear Materials Safety and Safeguards to James Valenti, SMC.

contain radioactive slag from the SMC facility.''[2] Response at 14. Their injury, it asserts, relates to the failure of the amendment to permit these individuals to place the slag now on their property on the SMC slag pile, thereby injuring their economic interests by requiring them to dispose of their slag at a substantially greater cost. Putting aside the question of whether this purported interest falls within applicable zone of interests, *but see, e.g., International Uranium (USA) Corp.* (Receipt of Material from Tonawanda, New York), CLI-98-23, 48 NRC 259, 264-65 (1998) (economic interests, unlinked to any radiological harm, inadequate to provide basis for standing), this claim must also fail because (a) it is not supported by the requisite sworn statement affirming any of the factual assertions upon which it rests; (b) it lacks the requisite concreteness to establish an injury in fact; and (c) it is not likely that a favorable decision in this instance would redress the alleged injurious effects to the interest in question. On the latter point, the Presiding Officer's authority in this proceeding relative to the SMC amendment application is to determine whether to permit the material now on site to be moved from the containers to the slag pile. Consequently, action by the Presiding Officer to grant or deny the requested amendment simply will not afford the relief the petition purports to seek so as to redress the alleged injury.[3]

Having failed to establish the requisite standing as of right,[4] the petition must be dismissed and this proceeding is terminated.

III. CONCLUSION

Because it fails to establish the requisite standing as of right, the December 21, 1998 petition filed by Michael Bruce Gardner, Esq., seeking to challenge

[2] The petition also describes various purported injuries to aesthetic, recreational, and environmental interests that will occur if the amendment is granted, including visual blight and contaminated runoff into nearby streams. *See* Response at 12-14. As we note below, however, the petition contains no verified claim to these injuries from any individual who had indicated an intent to become a party to this proceeding.

[3] By the same token, the limited scope of the amendment request raises a serious question whether, in accordance with 10 C.F.R. § 2.1205(h), the areas of concern specified in the petition are indeed germane to the subject matter of this proceeding.

[4] Although there is some question whether consideration of discretionary standing under the standards in *Portland General Electric Co.* (Pebble Springs Nuclear Power Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 614-17 (1976), is appropriate when there is no intervenor with standing as of right, *see Envirocare of Utah, Inc.,* LBP-92-8, 35 NRC 167, 183 (1992), the petition is so woefully deficient relative to the various factors that must be considered for discretionary standing that it would not pass muster under that analysis either.

the September 14, 1998 SMC request for a license amendment authorizing the movement of onsite slag material is denied.[5]

For the foregoing reasons, it is, this 23d day of February 1999, ORDERED that:

1. The December 21, 1998 request for a hearing filed by Michael Bruce Gardner is *denied* and this proceeding is *dismissed.*

2. In accordance with the provisions of 10 C.F.R. § 2.1205(o), as it rules upon a hearing request, this Memorandum and Order may be appealed to the Commission by filing an appeal statement that succinctly sets out, with supporting arguments, the errors alleged. To be timely, an appeal statement must be filed within 10 days after this Memorandum and Order is served (i.e., on or before *Wednesday, March 10, 1999*).

BY THE PRESIDING OFFICER[6]

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 23, 1999

[5] Putting aside the standing deficiencies noted above, the petition here is also suspect because of the considerable uncertainty about Mr. Gardner's role relative to the petition. He has not claimed to be intervening on his own behalf, but rather on behalf of his ''clients.'' Petition at 1. Yet, despite the Presiding Officer's explicit directive to enter a notice of appearance conforming with the requirements of 10 C.F.R. § 2.713(b), which would include a statement identifying exactly whom he is representing, *see* Presiding Officer Memorandum and Order (Initial Prehearing Order) (Jan. 4, 1999) at 2-3 (unpublished), up to this point Mr. Gardner has failed to do so.

If Mr. Gardner seeks to appeal this dismissal determination to the Commission, he should endeavor to clarify this matter of client authorization by entering an appropriate appearance with whatever additional explanation is needed.

[6] Copies of this Memorandum and Order were sent this date to counsel for Applicant SMC and to Michael Bruce Gardner, Esq., by Internet e-mail transmission; and to counsel for the Staff by e-mail through the agency's wide area network system.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of **Docket Nos. 50-315**
50-316
(License Nos. DPR-58
DPR-74)

INDIANA MICHIGAN POWER COMPANY
(Donald C. Cook Nuclear Plant, Units 1 and 2)

February 11, 1999

On October 9, 1997, the Union of Concerned Scientists (UCS or Petitioner) submitted a petition pursuant to 10 C.F.R. § 2.206 requesting that the operating license for Donald C. Cook Nuclear Plant, Units 1 and 2, be modified, revoked, or suspended until there is reasonable assurance that plant systems are in conformance with design- and licensing-bases requirements. The petition from UCS was submitted because of the inspection findings from the AE team inspection performed by the NRC in August-September 1997.

In addition, the UCS requested a public hearing on this issue be held in the Washington D.C. area.

On January 12, 1998, a meeting was held with the UCS and additional issues were raised by the UCS concerning the D.C. Cook Nuclear Plant. The UCS summarized these in a January 12, 1998 letter to the NRC. Following is a summary of the concerns that were evaluated under the section 2.206 process and included in the Director's Decision on the October 9, 1997 UCS petition: (1) ice condenser issues; (2) 10 C.F.R. § 50.59 process issues; (3) scope of the Licensee's review of engineering calculations and the NRC assessment of that review; (4) missing or inaccurate net positive suction head calculations for safety-related pumps; and (5) accuracy of the Licensee's February 6, 1997

response to the NRC request for additional information pursuant to 10 C.F.R. § 50.54(f).

The NRC granted the petition request concerning the informal public hearing. On August 19, 1998, an informal public hearing was held with the UCS and the Licensee for the purpose of gathering information and to provide clarification of the issues raised in the petition.

The Director of the Office of Nuclear Reactor Regulation has determined that the request to prevent operation of the units at D.C. Cook until there is reasonable assurance that significant noncompliances have been identified and corrected so that systems are in conformance with their design-basis and licensing-basis requirements has been satisfied. The regulatory oversight actions being taken by the NRC will provide reasonable assurance that systems at D.C. Cook will be in conformance with their design bases and licensing bases, thus meeting the request made in the petition, and eliminates the need to modify, suspend, or revoke the licenses at D.C. Cook.

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

I. INTRODUCTION

On October 9, 1997, Mr. David A. Lochbaum submitted a petition to the Executive Director for Operations of the U.S. Nuclear Regulatory Commission (NRC) pursuant to section 2.206 of Title 10 of the *Code of Federal Regulations* (10 C.F.R. § 2.206). The petition was submitted on behalf of the Union of Concerned Scientists (UCS or Petitioner) and requested that the operating licenses for the Donald C. Cook Nuclear Plant, Units 1 and 2 (D.C. Cook) be modified, revoked, or suspended to prevent operation of the units until there is reasonable assurance that significant noncompliances have been identified and corrected so that systems are in conformance with their design-basis and licensing-basis requirements. The Petitioner also requested that a public hearing into this matter be held in the Washington, D.C. area before the first unit at D.C. Cook is authorized to restart. The Petitioner indicated that the basis for his request was derived from a completed NRC architect/engineering[1] (AE) design inspection at D.C. Cook. Findings by the NRC during the AE inspection led to the Licensee declaring the emergency core cooling system (ECCS) inoperable at both units at D.C. Cook. As a result, the Licensee shut down both units in accordance with their Technical Specifications (TS). As stated in the petition, the systems reviewed during the AE inspection were the same systems that

[1] NRC Inspection Report (IR) No. 50-315, 50-316/97201, November 26, 1997.

the Licensee had reviewed earlier as part of its design-basis documentation reconstitution program. This review did not identify any deficiencies concerning equipment operability. Therefore, the Petitioner asserted that the D.C. Cook design-basis documentation reconstitution programs lacked the necessary rigor and focus to identify potential design-related operability issues. The Petitioner further asserted that deficiencies in the Licensee's design control programs may also be responsible for similar issues in safety systems that have not been examined by the NRC. On the basis of this potential, the Petitioner also requested that the NRC increase the inspection scope at D.C. Cook.

On December 9, 1997, the NRC acknowledged receipt of the petition and informed the Petitioner that the petition had been assigned to the Office of Nuclear Reactor Regulation (NRR) to prepare a response and that action on the specific concerns raised in the petition would be taken within a reasonable time.

By letter dated January 12, 1998, the Petitioner submitted an addendum to the petition. The addendum raised additional issues concerning D.C. Cook and provided additional information concerning the petition. In addition, the addendum raised concerns dealing with the section 2.206 process, the NRC inspection process, and generic concerns with ice condenser containments. On February 23, 1998, the NRC acknowledged receipt of the additional information and informed the Petitioner that the specific concerns related to the D.C. Cook plant and the petition would be considered in the Director's Decision. Further, the NRC informed the Petitioner that the concerns not directly applicable to the requests in the petition would be evaluated and transmitted in separate correspondence. By letters dated July 10 and December 28, 1998, the NRC sent the Petitioner the status of the review of these issues not related to D.C. Cook or the petition.

II. DISCUSSION

A. Request To Modify, Revoke, or Suspend the Operating Licenses for D.C. Cook Nuclear Plant, Units 1 and 2

The Petitioner based his request on the fact that the NRC had recently completed an AE design inspection at D.C. Cook and the inspection identified a number of issues concerning design and procedural controls, safety evaluations, use of engineering judgment, adequacy of operability determinations, temporary modifications, and consistency between the updated Final Safety Analysis Report (UFSAR) and the TS. The Petitioner asserted that the Licensee's design control programs were inadequate and there was the potential that similar issues could exist in other safety-related systems that the NRC had not inspected. The Petitioner requested that the units at D.C. Cook be prevented from operating until such time that there is reasonable assurance that significant noncompliances

have been identified and corrected. The Petitioner stated in the petition that the system certification process used at the Salem Nuclear Generating Station and the Millstone Nuclear Power Station would provide such reasonable assurance.

On September 8 and 9, 1997, the Licensee shut down both Unit 1 and Unit 2, respectively, because of inspection findings made by the NRC during the AE inspection. These findings led the Licensee to question the operability of the ECCS. Upon further investigation, the Licensee determined that the ECCSs in both units were inoperable and, in accordance with the TS, the Licensee shut down both units. By letter dated September 18, 1997, the Licensee identified several issues and corrective actions it would take preceding restart of either unit at D.C. Cook. By letter dated September 19, 1997, the NRC issued a confirmatory action letter (CAL) confirming that nine specific issues from the Licensee's September 18, 1997 letter would be addressed by the Licensee before a unit at D.C. Cook would be restarted. In addition, the NRC recognized that the AE inspection was a limited-scope inspection and that the inspection findings were substantial. For this reason, the NRC confirmed that the Licensee, before restart of a unit at D.C. Cook, would perform an assessment to determine whether the type of inspection findings discovered during the AE inspection existed in other safety-related systems and whether they affected system operability.

By letters dated December 2, December 24, and December 31, 1997, the Licensee responded to the CAL. In these letters, the Licensee described the corrective actions, the root-cause analysis, and the reasons why the units at D.C. Cook were ready to restart. The NRC held public meetings with the Licensee on December 10 and December 22, 1997, and January 8, 1998, to discuss the Licensee's CAL responses.

The petition raised concerns involving the Licensee's design control program and requested that a public hearing be held in the Washington, D.C. area before restarting either unit at D.C. Cook. The NRC Staff reviewed the petition thoroughly and determined that no new information was provided concerning D.C. Cook. The NRC Staff came to this conclusion because the Petitioner based his concerns on the Licensee's design control program deficiencies that were identified in the NRC AE inspection. A CAL had been issued which confirmed that the Licensee would bound the problems discovered by the AE inspection and implement adequate corrective actions before restarting either unit at D.C. Cook. Therefore, following the guidelines contained in NRC Management Directive (MD) 8.11, ''Review Process for 10 C.F.R. 2.206 Petitions,'' the NRC Staff came to the conclusion that new information was not provided and a hearing was not warranted.

In a telephone conversation on January 5, 1998, the NRC Petition Manager informed the Petitioner that new information was not provided in the petition and, in accordance with MD 8.11, a public hearing would not be granted. By letter dated January 6, 1998, the Petitioner protested the NRC's decision not to

hold a public hearing concerning the petition. In that letter, the Petitioner stated that information concerning ice condenser issues was presented to the NRC Inspector General's Office and since D.C. Cook's containment operability relies on an ice condenser system this constituted new information. The Petitioner also stated that the petition was developed and submitted in haste because NRC Region III officials indicated that the Licensee was planning to restart a unit at D.C. Cook in mid-October 1997 and the Petitioner wanted to submit the petition before the first unit at D.C. Cook was restarted. For this reason, the petition had not been fully developed and additional information would be forthcoming. On the basis of concerns that the Petitioner raised in the January 6, 1998 letter, and the assertion that the Petitioner potentially had new information, the NRC held a public meeting with the Petitioner on January 12, 1998. During the meeting, the Petitioner raised general concerns about the section 2.206 process and addressed the following six specific concerns covering a broad range of issues:

1. ice condenser concerns,
2. 10 C.F.R. § 50.59 Safety Evaluation process,
3. engineering calculations,
4. net positive suction head (NPSH) calculations,
5. Licensee's response to the CAL,
6. NRC inspection process.

By letter dated January 12, 1998, the Petitioner issued an addendum to the petition documenting the issues discussed during the January 12, 1998 public meeting. By letter dated February 23, 1998, the NRC acknowledged the receipt of the addendum. Issues 1 through 5, as they relate to D.C. Cook and the petition, are discussed individually in Sections II.B through II.F of this Director's Decision. As stated above, all issues raised in the addendum not related to D.C. Cook or the petition are being evaluated and will be addressed independent of the section 2.206 process in separate correspondence.

The NRC Staff reviewed the new information provided in the addendum according to the guidelines of MD 8.11 and concluded that the additional information presented in the January 12, 1998 addendum met the criteria for holding an informal public hearing. As a result, the NRC granted the Petitioner's request for an informal public hearing. On August 19, 1998, an informal public hearing was held at NRC headquarters in Rockville, Maryland. Both the Petitioner and the Licensee made presentations at the hearing. The hearing gave the Petitioner an opportunity to clarify the issues raised in the petition and the addendum. During the hearing, the Petitioner reported being pleased with the NRC oversight activities at D.C. Cook. Further, the Petitioner indicated he would like to see a Millstone-scale civil penalty issued to the Licensee to ensure that the Licensee will maintain the proper safety culture in the future. During the hearing, the Petitioner also requested that the NRC investigate the potential that the Licensee's December 2, 1997 letter contained material false

statements concerning the readiness of a unit at D.C. Cook to restart. This issue has been referred to the NRC Region III office for resolution and the results will be forwarded to the Petitioner under a separate cover.

In an effort to assess the effectiveness of the Licensee's corrective actions and the readiness of the units at D.C. Cook to restart, NRC performed an inspection of the CAL issues. The results of the inspection are documented in NRC Inspection Report (IR) No. 50-315, 50-316/98004. The team of inspectors reviewed the nine specific issues identified in the CAL and considered them adequately addressed. The inspection team concluded that the short-term assessment items were appropriate and bounded the AE inspection concerns. However, as described in the NRC July 30, 1998 letter to the Licensee, the CAL remains open pending the resolution of concerns involving the adequacy of the Licensee's assessment to determine whether the type of issues discovered during the AE inspection existed in other safety-related systems. By letter dated January 15, 1998, the Petitioner requested a copy of the inspection report, even if it was a preliminary version subject to revision, at least 1 business day before closing the CAL. In the NRC's February 23, 1998 letter, the request to release the draft inspection report was denied. As stated in the February 23, 1998 letter, it is not NRC policy to release draft predecisional information. This policy is intended to prevent improper influences and ensure that predecisional information, or contemplated enforcement actions, are not compromised by a premature release. In accordance with MD 8.11, once the petition was received, the Petitioner was placed on distribution for correspondence between the NRC and D.C. Cook. The Petitioner has subsequently received a copy of the IR.

The NRC expanded the scope of inspections of the D.C. Cook facility based on findings of the resident inspector staff, concerns that came to the NRC's attention regarding the ice condenser issues emanating from the AE inspection, and information brought to our attention by the Petitioner. This expanded scope of inspection satisfied the request in the petition. From November 1997 until April 1998, the NRC performed inspections of the containment (IR No. 50-315, 50-316/97017), ice condenser (IR No. 50-315, 50-316/98005), hydrogen mitigation systems (IR No. 50-315, 50-316/98009), and the design-basis (IR No. 50-315, 50-316/98004). The inspections identified that NRC requirements had been violated. The apparent violations were discussed at a public predecisional enforcement conference held at the NRC Region III office on May 20, 1998, with video viewing by the NRC headquarters staff, the Petitioner, and other members of the public in the NRC headquarters offices located in Rockville, Maryland.

During the predecisional enforcement conference, the Licensee admitted to all the apparent violations that formed the basis for the conference, described its assessment of the root causes, and presented its proposed corrective actions to address these issues. The Licensee stated that a root cause for many of

these apparent violations was the failure to establish and communicate adequate performance standards.

As documented in the IRs, extensive degradation of the design of each unit's ECCS, ice condenser, refueling water storage tanks (RWSTs), and containment sumps impaired the ability of the barriers (fuel cladding and containment) to prevent fission product release to the environment in the event of a design-basis loss-of-coolant accident (LOCA). With regard to the fuel cladding barrier, deficiencies were identified involving (1) a large quantity of fibrous materials within containment which would likely have clogged the ECCS sump screens in the recirculation mode, (2) a single-failure ECCS vulnerability, and (3) the insufficient amount of water available in the ECCS sump which represents a challenge to cool the fuel post LOCA. With regard to the containment barrier, the effects on the degraded ice condenser from blocked ice-bed flow passages, missing ice segments, and ice basket damage represented a serious challenge to the ability of the ice condenser to perform its intended function to condense steam and suppress containment pressure. These conditions seriously impaired the safety function of the ECCS and the containment. Further, beyond the specific systems addressed by this enforcement action, two additional systems related to the containment, the hydrogen ignition and containment spray systems, were also degraded during the same period and, following analysis, the Licensee declared these systems inoperable.

During the informal public hearing, the Petitioner requested that the NRC issue a ''Millstone'' scale[2] civil penalty for the violations of NRC requirements at D.C. Cook. The violations were collectively categorized in accordance with the NRC Enforcement Policy (NUREG-1600) as a Severity Level II violation. This severity level was warranted for the breadth and number of the violations that, taken in total, resulted in a lack of reasonable assurance that following a design-basis accident, the ECCS and containment would have performed their intended functions.

On October 13, 1998, the NRC issued the Notice of Violation and associated proposed civil penalty to the Licensee. Accordingly, after considering the information obtained during the informal public hearing and predecisional enforcement conference, and after consultation with the Commission, the NRC Staff chose to exercise discretion pursuant to Section VII.A.1 of the NRC Enforcement Policy and assessed a penalty in the amount of $500,000. Specifically, the escalated civil penalty reflected the consideration of the poor performance by the Licensee, the duration of the problems, the adverse impact on the ECCS and the containment, and the NRC's concerns regarding the violations. The purpose of the enforcement action was to emphasize the need for (1) taking

[2] On December 10, 1997, the NRC issued Enforcement Action EA 96-34 to Northeast Utilities which included Severity Level II violations and a $2.1 million civil penalty.

timely and effective corrective actions for identified deficiencies, (2) effective surveillance testing and for plant personnel to challenge and investigate discrepancies identified during surveillance activities, (3) rigorous safety evaluations to determine whether changes to the plant or procedures constitute unreviewed safety questions, (4) maintaining the plant's design and licensing bases, and (5) a strong self-assessment program. The NRC Staff would have proposed a larger civil penalty had it not been for the Licensee's decision to take comprehensive corrective actions and a commitment to keep the facility shut down until these problems are resolved.

Compliance with regulations, license conditions, and TS, and operation of a facility in accordance with the licensing basis is mandatory. However, the NRC also recognizes that plants will not operate trouble-free.[3] This is clearly articulated in Criterion XVI, Appendix B, Part 50, ''Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants.'' Criterion XVI states that ''[m]easures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.'' The appropriate response to an identified deficiency can and should vary, depending on the safety significance of the deficiency.

The conduct of NRC regulatory oversight at the D.C. Cook site is based on the recognition that it is the Licensee's responsibility to comply with its license and safety requirements and to take corrective actions when deficiencies are identified. Thus, the Licensee must determine that a unit is in conformance with applicable NRC regulations, its license conditions, its UFSAR, and that applicable licensing commitments have been met before a unit is ready to restart. The Licensee's conformance with NRC regulations, license conditions, and licensing commitments is fundamental to the NRC's confidence in the safety of licensed activities. In short, the Licensee has the primary responsibility for the safe operation of its facilities.

By letter dated March 7, 1998, the Licensee docketed the D.C. Cook Nuclear Plant Restart Plan (Restart Plan). The Restart Plan is the principal program

[3] The NRC's regulations for protection of public health and safety embrace the philosophy of defense-in-depth, which supports the identification and correction of degraded or nonconforming conditions previously discussed. Briefly stated, this philosophy (1) requires the application of conservative codes and standards to establish substantial safety margins in the design of nuclear plants; (2) requires high quality in the design, construction, and operation of nuclear plants to reduce the likelihood of malfunctions, and promotes the use of automatic safety system actuation features; (3) recognizes that equipment can fail and operators can make mistakes, and therefore, requires redundancy in safety systems and components to reduce the chances that malfunctions or mistakes will lead to accidents that release fission products from the fuel; and (4) recognizes that, in spite of these precautions, serious fuel damage accidents can happen and, therefore, requires containment structures and safety features to mitigate the release of fission products. In the unlikely event of an offsite fission product release, emergency plans are in place to provide reasonable assurance that protective actions can and will be taken to protect the population around nuclear power plants. These emergency plans are coordinated with local and state officials and the Federal Emergency Management Agency.

to provide reasonable assurance that weaknesses at the D.C. Cook units are identified and appropriate corrective actions are implemented. The Restart Plan includes efforts to understand and correct the licensing- and design-bases issues that, in part, led to the Licensee shutting down both units at D.C. Cook and the NRC taking escalated enforcement action. Revision 4 of the Restart Plan was submitted by the Licensee on December 16, 1998. The Licensee's Restart Plan included system readiness reviews for the most risk-significant systems at D.C. Cook. The reviews included evaluation of the UFSAR and TS design requirements, surveillance tests for the system, a review of design modifications, and a review of temporary modifications.

The NRC, in an effort to assess the effectiveness of the system readiness reviews, scheduled a safety system functional inspection (SSFI) on the auxiliary feedwater (AFW) system. The Licensee requested permission to conduct and subsequently conducted the SSFI, using independent contractors. The NRC provided oversight of the Licensee's SSFI through an inspection team. The NRC IR No. 50-315, 50-316/98017 associated with the oversight of the Licensee's SSFI was issued on January 28, 1999. In a public meeting on October 22, 1998, the Licensee presented the preliminary findings from the SSFI. The SSFI identified a number of issues, including findings that questioned the operability of the AFW system under certain accident conditions. These findings had not been identified by the Licensee's AFW system readiness review. In a public meeting on December 22, 1998, the Licensee stated that enhancements would be made to the system readiness review process and a more thorough review of the most risk-significant systems would be performed before restart of a unit at D.C. Cook. These changes will be incorporated into the Licensee's Restart Plan.

Through the implementation of the Restart Plan, the Licensee has documented a large number of deficiencies that vary in scope and safety significance for each unit. The Licensee has identified deficiencies that must be corrected before restart. In its continuing review of the Licensee's corrective actions, the NRC will determine whether the Licensee has appropriately scheduled safety-significant items for completion before restart and whether the decision to defer selected corrective actions until after restart is appropriate for each unit. The results of these efforts will be documented in NRC IRs.

The NRC has developed a comprehensive and multifaceted oversight process to provide reasonable assurance that the Licensee has identified necessary issues and implemented required corrective actions. Because of the extent of issues discovered at D.C. Cook, the NRC has chosen to use the guidelines contained in NRC Inspection Manual Chapter (MC) 0350, ''Staff Guidelines for Restart Approval'' to conduct the oversight of the Licensee's corrective actions. MC 0350 establishes the guidelines for approving the restart of a nuclear power plant after a shutdown resulting from a significant event, a complex hardware problem,

or serious management deficiencies. The primary objective of the guidelines in MC 0350 is to ensure that NRC's restart review efforts are appropriate for the individual circumstances, are reviewed and approved by the appropriate NRC management levels, and provide objective measures of restart readiness. In accordance with MC 0350, a restart panel has been established. Members include senior managers from both NRC Region III and the NRR offices. The NRR project manager and the senior resident inspector are also on the panel. The panel meets internally to discuss restart issues on a weekly basis, and holds meetings approximately monthly with the Licensee to discuss the Licensee's corrective actions and schedules. The monthly meetings with the Licensee are noticed and are open to the public.

By letters dated July 30 and October 13, 1998, the NRC forwarded to the Licensee the Case-Specific Checklist for D.C. Cook in accordance with the MC 0350 guidelines. The checklist specified the activities the NRC considers necessary to be addressed before the restart of a unit at D.C. Cook. The items on the list were derived from the NRC's review of inspection activities, the CAL, and the Licensee's Restart Plan. As new issues emerge the Case-Specific Checklist will be changed, and new issues necessary to be addressed before restart will be added to the list.

B. Ice Condenser Concerns

In the addendum, the Petitioner identified problems in the configuration and testing of the ice condenser at the Watts Bar Nuclear Power Plant. The addendum specifically identified problems with the inlet bay doors, floor upheaval, and ice basket components. The addendum also stated that those problems were known, but were not properly reported by the Watts Bar Licensee (the Tennessee Valley Authority), the D.C. Cook Licensee (Indiana Michigan Power Company), the McGuire Licensee (Duke Power), and the vendor (Westinghouse). The Petitioner questioned if the Watts Bar ice condenser problems were valid and if they applied to the D.C. Cook facility. In the NRC's February 23, 1998 acknowledgment letter, the Petitioner was informed that the specific concerns regarding ice condenser issues at D.C. Cook would be addressed in the Director's Decision. All other issues concerning ice condensers at other facilities and the vendor will be reported on in separate correspondence. By letters dated July 10 and December 28, 1998, the Petitioner was informed of the review status of these issues.

As a result of concerns with the ice condensers at the D.C. Cook facility, the NRC Region III office initiated an inspection of the ice condensers. The Petitioner's concerns raised in the addendum were incorporated into that inspection. In addition to the concerns raised in the addendum, the inspection also reviewed activities associated with the surveillance test program of the ice condensers, the

corrective actions performed on the ice condensers, and how the Licensee maintained the design-basis documentation concerning the ice condensers. The findings of the inspection were documented in NRC IR No. 50-315, 50-316/98005.

The inspectors determined that the overall material condition of the ice condensers was poor and some of the concerns raised by the Petitioner were confirmed. The issues raised in the addendum concerning the inlet bay doors and the floor upheaval were not substantiated. The team inspected the doors of the ice condensers and found them to be functional but in poor material condition. In addition, the team identified deficiencies in the design-basis testing of the inlet bay doors. The team also inspected the ice condenser floor sections, which have the potential to heave and prevent the bay doors from operating properly. No signs of floor upheaval or degradation were detected. Concerning the issue of deficiencies of ice basket components, the team identified defective and damaged ice baskets. Examples include the following: (1) dented and buckled ice basket webbing, (2) missing sheet metal screws used to couple the ice baskets together, (3) loose and missing U-bolt nuts on lower ice basket assemblies, (4) separated ice baskets, and (5) failed fillet welds at the ice basket bottom holddown bar. The team inspection identified twenty-nine apparent violations of NRC requirements. As stated in Section II.A of the Director's Decision, these violations were part of the overall enforcement action taken by the NRC.

In the addendum, the Petitioner raised the concern that the Licensee was aware of the deficiencies with the ice condenser and did not properly report the deficiencies. While the Licensee's staff had knowledge of some of the inspection issues, it was not apparent that the Licensee was aware of the significance of those issues until they were discovered by the NRC and followed up by the Licensee during the inspection. Contributing to the Licensee's failure to recognize the significance of those issues was the breakdown of the corrective action program. As stated in Section II.A, these issues were a part of the overall enforcement action. Therefore, the problems the Licensee's staff identified with the ice condenser were not properly resolved or reported by the Licensee. Following the inspection, the Licensee has submitted several LERs reporting on the deficiencies identified with the ice condenser in accordance with 10 C.F.R. § 50.73. In addition, on July 30, 1998, the Licensee issued a report in accordance with 10 C.F.R. Part 21 informing the NRC of potential defects with failed fillet welds at the ice basket holddown bar.

In March 1998, the Licensee decided to completely melt out the ice condensers of both units to allow thorough inspections and comprehensive repairs of the ice condensers. Following the meltout of the ice condensers, the Licensee discovered foreign material in the ice baskets. Some material appeared to be from the original construction. Also, the Licensee identified damage to the ice baskets and other ice condenser components. The restoration of the ice condenser has been incorporated into the Licensee's Restart Plan. The Licensee

chose to repair damaged components and reinspect the ice condensers to ensure that corrective actions have been adequately implemented and the material condition of the ice condensers has been returned to its original design basis. In addition to the physical repairs to the ice condenser, the Licensee has reviewed the ice condenser surveillance program and intends to complete revised ice condenser surveillance tests to ensure that the ice condensers are operable and will perform their intended function.

Resolution of the ice condenser problems is an item on the MC 0350 Case-Specific Checklist and the Licensee's corrective actions are monitored by the MC 0350 restart panel. Corrective actions implemented by the Licensee will be inspected before the restart of a unit at D.C. Cook.

C. 10 C.F.R. § 50.59 Safety Evaluation Process

During the AE inspection, the NRC inspectors identified problems with the 10 C.F.R. § 50.59 process at D.C. Cook. In the addendum, the Petitioner raised a concern that the Licensee's section 50.59 safety evaluation preparation process was ''bad'' and that a thorough enough review of old section 50.59 safety evaluations had not been performed. Further, the Petitioner questioned if safety evaluations prepared using the ''bad'' section 50.59 process potentially could mean that unidentified safety problems remain at D.C. Cook.

Following the AE inspection, the Licensee initiated corrective actions to address the section 50.59 issues identified during the AE inspection. The Licensee assessed the section 50.59 process in December 1997. The Licensee reviewed section 50.59 screenings and unreviewed safety question determinations performed between January 1996 and September 1997. The Licensee identified several administrative or procedural problems. The Licensee's assessment did not identify issues that would have an impact on the technical conclusions reached in any safety evaluation prepared in accordance with the section 50.59 process.

To evaluate the corrective actions taken by the Licensee following the AE inspection, the NRC performed an inspection of the section 50.59 process at D.C. Cook. The inspectors reviewed procedure and design change safety evaluations. The team did not identify any safety evaluations performed by the Licensee using the ''old'' section 50.59 process that resulted in a safety system operability concern, or where the change would have resulted in an unreviewed safety question determination. The inspection did, however, identify apparent violations of section 50.59 concerning the failure to perform safety evaluations for proposed changes to the plant design basis. The violations resulted from the Licensee's failure to recognize that implemented changes constituted a change to the plant's design basis as described in the UFSAR. Violations were also identified pertaining to the adequacy of safety evaluations. The inspection made it evident that weakness still existed in the Licensee's section 50.59 program and

substantiated the concerns raised in the addendum with the Licensee's section 50.59 process. The specific details of the findings are contained in IR No. 50-315, 50-316/98004.

As a result of the inspection findings from both the AE inspection and IR No. 50-315, 50-316/98004, the Licensee has performed three additional self-assessments of the effectiveness of its section 50.59 program. The Licensee's review sample was selected from a population of section 50.59 safety evaluations beginning in the 1980s. As a result of the deficiencies identified through these self-assessments, the Licensee committed to implement a number of programmatic changes to improve the section 50.59 process at D.C. Cook. Further, the Licensee has committed to perform enhanced system readiness reviews as stated above. These commitments have been incorporated into the Licensee's Restart Plan and will be implemented before restart of a unit at D.C. Cook.

Inspections to date of the Licensee's section 50.59 process have not identified any safety evaluations performed by the Licensee that resulted in safety system operability concerns. However, the Licensee's enhanced system readiness reviews may discover section 50.59 safety evaluations that are inadequate and that may result in safety system operability concerns. Because of the nature and number of section 50.59 violations, the NRC placed the section 50.59 process on the MC 0350 Case-Specific Checklist. Corrective actions taken by the Licensee will be inspected by the NRC Staff before restart of a unit at D.C. Cook to ensure that the section 50.59 program implementation at D.C. Cook provides adequate assurance of safety.

D. Engineering Calculations

In the addendum, the Petitioner identified concerns involving engineering calculations at D.C. Cook. The Petitioner questioned whether the population of calculations, reviewed by the Licensee as part of the corrective actions taken in response to inspection findings from the AE inspection, was a representative sample. In addition, the Petitioner questioned whether the NRC was satisfied with corrective actions taken by the Licensee in response to the calculation weaknesses identified by the NRC during the AE inspection.

The NRC inspected the corrective actions taken by the Licensee in this area. The NRC inspection findings were documented in NRC IR No. 50-315, 50-316/98004. The inspection concluded that the older calculations (early 1970 vintage) appeared to satisfy their intended purpose; however, problems still existed with calculations at D.C. Cook and the initial corrective actions implemented by the Licensee had been unsuccessful in bounding the problem.

On the basis of the inspection findings, the Licensee chose to expand the scope of engineering calculations to be reviewed to determine the quality, level of detail, completeness, and accuracy of the calculations before restart of a unit. The Licensee expanded its review to include a significant sample of the calculations for the most risk-significant systems. The Licensee's expanded review identified a number of deficiencies in engineering calculations. As a result of these deficiencies, the Licensee has committed to corrective actions to change the calculation preparation procedure and to train all calculation preparers, verifiers, and approvers on the new procedures.

In summary, because of the extent of the problems with engineering calculations and design control at D.C. Cook, the MC 0350 restart panel incorporated this issue into the Case-Specific Checklist. Before restart of a unit at D.C. Cook, the NRC will evaluate corrective actions taken by the Licensee to assess whether the Licensee has been successful in correcting the weakness in the engineering calculation program at D.C. Cook and that the calculation adequacy provides reasonable assurance of safety.

E. Net Positive Suction Head (NPSH) Calculations

In the addendum, the Petitioner stated that from the time the petition was submitted on October 9, 1997, until the time the Licensee responded to the CAL on December 2, 1997, the Petitioner received concerns from an individual at D.C. Cook indicating problems with NPSH calculations. The alleged problems involved both missing and inaccurate calculations. The Petitioner questioned if safety-related pumps at D.C. Cook have adequate NPSH as shown by quality calculations.

In response to the concerns raised in the addendum, the NRC Staff requested by letter dated June 8, 1998, that the Licensee provide (1) the NPSH calculations for all safety-related pumps, (2) a description of the calculation technique, and (3) all assumptions used in the calculations. By letters dated July 22, July 31, and August 5, 1998, the Licensee provided the requested information.

The NRC Staff reviewed the NPSH calculations for each safety-related pump at D.C. Cook. With the exception of the containment spray (CTS) and the residual heat removal (RHR) systems, the NRC found that the calculations submitted by the Licensee supported adequate NPSH for the safety-related pumps. For the CTS and RHR systems the values used for the pump run-out flows in the UFSAR did not match the values used in the NPSH calculations. Because of the inconsistencies in the values used for the pump run-out flows, the NRC was unable to determine whether the NPSH calculations of record for the CTS and RHR systems demonstrated adequate NPSH for the pumps in these systems. By letter dated January 7, 1999, the NRC informed the Licensee of the inconsistencies discovered during the review of the NPSH calculations.

Further, the letter requested the Licensee to provide revised NPSH calculations addressing the inconsistencies in the CTS and RHR systems' NPSH calculations, and show that adequate NPSH is available for the safety-related pumps in these systems. In addition, the issue of adequate NPSH for safety-related pumps will be monitored by the MC 0350 restart panel. The Licensee's resolution of the issue will be reviewed and evaluated by the NRC.

In summary, the Petitioner stated that there were missing and inaccurate NPSH calculations for safety-related pumps at D.C. Cook. Upon request, the Licensee provided the NPSH calculation for all safety-related pumps at D.C. Cook. The Licensee's response demonstrated that there were NPSH calculations for all safety-related pumps at D.C. Cook. When the calculations were reviewed by the NRC, inconsistencies were discovered in values documented in the UFSAR and those used in the NPSH calculations. These concerns have been identified and transmitted to the Licensee. The Licensee's corrective actions will be monitored through the MC 0350 process to ensure appropriate actions are taken.

F. Licensee's Response to the CAL

In the addendum, the Petitioner raised a concern about the credibility of the Licensee's response to the CAL. The Petitioner stated that since the Licensee's February 6, 1997 response to the NRC's October 9, 1996, 10 C.F.R. § 50.54(f) request for design-basis information was not accurate, based on the AE inspection finding, he could not see how the Licensee's response to the CAL could be accurate.

Following the Licensee's response to the CAL, the NRC performed additional inspections at D.C. Cook, documented in IR Nos. 50-315, 50-316/98004; 50-315, 50-316/98005; and 50-315, 50-316/98009. The findings of these inspections clearly showed that the Licensee's actions to bound the scope of engineering problems in response to the CAL were too narrowly focused and were not sufficient to address the broad array of problems concerning the design-basis and licensing-basis issues that existed at D.C. Cook.

The Petitioner's concern in the addendum (that the Licensee's response to the CAL failed to assure the NRC that corrective actions were adequate) has been substantiated. The inspection findings from early 1998 indicated that the CAL response did not bound the design-basis and licensing-basis issues at D.C. Cook. As indicated in Section II.A of the Director's Decision, the NRC took escalated enforcement action against the Licensee. In response to the violations and various programmatic breakdowns at D.C. Cook, the Licensee made a decision in early 1998 to perform a comprehensive assessment to provide reasonable assurance of plant system readiness, programmatic readiness, functional area readiness, and containment readiness before restart of either unit. The Licensee's

primary mechanism to implement each of the plant assessment programs is the D.C. Cook Nuclear Plant Restart Plan. The Restart Plan was submitted in March 1998, and Revision 4 of the Restart Plan was docketed on December 16, 1998. As stated above, the NRC is using the guidelines in MC 0350 to oversee the Licensee's corrective actions and the readiness of a unit to restart. As additional problems or concerns are identified during the implementation of the Restart Plan, appropriate adjustments will be made to the Restart Plan and the Case-Specific Checklist.

III. NRC RESPONSE TO REQUESTED ACTION

A. Request To Modify, Revoke, or Suspend the Operating Licenses for D.C. Cook, Units 1 and 2

The Petitioner requested that the operating licenses for D.C. Cook, Units 1 and 2 be modified, revoked, or suspended to prevent operation of the units until there is reasonable assurance that significant noncompliances have been identified and corrected so that systems are in conformance with their design-basis and licensing-basis requirements. In addition, the petition requested that the NRC broaden the inspection scope at D.C. Cook following the AE inspection. The NRC's regulatory oversight actions taken thus far at D.C. Cook, in part, fulfill the actions requested in the petition. The regulatory oversight actions at D.C. Cook are broad and comprehensive and will ensure that there is reasonable assurance of safety prior to restart of either unit.

Inspection findings at D.C. Cook following the AE inspection verified that the corrective actions implemented by the Licensee as described in the CAL response were too narrowly focused and did not fully address the design-basis and licensing-basis issues. The NRC increased inspections at D.C. Cook identified a number of violations of NRC requirements, and as a result, took appropriate enforcement action against the Licensee as stated above. While the enforcement action did not modify, suspend, or revoke the operating licenses of the D.C. Cook facilities, it did emphasize the serious nature of the violations, the duration of the problems, and the Licensee's poor performance.

The Licensee has developed an integrated Restart Plan. The plan provides the framework to be used by the Licensee to identify, evaluate, and correct issues. The NRC regulatory oversight at D.C. Cook is following the guidelines of MC 0350 as discussed above. This approach focuses the correct level of management attention as well as resources on significant issues to be verified before restart of a unit at D.C. Cook. In addition, this approach allows the NRC the flexibility to change the focus of the oversight as different significant issues emerge. In the Licensee's effort to identify and correct issues, new issues will continue to emerge. As a result, the Licensee will be expected to modify the

Restart Plan to ensure that corrective actions, to resolve the emergent issues, are implemented in a timely manner. The MC 0350 restart panel will review these changes to the Restart Plan to ensure that the Licensee has taken appropriate corrective actions.

The Petitioner's request to suspend, modify, or revoke the licenses at D.C. Cook, Units 1 and 2 has not been granted at this time. The current regulatory oversight at D.C. Cook is sufficient, and provides reasonable assurance that before restart of a unit at D.C. Cook the Licensee will have identified and corrected issues so that the safety systems at D.C. Cook will be in compliance with their design-basis and licensing-basis requirements.

B. Request To Hold a Public Hearing on the Issues Raised in the Petition Before Restart of a Unit at D.C. Cook

The Petitioner requested that a public hearing into the issues raised in the petition be held in the Washington, D.C. area before the first unit at D.C. Cook is authorized to restart. As discussed above, this request was granted. On August 19, 1998, an informal public hearing was held at the NRC headquarters in Rockville, Maryland. Both the Petitioner and the Licensee made presentations during the hearing. The hearing gave the Petitioner an opportunity to clarify the issues raised in the petition and the addendum.

C. Issues Raised in the Addendum

As discussed in Sections II.B through II.E of this Director's Decision, each of the actions requested by the Petitioner in the addendum has been granted in that the Licensee is taking additional corrective actions to ensure that each issue raised in the addendum will be resolved before restart of a unit at D.C. Cook, and the NRC will verify that the Licensee's corrective actions have been effective. Each of the issues raised in the addendum will be reported on in a future inspection report.

IV. CONCLUSION

The NRC has determined, for the reasons given in the preceding discussion, that the request to prevent operation of the units at D.C. Cook until there is reasonable assurance that significant noncompliances have been identified and corrected so that systems are in conformance with their design-basis and licensing-basis requirements has been satisfied. The regulatory oversight actions being taken by the NRC as stated above will provide reasonable assurance that systems at D.C. Cook will be in conformance with their design basis and

licensing bases, thus meeting the request made in the petition, and eliminates the need to modify, suspend, or revoke the licenses at D.C. Cook. The request to hold a public hearing into the issues raised in the petition and addendum in the Washington, D.C. area before the first unit at D.C. Cook is authorized to restart has been granted. Action has been taken on each concern identified in the addendum, as stated above.

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

FOR THE NUCLEAR
REGULATORY COMMISSION

Samuel J. Collins, Director
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 11th day of February 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of **Docket No. 50-271**
(License No. DPR-28)

VERMONT YANKEE NUCLEAR POWER CORPORATION
(Vermont Yankee Nuclear Power Station)

February 10, 1999

By Director's Decision dated February 10, 1999, the Director, Office of Nuclear Reactor Regulation, has acted on a petition for action under 10 C.F.R. § 2.206 received from Michael J. Daley on April 9, 1998, concerning the Vermont Yankee Nuclear Power Station (VYNPS).

The petition requested that the U.S. Nuclear Regulatory Commission (NRC) issue an order requiring that the Licensee's administrative limits, which were in effect at the time and precluded VYNPS from operating with a torus water temperature above 80°F or with a service water injection temperature greater than 50°F, shall remain in force until certain conditions are met. The conditions listed include a complete reconstitution of the licensing basis for the maximum torus water temperature, submittal to the NRC of a technical specifications (TSs) amendment request establishing the correct maximum torus water temperature, and completion of NRC's review of the amendment request.

As a basis for the request, the Petitioner raised concerns about the Licensee being unable to demonstrate an ability to either justify the operational limits for the maximum torus water temperature or to maintain operations within existing administrative limits (torus water temperature is critical to the proper functioning of the containment). The Petitioner asserted that since 1994, events have caused the Licensee to question VYNPS's maximum torus water temperature limits four times, leading to the self-imposed administrative limits previously noted. The Petitioner stated that the NRC must move from a ''wait and see'' posture

to active intervention, with immediate imposition of the order recommended by the Petitioner as a first step.

On May 13, 1998, the Director of the Office of Nuclear Reactor Regulation concluded that issuing an immediate order imposing the Licensee's administrative limits that were in effect at the time was unnecessary. This aspect of the petition was denied since the Licensee took appropriate actions to determine the proper limit on torus water temperature, sought a TS amendment to impose the correct torus water temperature, and administratively implemented the limit while the NRC reviewed the analysis in support of the TS amendment. The additional conditions associated with the request have been completed including establishing the correct licensing basis for the maximum torus temperature, submittal of a TS amendment request establishing the correct maximum torus water temperature limit, and completion of the NRC review of the amendment request. The NRC has concluded that the appropriate limit for maximum torus temperature is 90°F, making the limits requested in the petition unnecessary. Accordingly, the Staff has addressed the issues raised by the Petitioner and has completed its actions relating to the petition.

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

I. INTRODUCTION

By a petition submitted pursuant to 10 C.F.R. § 2.206 on April 9, 1998, Michael J. Daley, on behalf of the New England Coalition on Nuclear Pollution, Inc. (Petitioner), requested that the U.S. Nuclear Regulatory Commission (NRC) take immediate action with regard to the Vermont Yankee Nuclear Power Station (VYNPS) operated by the Vermont Yankee Nuclear Power Corporation (Licensee or Vermont Yankee).

The Petitioner requested that the NRC issue an order requiring that the Licensee's administrative limits, which were in effect at the time and precluded VYNPS from operating with a torus water temperature above 80°F or with a service water injection temperature greater than 50°F, shall remain in force until certain conditions are met. The conditions listed include a complete reconstitution of the licensing basis for the maximum torus water temperature, submittal to the NRC of a technical specifications (TSs) amendment request establishing the correct maximum torus water temperature, and completion of NRC's review of the amendment request.

On May 13, 1998, the Director of the Office of Nuclear Reactor Regulation informed the Petitioner that he was denying the request for immediate action at

VNYPS, that the petition was being evaluated under 10 C.F.R. § 2.206 of the Commission's regulations, and that action would be taken in a reasonable time.

The NRC Staff's review of the petition is now complete. For the reasons set forth below, the Petitioner's remaining requests have been appropriately addressed. The conditions associated with the Petitioner's request have been completed, including establishment of the correct licensing basis for the maximum torus temperature, submittal of a TS amendment request establishing the correct maximum torus water temperature limit, and completion of the NRC's review of the amendment request.

II. BACKGROUND

In support of these requests, the Petitioner raised concerns about the Licensee being unable to demonstrate an ability to either justify the operational limits for the maximum torus water temperature or to maintain operations within existing administrative limits (torus water temperature is critical to the proper functioning of the containment). The Petitioner asserted that since 1994, events have caused the Licensee to question VYNPS's maximum torus water temperature limits four times, leading to the self-imposed administrative limits previously noted. The Petitioner stated that the NRC must move from a ''wait and see'' posture to active intervention, with immediate imposition of the order recommended by the Petitioner as a first step.

The Staff notes that the limits proposed by the Petitioner were in effect at VYNPS on an interim basis while the Licensee determined the correct maximum torus water temperature limits since it was determined that the TS limit of 100°F was incorrect. The Licensee subsequently completed the analysis and determined that the correct limit for the maximum torus water temperature is 90°F. This administrative limit was then established at 90°F and a TS amendment request was submitted to establish this as the maximum torus water temperature.

III. DISCUSSION

As indicated in the May 13 letter, Petitioner's request for immediate action was denied. Although the NRC identified concerns regarding the Licensee's handling of the torus water temperature issue in the past, as evidenced by the NRC's enforcement action (Notice of Violation and Proposed Imposition of Civil Penalty of $55,000 dated April 14, 1998), there was insufficient basis for concluding that the limits proposed by the Petitioner must be imposed on the Licensee while the NRC reviewed the associated TS amendment request. The NRC took several actions in this area, including performing a design inspection

and conducting several meetings with the Licensee on this issue. The NRC concluded that the Licensee's actions to resolve this issue were acceptable.

In May and June 1997, the NRC performed a design inspection to evaluate the capability of selected systems to perform their intended safety function as described in design-basis documentation. Also, the NRC assessed the Licensee's adherence to its design and licensing basis for selected systems, and the consistency of the as-built configuration and system operations with the final safety analysis report. The team concluded that although some concerns were identified, the systems evaluated were capable of performing their intended functions and the design engineers had excellent knowledge and capabilities. The report findings were documented in NRC Inspection Report Number 50-271/97-201, which was provided with our May 13 letter to the Petitioner.

One of the concerns identified during the design inspection was associated with the Licensee's previous handling of the torus water temperature issue and resulted in enforcement action being taken on April 14, 1998, because of a failure to (1) properly translate the design basis of the plant into specifications, procedures, and instructions and (2) promptly correct design deficiencies once they were identified. However, credit was warranted for corrective actions because NRC considered the Licensee's actions, once the violations were identified, to be prompt and comprehensive.

At the NRC's request, several public meetings were conducted to discuss issues, including the Licensee's analysis to determine the appropriate torus water temperature limit. As a result of discussions with the Licensee during public meetings on March 5, March 24, and April 7, 1998, the NRC concluded that the Licensee was taking the appropriate actions to resolve this issue and to ensure that the appropriate maximum torus water temperature was specified in the TS and administratively controlled while the TS amendment was being reviewed by the NRC. During the April 7 meeting, the Licensee committed to submit the TS amendment request to limit the torus water temperature to 90°F, which is an input value to the containment analysis calculations, before restart. The calculations supporting the amendment request were subjected to the Licensee's formal quality process for ensuring accuracy and completeness and provided additional assurance that the 90°F limit is correct. The more restrictive administrative limits (80°F torus water temperature and 50°F service water injection water temperature) were put in place by the Licensee, while the detailed analysis was performed to verify that 90°F was the correct limit.

The Licensee proposed a TS amendment to establish a maximum torus water temperature limit of 90°F by letter dated May 8, 1998, as supplemented on July 10 and October 2, 1998. The NRC reviewed the Licensee's analysis and concluded, for the reasons specified in the safety evaluation, that the appropriate maximum torus water temperature is 90°F. Therefore, imposition of the more restrictive administrative limits specified in the petition are not necessary.

IV. CONCLUSION

The NRC Staff has evaluated the information provided by the Petitioner as its basis for the actions requested. As indicated in the May 13 letter to the Petitioner, the NRC has concluded that issuing an immediate order, as requested, was unnecessary since the Licensee took appropriate actions to determine the proper limit on torus water temperature, sought a TS amendment to impose the correct torus water temperature, and administratively implemented the limit while the NRC reviewed the analysis in support of the TS amendment. Although the NRC denied Petitioner's request to take immediate action to issue an order imposing certain limits on VYNPS, the conditions associated with the request have been completed, including establishment of the correct licensing basis for the maximum torus temperature, submittal of a TS amendment request establishing the correct maximum torus water temperature limit, and completion of the NRC's review of the amendment request.

Since the conditions listed in the petition have been met and the NRC had previously addressed Petitioner's immediate request for imposition of an order, all actions associated with the request are complete. For the reasons contained in the safety evaluation, we have concluded that the appropriate limit for maximum torus water temperature is 90°F, making the limits requested in the petition unnecessary. Accordingly, the Staff has addressed the issues raised by the Petitioner and has completed its actions relating to the petition.

As provided in 10 C.F.R. § 2.206(c), a copy of this Decision will be filed with the Secretary of the Commission for the Commission's review. This Decision will constitute the final action of the Commission 25 days after issuance unless the Commission, on its own motion, institutes 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 10th day of February 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket Nos. 50-295-LA**
50-304-LA

COMMONWEALTH EDISON COMPANY
(Zion Nuclear Power Station,
Units 1 and 2) **March 2, 1999**

In this license amendment proceeding, the Commission considers the appeal of an Atomic Safety and Licensing Board decision, LBP-98-27, 48 NRC 271 (1998), that denied a petition for leave to intervene and request for hearing filed by Mr. Edwin D. Dienethal. The Commission affirms the Board's ruling that Mr. Dienethal lacks standing to challenge the license amendments.

LICENSE PROCEEDINGS: APPLICANT'S CHARACTER AND COMPETENCE

The Commission has stressed that licensing actions as a rule do not throw open an opportunity to engage in a free-ranging inquiry into the ''character'' of the licensee. For management ''character'' to be an appropriate issue for adjudication in a licensing proceeding, there must be some direct and obvious relationship between the character issues and the licensing action in dispute.

RULES OF PRACTICE: STANDING TO INTERVENE (LICENSE AMENDMENT)

In an operating license amendment proceeding, a petitioner cannot base his or her standing simply upon a residence or visits near the plant, unless the proposed

action quite obviously entails an increased potential for offsite consequences. It is incumbent upon the petitioner to provide some ''plausible chain of causation,'' some scenario suggesting how the license amendments would result in a distinct new harm or threat. A petitioner cannot seek to obtain standing in a license amendment proceeding simply by enumerating the proposed license changes and alleging without substantiation that the changes will lead to offsite radiological consequences.

RULES OF PRACTICE: RESPONSIBILITIES OF PARTIES

We do not expect our adjudicatory boards, unaided by the parties, to sift through the parties' pleadings to uncover and resolve arguments not advanced by litigants themselves. The burden of setting forth a clear and coherent argument for standing and intervention is on the petitioner. It should not be necessary to speculate about what a pleading is supposed to mean. The petitioner therefore bears the responsibility for any Licensing Board misunderstanding of his petition.

MEMORANDUM AND ORDER

I. INTRODUCTION

In this Decision we review an Atomic Safety and Licensing Board Memorandum and Order, LBP-98-27, 48 NRC 271 (1998), that denied a petition for leave to intervene and request for hearing filed by Edwin D. Dienethal. Mr. Dienethal challenges particular license amendments issued to the Commonwealth Edison Company (''ComEd'' or ''Licensee''). The Board found that he lacks standing to challenge the license amendments. Pursuant to 10 C.F.R. § 2.714a, Mr. Dienethal has appealed the Board's ruling. The Licensee and the NRC Staff support the Board's decision. We affirm the decision.[1]

[1] Mr. Dienethal not only has challenged LBP-98-27 on appeal to the Commission, but also recently filed a petition for review (No. 99-1001) in the United States Court of Appeals for the District of Columbia Circuit challenging the same Board order. But, as we recently indicated in identical circumstances, simultaneous appeals to the Commission and to the court of appeals are impermissible. *See Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 336 n.1 (1998). Mr. Dienethal apparently misunderstands our rules. ''Although petitions seeking discretionary Commission review are 'deemed denied' if not acted on in 30 days (10 C.F.R. § 2.786(c)), no comparable provision governs appeals as of right, such as [Mr. Dienethal's] (*see* 10 C.F.R. § 2.714a). In [appeals as of right], the final agency action is a Commission decision [resolving] the appeal.'' *Calvert Cliffs,* 48 NRC at 336 n.1. As Mr. Dienethal's appeal has been neither ''deemed denied'' nor withdrawn, we proceed to decide it.

II. BACKGROUND

This proceeding concerns a license amendment application filed by the Commonwealth Edison Company for the Zion Nuclear Power Station, Units 1 and 2. The license amendments are intended to facilitate and reflect the plant's now shutdown and defueled condition. The NRC Staff issued the amendments on July 24, 1998.

Previous license amendments issued by the NRC in December of 1997 — when neither Zion unit was in operation — had replaced the Zion Station's Custom Technical Specifications (CTS) with a set of Improved Technical Specifications (ITS), which were to be implemented prior to resumption of operations at the Mode 4 level (hot shutdown). However, the very next month, ComEd decided to cease operations at Zion Station permanently. Consequently, both units are now shut down and nuclear fuel has been removed from both reactors. Noting ''no benefit to expending the resources that would be needed to complete the ITS implementation process,''[2] ComEd has continued to conduct all plant activities in accordance with the CTS, and, on March 30, 1998, filed the license amendment application at issue in this proceeding.

Among the changes made by the license amendments is that of formally restoring the CTS as the specifications governing Zion Station. The amendments also reinstate five license conditions that are associated with the CTS and thus were deleted at the time of the ITS amendment. Besides restoring the CTS and associated license conditions, the license amendments also make several changes to the CTS to take account of the station's now permanently shutdown and defueled units. These changes (1) alter particular verbiage implying the units are operational; (2) reduce required shift staffing numbers and on-shift crew composition because of the units' nonoperational status; (3) permit Certified Fuel Handlers — in lieu of licensed operators — to satisfy shift staffing requirements; and (4) change particular management titles and responsibilities to reflect a permanently shutdown organization.

On June 4, 1998, Mr. Dienethal filed his petition for leave to intervene in this license amendment proceeding. Directed by the Board to ''address any shortcomings in his petition,'' Mr. Dienethal on July 31, 1998, filed an Amended Petition to Intervene, including nineteen proposed contentions. His Amended Petition outlines various activities that bring him within Plant Zion's general vicinity, and alleges that the license amendments will increase the potential of an accident or other incident that could cause radiological injury to him and his family. In LBP-98-27, the Licensing Board ruled that Mr. Dienethal lacks standing to intervene. The Board concluded that Mr. Dienethal's

[2] Letter to NRC Document Control Desk, from John C. Brons, Site Vice Pres., Zion Nuclear Station (Mar. 30, 1998), Attach. A at 4.

''unsubstantiated allegations simply failed[ed] to demonstrate a plausible nexus between the challenged license amendments and Mr. Dienethal's asserted harm.'' LBP-98-27, 48 NRC at 277.

III. ANALYSIS

Under section 189a of the Atomic Energy Act, the Commission must grant a hearing upon the request of any person ''whose interest may be affected by the proceeding.'' 42 U.S.C. § 2239(a). Accordingly, NRC regulations require a petition for intervention to ''set forth with particularity the interest of the petitioner in the proceeding, how that interest may be affected by the results of the proceeding, . . . and the specific aspect or aspects of the subject matter of the proceeding as to which [the] petitioner wishes to intervene.'' 10 C.F.R. § 2.714(a)(2). In evaluating whether a petitioner's asserted interest provides an appropriate basis for intervention, the Commission has long looked for guidance to judicial concepts of standing. *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976). *Accord, Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195 (1998); *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995). Judicial concepts of standing require a petitioner to allege (1) a particularized injury (2) that is fairly traceable to the challenged action and (3) is likely to be redressed by a favorable decision. *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 5-6 (1998); *see Steel Co. v. Citizens for a Better Environment,* 118 S. Ct. 1003, 1016-17 (1998). Accordingly, a petitioner seeking to intervene in a license amendment proceeding must assert an injury-in-fact associated with *the challenged license amendment,* not simply a general objection to the facility. *See Quivira,* 48 NRC at 6; *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329-30 (1989).

On appeal before the Commission, Mr. Dienethal submits that his Amended Petition ''unquestionably set forth facts sufficient'' to link the Zion license amendments with a particularized injury — that of an increased potential for an offsite release of radiation. Brief in Support of Petitioner's Appeal (Nov. 16, 1998) (''Appeal Brief'') at 4. Any such offsite release, Mr. Dienethal claims, could threaten his health, safety, and financial interests because he resides approximately 10 miles from the Zion plant, purchases food from farms located within 10 miles of the plant, drinks water that comes from Lake Michigan (in which Plant Zion dumps wastes), and regularly engages in various activities within the plant's general vicinity. *See generally* Petitioner's Amended Petition

to Intervene and Statement of Contentions (July 31, 1998) (''Amended Petition'') at 6-9.

The Licensing Board in LBP-98-27 acknowledged that Mr. Dienethal conducts activities within the plant's general area. But the Board nevertheless noted that Mr. Dienethal simply had failed to indicate *how* the particular license amendments at issue would increase the risk of an offsite release of radioactive fission products. We agree with the Licensing Board, and follow our usual practice of deferring to its standing determinations. *See, e.g., Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 32 (1998) (collecting cases). On appeal, Mr. Dienethal points to various kinds of potential injury as sufficient for standing: harm from poor management, proximity-based harm from accidents or contamination, and harm from a reduction in radiation protection personnel on duty. None of Mr. Dienethal's claims of injury is persuasive in the context of this case.

A. Management

Virtually all of the claims Mr. Dienethal advances in this proceeding either reflect or directly rely upon allegations of deliberate violations of regulatory or plant requirements by plant supervisors and managers. *See* Appeal Brief at 2, 4-6, 8-12; Amended Petition at 9, 12-17, 19. The heart of Mr. Dienethal's grievance appears to be the ''character'' and ''integrity'' of Plant Zion's management — matters of considerable significance, to be sure, but matters not at issue in this license amendment proceeding. It is not at all clear how the relief sought by Mr. Dienethal — denial of the current license amendments — would either rectify or reduce his risk of harm from corrupt or ineffective management. Management integrity, in other words, is not linked to the agency action Mr. Dienethal challenges, and he therefore lacks standing to intervene.

Mr. Dienethal apparently believes that any license amendment proceeding can be turned into an inquiry into the Applicant's management character by the simple device of making allegations about ''unfitness or lack of character.'' *See* Amended Petition at 9. On the contrary, the Commission has stressed that licensing actions as a rule do not ''throw[] open an opportunity to engage in a free-ranging inquiry into the 'character' of the licensee.'' *Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 32 (1993). For management ''character'' to be an appropriate issue for adjudication in a licensing proceeding, ''[t]here must be some direct and obvious relationship between the character issues and the licensing action in dispute.'' *Id.* The *Vogtle* proceeding Mr. Dienethal cites, for instance, involved a ''total transfer'' — to a new organization — of the ''operational control and responsibility over a nuclear power plant licensed to operate at full power.'' *Id.* at 31-32. The Commission

explicitly distinguished the proceeding in *Vogtle* from more common licensing actions. *Id.* at 32.

The present proceeding concerns specific technical, administrative, and crew composition changes to Plant Zion's technical specifications. It does not, contrary to Mr. Dienethal's view, ''concern[] the failure of Applicant to properly manage Plant Zion.'' Amended Petition at 3. The license amendments at issue here have no bearing on Plant Zion's overall management structure, personnel, or culture. Denial of the license amendments accordingly would have no impact on the plant's management ''character'' or ''integrity.'' Although the license amendments do change some particular job titles and responsibilities to reflect the facility's reduced activities and significantly lower risk of offsite radiological consequences now that it no longer is operational, Mr. Dienethal raises no credible claim of harm from these particular changes. At bottom, his is a broad-brushed claim of wholesale corruption at Plant Zion — corruption allegedly condoned and thus perpetuated by ''the highest levels'' and indeed ''every level of management.'' *See, e.g.,* Appeal Brief at 9-10. In short, as the Board held, Mr. Dienethal's numerous allegations about Plant Zion's managers and supervisors are beyond the scope of this proceeding. His concerns about deliberate violations of regulations may be raised in a petition under 10 C.F.R. § 2.206. If found to have merit, his concerns could then be addressed by appropriate enforcement action.

None of Mr. Dienethal's management-driven concerns explains how any of the specific license amendments at issue here might cause him radiological injury. In a characteristic statement, Mr. Dienethal sets forth the following general claim:

> The Applicant engages in willful and knowing violations of mandatory safety related procedures and the harassment and intimidation of employee's [sic] who seek to raise safety concerns. Due to these practices, Applicant cannot insure that any of the work to be performed under any of the proposed amendments to the license shall be performed in a manner consistent with the controlling procedures, regulations, laws and/or requirements of public safety.

Amended Petition at 19. To accept Mr. Dienethal's claim as a basis for standing, however, would mean that a petitioner could insert management integrity issues into all license amendment proceedings, no matter the nature of the amendment, simply by (1) alleging that management character is bad; and (2) then claiming that no license amendments should be granted because of the alleged bad character.

Indeed, Mr. Dienethal argues as much:

> The applicant cannot be granted *any* license amendments which would directly or indirectly permit it to conduct any future work at Plant Zion or participate in any manner in the

> decommissioning process. The Applicant lacks the character, competence, and integrity to engage in *any* licensed activities at Plant Zion, including those licensed activities directly or indirectly authorized under the pending amendments to the license.
>
> *No changes* should be made to Applicant's license until the harassment and intimidation of employees is halted.

Amended Petition at 19 (emphasis added); *id.* at 39 (emphasis added); *see also* Appeal Brief at 7. Mr. Dienethal's position is much too open-ended. The NRC has no legal duty, and also lacks the resources and expertise, to assess management integrity and character every time the agency considers a reactor license amendment request (which annually number nearly a thousand).

In sum, Mr. Dienethal has not explained how denial of the contested license amendments would enhance his personal safety or even remedy the management deficiencies that concern him. Rejecting the license amendments at issue here, which simply conform existing requirements to Zion's new shutdown status in which no operational activities remain, would do nothing to cure an ingrained culture of management misconduct at Zion, if it exists, and would do nothing to protect Mr. Dienethal from radiological injury.

B. Proximity-Based Injury

Mr. Dienethal's Amended Petition also relied heavily upon his claimed frequent contacts in the plant's general area. On appeal, he reiterates his general claim. *See* Appeal Brief at 3, 14-15. But in an operating license amendment proceeding, a petitioner cannot base his or her standing simply upon a residence or visits near the plant, unless the proposed action quite ''obvious[ly]'' entails an increased potential for offsite consequences. *See, e.g., St. Lucie,* 30 NRC at 329-30.

Here, given the shutdown and defueled status of the units, the license amendments do not on their face present any ''obvious'' potential of offsite radiological consequences. All of the fuel at Plant Zion is in the spent fuel pool. The significant nuclear activities still ongoing at Plant Zion are the storage and handling of spent fuel bundles in the pool. Because neither reactor will ever operate again, the scope of activities at the plant has been greatly reduced. *See* Safety Evaluation by the Office of Nuclear Reactor Regulation (July 24, 1998) (''Safety Evaluation'') at 2-3, attached to Board Notification 98-01 (Aug. 4, 1998). Accordingly, ''the spectrum of accidents and events that remain credible is significantly reduced.'' 63 Fed. Reg. 25,101, 25,105 (May 6, 1998). The challenged license amendments, including reductions in crew shift staffing, are based largely on the nonoperational status and concomitant reduced scope of work at the facility. *See* Safety Evaluation at 1-3. The Licensing Board thus

reasonably concluded that ''the type of accident that credibly could occur . . . from these license amendments is anything but self-evident.'' 48 NRC at 277.

As the Licensing Board noted, it was incumbent upon Mr. Dienethal to provide in his Amended Petition some ''plausible chain of causation,'' some scenario suggesting how these particular license amendments would result in a distinct new harm or threat to him. Mr. Dienethal, however, based his claims of standing only upon conclusory allegations about potential radiological harm from the facility. His Amended Petition contains a five-page section specifically focusing upon the standing question. *See generally* Amended Petition at 5-10. In it, Mr. Dienethal alleges that

> if Plant Zion functions under the proposed amendments, the risk of potential injuries . . . will be increased as a result of *inter alia*:
>
> (1) LOCA (Loss of Coolant Accident),
>
> (2) radiological concerns,
>
> (3) unsafe levels of radiation for the employees at the plant and the general public,
>
> (4) undetectable radiation contamination by employees,
>
> (5) contamination of the local community and the environment,
>
> (6) increase[d] risk of accident at Plant Zion, and
>
> (7) contamination of Lake Michigan.

Id. at 8 (citation to affidavit omitted). He goes on to claim that ''if Commonwealth Edison Co.'s request for amendment is approved, other imminent risks would result due to the increased potential of failing to detect radiation in adequate time and the increase[d] risk of the plant functioning unsafely and outside NRC regulations.'' *Id.* Having cited the above-listed general concerns, the Amended Petition then simply concludes that ''[t]hese allegations are more than sufficient to satisfy the injury in fact and other standing requirements necessary to grant Petitioner leave to intervene.'' *Id.* We must disagree.

Mr. Dienethal fails to indicate *how* these various harms might result from the license amendments, particularly given not only the shutdown status of the facility, but also the continued applicability of the NRC's safety-oriented regulations governing defueled nuclear plants. As the Board stated, ''[n]owhere does the Petitioner set forth [a] plausible or credible causal chain for any such accident or explain how the risk of such an accident is increased by the Applicant's proposed amendments.'' 48 NRC at 277. A petitioner cannot seek to obtain standing in a license amendment proceeding simply by enumerating the proposed license changes and alleging without substantiation that the changes will lead to offsite radiological consequences.

Indeed, some of Mr. Dienethal's allegations quite patently have no relation to the license amendments at issue. For example, his first-listed concern is over an increased risk of a Loss of Coolant Accident (LOCA). Yet, as the Licensing Board noted, such accidents could only conceivably occur in operating reactors. *Id.*; *see also* 10 C.F.R. § 50.47(c) (description of LOCAs). Mr. Dienethal's Amended Petition is rife with unsubstantiated claims, including the unsupported (and implausible) claim that now that the plant no longer is operational, ''[t]he hazards to the public health and safety . . . are as severe, and in many cases more severe, than those that existed during the full operational phase of the plant.'' Amended Petition at 4. He needs more than conclusory statements like these to justify triggering an adjudicatory hearing to consider the Zion license amendments.

C. Radiation Protection Personnel

Mr. Dienethal's appeal focuses in particular on one of his nineteen contentions, Contention 10, which ''directly challenged Applicant's request to eliminate the continuous onsite presence of a 'Radiation Protection Person.' '' Appeal Brief at 3-4. Citing at length the statements made in Contention 10 (which essentially alleges that a Radiation Protection Person (RPP) must be on site at all times), Mr. Dienethal declares that he ''placed in the record'' sufficient facts to indicate how ''the elimination of the 'continuous onshift presence of a RPP' could result in the improper release of radioactive materials.'' *Id.* at 5. Thus, Mr. Dienethal concludes, ''[a]lthough the ASLB did not address this issue,'' his Amended Petition ''unquestionably set forth facts sufficient'' to link ''this requested amendment and the potential offsite release of radioactive fission products.'' *Id.* at 4.

For two separate reasons, Mr. Dienethal's radiation protection argument fails as a justification for his standing. First, the argument appears to be newly minted for appeal. It was never properly called to the Licensing Board's attention, which, understandably enough, did not rule on it. Second, Mr. Dienethal's claims about radiation protection staffing deficiencies do not suggest any scenario of potential harm more plausible than his general proximity claims.

1. New Argument on Appeal

Before the Board, Mr. Dienethal's five-page discussion labeled ''Standing'' nowhere even mentioned the RPP or a reduction in radiation protection staffing. At most, his Board pleading can be said to allude generally to ''radiological concerns'' or ''unsafe levels of radiation.'' But he never suggested how these

alleged harms might result from the amendments or from a change in radiation protection staffing.

Mr. Dienethal says that an examination of his Contention 10 would show his concern about RPP deficiencies. But the ''standing'' discussion in his Amended Petition did not cross-reference or even mention Contention 10. And Contention 10 was just one of some nineteen contentions, which spanned diverse topics, including Fuel Handlers, control room personnel, the fuel assembly tubing, decommissioning, loss-of-coolant accidents, and complaints about the Applicant's management integrity. There was no reason for the Board, facing a decision on standing, to look beyond Mr. Dienethal's expressly denominated ''standing'' arguments to find support for Mr. Dienethal's position. It is by no means clear from Mr. Dienethal's discussion of ''standing,'' and from the set of submitted contentions and attached items, which included affidavits and lengthy Department of Labor hearing transcripts, that he was basing his standing claim on the elimination of a round-the-clock Radiation Protection Person. (The voluminous transcripts from DOL proceedings, for instance, deal only with alleged deliberate violations by particular supervisors in the radiation protection department and at no point address crew staffing.)

We do not expect our adjudicatory boards, unaided by the parties, to sift through the parties' pleadings to uncover and resolve arguments not advanced by litigants themselves. The burden of setting forth a clear and coherent argument for standing and intervention is on the petitioner. ''It should not be necessary to speculate about what a pleading is supposed to mean.'' *Kansas Gas and Electric Co.* (Wolf Creek Generating Station, Unit 1), ALAB-279, 1 NRC 559, 576 (1975). *Cf. Curators of the University of Missouri,* CLI-95-1, 41 NRC 71, 132 n.81 (1995). Mr. Dienethal therefore bears the responsibility for any Licensing Board misunderstanding of his Amended Petition. *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 143 n.17 (1993). He cannot revive his case on appeal on the basis of a new argument that the Board had no fair opportunity to consider. *See Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-97-13, 46 NRC 195, 221 (1997). We note, parenthetically, that Mr. Dienethal is represented by counsel experienced in NRC proceedings, a factor adding to his obligation to provide clear pleadings.

2. Plausibility of Harm

Even were we to disregard Mr. Dienethal's failure to raise his RPP-based standing argument before the Board, his argument would not suffice for standing. His appellate brief suggests no plausible scenario whereby elimination of a continuous onshift RPP might lead to offsite radiological harm.

At bottom, Mr. Dienethal does not address why a shutdown and defueled facility must continue to have an around-the-clock RPP. The NRC Staff found the

license amendments to be ''consistent with the quantity, complexity, and hazard level of the activities required for the storage and handling of nuclear fuel,'' the remaining major nuclear activities at the site. 63 Fed. Reg. 25,101, 25,106 (May 6, 1998). Nowhere does Mr. Dienethal provide any specific grounds to question this view. The Staff's findings, we note, are consistent with its treatment of other shutdown nuclear power facilities, where the Staff did not require a continuous onsite RPP.[3]

Of further note, the Zion Station procedures will still require an onsite RPP during any handling of irradiated fuel.[4] This requirement is consistent with the Proposed Standard Technical Specifications for Permanently Defueled Westinghouse Plants, which only call for an RPP to ''be on site during fuel handling operations or movement of loads over storage racks containing fuel.''[5] Mr. Dienethal, however, neither addresses nor otherwise throws into question the sufficiency of the ongoing Zion Station radiation protection procedures.

In addition, the mere fact that an RPP may not be on site does not mean that no radiation protection measures are being taken. The Commission's radiation protection requirements obligate the Licensee to maintain an approved radiation protection program that is ''commensurate with the scope and extent of licensed activities.'' 10 C.F.R. § 20.1101(a). Such a program must satisfy regulatory requirements under Part 20, which include restrictions on the offsite release of radioactive materials (10 C.F.R. §§ 20.1101, 20.1301); mandatory surveys of both unrestricted and controlled areas to demonstrate compliance with radiation limits (10 C.F.R. §§ 20.1302, 20.1501); monitoring of personnel to ensure compliance with established occupational dose limits (10 C.F.R. §§ 20.1501, 20.1502); controlled access to high radiation areas (10 C.F.R. §§ 20.1601, 20.1602); detailed records of the radiation protection program, to include information on occupational doses and radiation survey results (10 C.F.R. §§ 20.2102, 20.2103); and numerous requirements for waste disposal (10 C.F.R. § 20.2001, *et seq.*).

In light of the reduced number of radiological activities at Plant Zion, and of the radiological safety requirements still applicable to the plant — including the requirement that an RPP always be on site during the handling of irradiated fuel — Mr. Dienethal's sweeping allegations simply do not lend credible support to his claim that ''*any* reduction in radiation protection staffing does create a

[3] *See, e.g.,* Operating License DPR-36 for the Maine Yankee Atomic Power Station, Docket No. 50-309 (Amendment 160) (Nov. 26, 1997); Operating License DPR-61 for the Haddam Neck Plant, Docket No. 50-213 (Amendment 192) (Mar. 27, 1998).

[4] *See* Letter from John C. Brons, Site Vice President, Zion Nuclear Station, to Document Control Desk, NRC (Mar. 30, 1998), Re: License Amendment Application, Attachment E.

[5] NUREG-1625, ''Proposed Standard Technical Specifications for Permanently Defueled Westinghouse Plants'' (Draft Report for Comment) (March 1998) at 5.0-3; *see also id.* at 5.04-4 (Table 5.2.2-1, titled ''Minimum Shift Crew Composition,'' which does not require an onsite RPP).

cognizable potential harm to the public, including but not limited to an increased risk in the release of radiation off-site.'' Appeal Brief at 6 (emphasis added).

Perhaps the closest Mr. Dienethal comes to even attempting an explanation of *how* the license amendment changes might lead to radiological injury is when in one of his contentions he alleges that ''the combination of staffing changes'' — such as the elimination of the continuous onsite RPP coverage, the use of certified fuel handlers, and the elimination of the site Vice President — ''would result in the elimination of experienced professionals onsite which could reasonably result in a LOCA due to human error.'' Amended Petition at 40. As we have already noted, however, LOCAs are not possible at a permanently defueled facility. In this and all of Mr. Dienethal's arguments, he simply never suggests why the license amendment changes are not commensurate with the plant's now shutdown and defueled status and therefore increase offsite risk. We agree, therefore, with the NRC Staff and the Licensee that Mr. Dienethal has failed to provide any plausible scenario linking any of the license amendments, including the RPP change, with his alleged radiological harm.

There is yet another reason why Mr. Dienethal's claims about the onsite RPP are an unpersuasive basis for standing: it seems unlikely that Mr. Dienethal would obtain any effective redress of his grievances even if he were to prevail at a hearing. After all, Mr. Dienethal's basic and oft-repeated claim is that radiation protection supervisors *directed* others to *violate* technical specifications, Radiation Work Permits, and other procedures, and that the radiation protection program is ''riddled with intentional violations by supervisors.'' *See* Appeal Brief at 4-5, 6, 9-12, 15; Amended Petition at 15-17, 29; DOL Testimony at 228-30, 235. The mere presence of one round-the-clock radiation protection person would add little or nothing to Mr. Dienethal's personal safety if, as he insists, Zion's management routinely directs a scheme of noncompliance with safety-related procedures. Indeed, an RPP presumably *was* on site during the historical incidents Mr. Dienethal alleges, since the time period he most frequently references — 1995-96 — was prior to the Zion facility being shut down and defueled. According to Mr. Dienethal, the alleged corruption bedeviling the radiation protection department has resulted in a ''complete breakdown of QA [quality assurance] within that department,'' and, unless this ''root cause'' of violations is ''investigated, identified, and corrected,'' ''numerous health and safety violations'' will occur. Appeal Brief at 5, 12. Denial of the current license amendments, the only remedy Mr. Dienethal seeks in this proceeding, would do nothing to improve a situation of that kind.

As we noted above, the NRC maintains a public petitioning process precisely to consider enforcement-type grievances like Mr. Dienethal's, 10 C.F.R. § 2.206, and it is to that process, not to a license amendment adjudication, that he must resort if he wishes to pursue his claims further.

We add one final point. Having focused his appeal largely upon the change involving the radiation protection person (Contention 10), Mr. Dienethal then concludes his appeal with the catch-all statement that ''[t]he Commission should find that Petitioner set forth sufficient facts to justify standing related to the proposed amendments identified in contentions 1, 2, 3, 5, 7, 8, 9, 10, 12, 13, 17, and 18.'' Appeal Brief at 17. Just as Mr. Dienethal raised for the first time on appeal a standing argument based upon Contention 10, he now apparently attempts to interject more new claims on appeal based upon these other contentions. For the reasons given above, raising new arguments on appeal to reverse a Board decision is unfair to the Board and the parties, and therefore impermissible in NRC practice. *See* p. 194, *supra.*

Not only did Mr. Dienethal not develop his new standing claims before the Licensing Board, he also fails to address them in any meaningful fashion on appeal. We cannot readily discern from the license amendment application, for example, what change in ''radiation monitors'' (Contention 17) these amendments make, if any; we note that the Licensee stated that the amendments ''do not affect radiation monitoring systems at Zion.'' ComEd Reply to Amended Petition (Aug. 18, 1998) at 9. We also see a contradiction in Mr. Dienethal's complaint that harm will result from ''any reduction [in] management oversight'' (*see* Contention 5), when it is his overarching claim that the plant's *management* — including ''site management,'' the ''highest levels of management,'' and indeed ''every level of management'' — is responsible for the alleged deficiencies and safety risks at Zion. *See* Appeal Brief at 9-10. It is these very supervisors and managers who allegedly give ''instructions that safety-related procedures be intentionally violated,'' ''conduct[] illegal field modifications'' of Problem Identification Form (PIF) requirements, and harass employees who follow procedures. *See id.* at 8-10. It is odd, to say the least, for Mr. Dienethal to claim injury from a reduction in their presence.

In short, we are not inclined to parse these numerous contentions, which Mr. Dienethal never properly addressed before the Licensing Board, and now makes no pretense of explaining on appeal, to find a basis for standing.

III. CONCLUSION AND ORDER

For the reasons stated in this Decision, the Commission hereby *affirms* LBP-98-27.

It is so ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 2d day of March 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 50-482-LT**

KANSAS GAS AND ELECTRIC COMPANY, et al.
(Wolf Creek Generating Station, Unit 1) **March 2, 1999**

The Commission requests comments on its proposal to direct its Staff no longer to conduct ''significant changes'' antitrust reviews in license transfer cases, including the current proceeding.

MEMORANDUM AND ORDER

Before the Commission is a petition to intervene and request for hearing filed by the Kansas Electric Power Cooperative (KEPCo). Pursuant to our recently promulgated Subpart M, 10 C.F.R. § 2.1300 *et seq.,* KEPCo challenges a proposed license transfer affecting the Wolf Creek Generating Station, a nuclear power reactor in which KEPCo owns a 6% interest. The license transfer would transfer the 47% ownership interests of the Kansas Gas and Electric Company (KGE) and the Kansas City Power and Light Company (KCPL) to a new company, Westar Energy. KEPCo's petition claims that the license transfer would have ''serious adverse and anticompetitive effects'' (Petition at 5), would result in ''significant changes'' in the competitive market (*id.* at 15-17), and therefore warrants an antitrust review under section 105c of the Atomic Energy Act, 42 U.S.C. § 2135(c).

The NRC Staff historically has performed a ''significant changes'' review in considering the antitrust aspects of certain kinds of license transfers. However, the Commission intends to consider in this case whether to move away from the prior practice and to direct the NRC Staff no longer to conduct significant changes reviews in license transfer cases, including the current case. The Commission expects to consider a number of factors, including its own resources and expertise, and its statutory mandate. The governing legislation, section 105c of the AEA, and its legislative history, do not appear to call for fresh Commission antitrust reviews after the initial construction permit and operating license stage. *See American Public Power Association v. NRC,* 990 F.2d 1309, 1311-13 (D.C. Cir. 1993). *See also* 56 Fed. Reg. 64,943, 64,969-71 (Dec. 13, 1991). Moreover, with the passage of the Energy Policy Act of 1992, a sister federal agency, the Federal Energy Regulatory Commission (FERC), now has broad powers to order relief remedying anticompetitive situations. *See* 16 U.S.C. § 824j-k.

Accordingly, prior to further considering KEPCo's request for a hearing on antitrust issues, we direct KEPCo, and the license transfer applicants (KGE and KCPL), to file briefs within 14 days of this Order. The briefs shall address one question only: whether as a matter of law or policy the Commission may and should eliminate all antitrust reviews in connection with license transfers and therefore terminate this adjudicatory proceeding forthwith.

The briefs shall be provided to all other parties (by facsimile, e-mail, or hand-delivery) on the filing date, and shall not exceed thirty pages per side (i.e., a total of thirty pages for KEPCo and a total of thirty pages for KGE and KCPL, combined). Each party may file reply briefs, not to exceed ten pages per side, within 21 days of the date of this Order. No other pleadings in response to this Order, or as authorized by Subpart M, shall be filed pending further order of the Commission.[1] The NRC Staff shall not be a party to this proceeding.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 2d day of March 1999.

[1] The Commission will accept *amicus curiae* briefs by any interested person or entity, so long as the brief is filed by March 31, 1999. No *amicus* brief shall exceed 20 pages. We are posting this Order on the NRC's Web site, publishing it in the *Federal Register,* and also sending copies to the United States Department of Justice, the Federal Energy Regulatory Commission, the Nuclear Energy Institute, the American Public Power Association, and the National Rural Electric Cooperative Association.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 50-443**

NORTH ATLANTIC ENERGY SERVICE CORPORATION, et al.
(Seabrook Station, Unit 1) **March 5, 1999**

The Commission denies one Petitioner's untimely intervention petition, grants in part a second Petitioner's timely intervention petition and hearing request, limits the scope of the resulting proceeding, establishes a filing schedule, and imposes other procedural requirements.

RULES OF PRACTICE: STANDING; CONTENTIONS

To intervene as of right in a Commission licensing proceeding, a petitioner must demonstrate that its ''interest may be affected by the proceeding,'' or in common parlance, it must demonstrate ''standing.'' *See* AEA § 189a, 42 U.S.C. § 2239(a). The Commission's rules require further that a petition for intervention raise at least one admissible contention or issue. The standards for meeting these two requirements in license transfer cases come both from our Subpart M procedural regulations and from judicial cases on standing (to which we look for guidance). The Commission's requirements for standing and for admissible issues overlap somewhat.

RULES OF PRACTICE: STANDING

To show standing, a petitioner must (1) identify an interest in the proceeding by (a) alleging a concrete and particularized injury (actual or threatened) that (b) is fairly traceable to, and may be affected by, the challenged action (the grant of an application), and (c) is likely to be redressed by a favorable decision, and (d) lies arguably within the ''zone of interests'' protected by the governing statute(s); (2) specify the facts pertaining to that interest.

RULES OF PRACTICE: CONTENTIONS

To show admissible issues, a petitioner must (1) set forth the issues (factual and/or legal) that petitioner seeks to raise, (2) demonstrate that those issues fall within the scope of the proceeding, (3) demonstrate that those issues are relevant and material to the findings necessary to a grant of the license transfer application, (4) show that a genuine dispute exists with the applicant regarding the issues, (5) provide a concise statement of the alleged facts or expert opinions supporting petitioner's position on such issues, together with references to the sources and documents on which petitioner intends to rely. *See* 10 C.F.R. § 2.1308. *See generally Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 194-96 (1998) (standing); *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 348-49 (1998) (admissible contentions).

RULES OF PRACTICE: STANDING

LICENSE TRANSFER PROCEEDING

A Petitioner who is a co-licensee satisfies the standing test when it advances a plausible claim of injury, i.e., the potential that NRC approval of the license transfer would put in place a new and financially incapable co-licensee, thereby increasing the Petitioner's risk of radiological harm to its property and its risk of being forced to assume a greater-than-expected share of the nuclear facility's operating and decommissioning costs. Indeed, it is hard to conceive of an entity more entitled to claim standing in a license transfer case than a co-licensee whose costs may rise, and whose property may be put at radiological risk, as a result of an ill-funded license transfer. This kind of situation justifies standing based on ''real-world consequences that conceivably could harm petitioners and entitle them to a hearing.'' *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 205 (1998).

RULES OF PRACTICE: STANDING

Petitioner's allegations regarding its increased risk, supported by two detailed affidavits and other evidentiary exhibits, are sufficiently concrete and particularized to pass muster for standing.

RULES OF PRACTICE: STANDING

The threatened injury is fairly traceable to the challenged action (here, the grant of the license transfer application) because the alleged increase in risk associated with the transferee taking over the transferor's interest could not occur without Commission approval of the application. Similarly, the threatened injury can be redressed by a favorable decision because the Commission's denial of the application would prevent the transfer of interest.

RULES OF PRACTICE: STANDING

As the AEA protects not only human health and safety from radiologically caused injury but also the owners' property interests in their facility (*Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 48 (1994), citing AEA §§ 103b, 161b, 42 U.S.C. §§ 2133(b), 2201(b)), persons or entities who own (or co-own) an NRC-licensed facility plainly have an AEA-protected interest in licensing proceedings involving their facility.

RULES OF PRACTICE: STANDING

Because the Commission itself has stated in a policy statement that, under ''highly unusual situations,'' it might hold co-owners financially liable for the share of such expenses attributable to a defaulting co-owner (*see* ''Final Policy Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry,'' 62 Fed. Reg. 44,071, 44,074, 44,077 (Aug. 19, 1997)), and because the State of New Hampshire (in which the subject nuclear facility is located) has apparently imposed similar joint and several liability on all of the facility's co-owners (*see* N.H. Senate Bill 140, signed by the Governor on June 11, 1998), Petitioner presents an admissible issue when it asserts that the transfer would impose upon it a heightened risk of liability for operating and decommissioning-fund expenses.

LICENSE TRANSFER PROCEEDINGS

DECOMMISSIONING FUNDING

FINANCIAL ASSURANCE

Sometimes, in response to site-specific circumstances, utilities prudently set aside more funds than the NRC requires. The NRC focuses its requirements on the amount of money required to reduce residual radioactivity to levels that permit release of the property (*see* 10 C.F.R. § 50.2). However, release can also involve activities other than those falling within the NRC's definition of ''decommissioning'' — activities such as removal and disposal of spent fuel or of nonradioactive structures and materials beyond what is necessary to reduce residual radioactivity to required levels (*see* 10 C.F.R. § 70.75(c) n.1). The costs of these activities can amount to a large fraction of the NRC's required funding figure. Moreover, decommissioning funding is also subject to regulation by agencies having jurisdiction over rates — agencies such as the Federal Energy Regulatory Commission and state Public Utilities Commissions, and these agencies can set funding requirements that are in addition to funding requirements set by the NRC (*see* 10 C.F.R. § 50.75(a)).

RULES OF PRACTICE: COLLATERAL ATTACK

REGULATIONS: COLLATERAL ATTACK

COLLATERAL ATTACK

A petitioner in an individual adjudication cannot challenge generic decisions made by the Commission in rulemakings. *See, e.g., Massachusetts v. NRC,* 924 F.2d 311, 330 (D.C. Cir. 1991), *cert. denied,* 502 U.S. 899 (1991). *Accord, Curators of the University of Missouri,* CLI-95-1, 41 NRC 71, 170-71 (1995); *American Nuclear Corp.* (Revision of Orders to Modify Source Materials Licenses), CLI-86-23, 24 NRC 704, 708-10 (1986); *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 21 n.33 (1974); *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 NRC 2069, 2073 (1982). For example, no one would be free to argue in a license transfer case that site-specific conditions at a particular nuclear power reactor render unusable the generic projected costs calculated under our rule's cost formula. In our decommissioning rulemakings, we deliberately decided to avoid a requirement for site-specific cost estimates to show financial assurance. *See, e.g.,* Final Rule, ''General Requirements for Decommissioning Nuclear Facilities,'' 53 Fed. Reg. 24,018, 24,030-31 (June 27, 1988) (discussing 1988 rule). Nor could anyone argue that prepayment is not an acceptable means of providing financial assurance for decommissioning. Our

rules expressly say that it is. Subpart M allows participants to ''petition that a Commission rule or regulation be waived'' in particular cases upon a showing that because of ''special circumstances . . . application of a rule or regulation would not serve the purpose for which it was adopted.'' *See* 10 C.F.R. § 2.1329.

RULES OF PRACTICE: SCOPE AND TYPE OF PROCEEDING; CONTENTIONS (SCOPE)

LICENSE TRANSFER PROCEEDINGS

FINANCIAL QUALIFICATIONS

FINANCIAL ASSURANCE

DECOMMISSIONING FUNDING

There is substantial doubt whether an argument based on a theoretical early shutdown of a facility is within the scope of a license transfer proceeding. There is nothing about the transfer to a new owner that changes the expected life span or cost of decommissioning a facility. As a general matter, license transfer proceedings are not the appropriate place for considering changes to requirements applicable to the facility and all its owners, as opposed to requirements directed at the proposed transferee. Indeed, if NEP's premise were correct, it would be more appropriate to consider generically whether to impose a change in the decommissioning funding process for all owners of the plant. The financial nature of these issues does not necessarily make them relevant to the financial questions presented in this particular transfer proceeding. As with technical requirements for operation of the plant, the transferee takes the plant as it exists, including the projected costs and associated assumptions used to establish the amount of decommissioning funding required.

FINANCIAL ASSURANCE

DECOMMISSIONING FUNDING

LICENSE TRANSFER PROCEEDINGS

The transferor's promise to prepay considerably more than the minimum amount currently prescribed by the NRC financial assurance formula leaves Petitioner without any plausible decommissioning funding grievance, and (particularly in view of the transferor's minuscule share of the plant) gives the Commission no reason to think that the public health and safety might in any respect be left unprotected. Prepayment is in fact the strongest and most reliable of the various decommissioning funding devices set out in section 50.75(e)(1). The

Commission concludes here, as a matter of law, that the transferor's prepayment provides sufficient assurance for its share of decommissioning costs and that there exists no genuine issue of material fact or law necessitating a hearing on decommissioning funding assurance. *See* 10 C.F.R. § 2.1306(b)(2)(iv).

FINANCIAL QUALIFICATIONS

LICENSE TRANSFER PROCEEDINGS

DECOMMISSIONING FUNDING

FINANCIAL ASSURANCE

Petitioner's claim that the license transferee will lack sufficient financial resources to fulfill its obligations for operating expenses is relevant and material. Indeed, it goes to the very heart of the question whether Applicants' financial qualifications are adequate to pass statutory and regulatory muster. When promulgating Subpart M a few months ago, the Commission expressly recognized that NRC review of license transfer applications ''consists largely of assuring that the ultimately licensed entity has the capability to meet financial qualification and decommissioning funding aspects of NRC regulations.'' *See* 63 Fed. Reg. at 66,724.

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

Our recently issued Subpart M, like its counterparts applicable to other types of Commission proceedings (*e.g.,* 10 C.F.R. § 2.714), does not permit ''the filing of a vague, unparticularized contention,'' unsupported by affidavit, expert, or documentary support. *Calvert Cliffs,* 48 NRC at 349. *See* 10 C.F.R. § 2.1306. Nor does our practice permit ''notice pleading,'' with details to be filled in later. Instead, we require parties to come forward at the outset with sufficiently detailed grievances to allow the adjudicator to conclude that genuine disputes exist justifying a commitment of adjudicatory resources to resolve them. *See Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 n.7 (1996).

FINANCIAL QUALIFICATIONS

LICENSE TRANSFER PROCEEDINGS

''Speculation'' of some sort is unavoidable when the issue at stake concerns predictive judgments about an applicant's future financial capabilities.

RULES OF PRACTICE: COLLATERAL ATTACK

REGULATIONS: COLLATERAL ATTACK

COLLATERAL ATTACK

FINANCIAL QUALIFICATIONS

LICENSE TRANSFER PROCEEDINGS

RULES OF PRACTICE: BURDEN OF PROOF

Section 50.33(f)(2) nowhere declares that the proffering of 5-year projections will, *per se,* prove adequate in any and all cases. To the contrary, the rule contains a ''safety-valve'' provision explicitly reserving the possibility that, in particular circumstances, and on a case-by-case basis, additional protections may be necessary. *See* 10 C.F.R. § 50.33(f)(4) (to ensure adequate funds for safe operation, NRC may require ''more detailed or additional information'' if appropriate). Petitioner is entitled to argue that *this case* calls for additional financial qualification measures beyond 5-year projections and that the Applicants therefore have not met their burden under section 50.33(f)(2) to satisfy Commission financial qualification requirements. The burden of proof under section 50.33(f)(2) is to ''demonstrate [that] the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license.'' In addition, section 50.33(f)(2) imposes certain filing requirements on the applicant — that it submit operating cost estimates for the next 5 years and indicate the source of funds to cover these costs. Transferee's ''collateral attack'' argument conflates these two portions of section 50.33(f)(2) by assuming that the Applicants have met their burden of proof merely by complying with the filing requirements. Although satisfaction of those requirements is *necessary* to the grant of a license transfer application, such satisfaction cannot be deemed always *sufficient* to satisfy the Applicants' burden of proof, else the NRC be irrevocably bound by Applicants' own estimates and left without authority to look behind them. Always in question under section 50.33(f)(2) is whether the Applicants' cost and revenue estimates are reasonable. The adequacy of those estimates is challengeable (as here) by a petition for intervention under 10 C.F.R. § 2.1306 or by an NRC request for more detailed information. *See* 10 C.F.R. § 50.33(f)(4) (the Commission ''may request an . . . entity . . . to submit additional or more detailed information respecting its financial arrangements and status of funds if [we] consider[] this information appropriate''). *Accord* 10 C.F.R. Part 50, Appendix C, § IV.

RULES OF PRACTICE: COLLATERAL ATTACK

REGULATIONS: COLLATERAL ATTACK

COLLATERAL ATTACK

FINANCIAL QUALIFICATIONS

LICENSE TRANSFER PROCEEDINGS

If Petitioner claimed that 5-year cost-and-revenue projections are *per se* inadequate to meet financial qualification requirements, such a claim would be precluded as a collateral attack on NRC rules. Rather, Petitioner simply contends that, as NRC rules themselves contemplate, the circumstances of this particular transfer call for more detailed or extensive financial protection. The Commission thus concludes that Petitioner is not launching an impermissible collateral attack on section 50.33(f)(2) but instead raises an admissible issue for a hearing under Subpart M.

FINANCIAL QUALIFICATIONS

LICENSE TRANSFER PROCEEDINGS

RULES OF PRACTICE: BURDEN OF PROOF

Petitioner cannot insist that Applicants provide the impossible: absolutely certain predictions of future economic conditions. To be sure, safe operation of a nuclear plant requires adequate funding, but the potential safety impacts of a shortfall in funding are not so direct or immediate as the safety impacts of significant technical deficiencies. Generally speaking, then, the level of assurance the Commission finds it reasonable to require regarding a licensee's ability to meet financial obligations is less than the extremely high assurance the Commission requires regarding the safety of reactor design, construction, and operation. The Commission will accept financial assurances based on plausible assumptions and forecasts, even though the possibility is not insignificant that things will turn out less favorably than expected. Thus, the mere casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat a finding of reasonable assurance. At the same time, though, funding plans that rely on assumptions seriously at odds with governing realities will not be deemed acceptable simply because their form matches plans described in the regulations. Relying on affidavits and various forms of financial data, Petitioner asserts that the transferee's cost-and-revenue estimates fail to provide the required assurance because they do not reflect a realistic outlook for the transferee itself or for the nuclear power industry in New England. As in other cases (*e.g., Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-

94-10, 40 NRC 43, 51-53 (1994)), the Commission cannot brush aside such economically based safety concerns without giving the Intervenor a chance to substantiate its concerns at a hearing, but the Commission notes that Petitioner's arguments ultimately will prevail only if it can demonstrate relevant uncertainties significantly greater than those that usually cloud business outlooks.

FINANCIAL QUALIFICATIONS

LICENSE TRANSFER PROCEEDINGS

The Commission cannot accede to Petitioner's seeming view that the transferee inherently cannot meet the Commission's financial qualification rules because the transferee's rates are not regulated by a state utilities commission. This view runs counter to the premise underlying the entire restructuring and economic deregulation of the electric utility industry, i.e., that the marketplace will replace cost-of-service ratemaking. In the Commission's view, unregulated electricity rates are not incompatible with maintaining sufficient financial resources to operate a nuclear power reactor.

RULES OF PRACTICE: UNTIMELY INTERVENTION

A Petitioner's failure to read carefully the governing procedural regulations does not constitute good cause for accepting its late-filed petition.

RULES OF PRACTICE: UNTIMELY INTERVENTION

Where a Petitioner has offered an entirely new suggestion for relief, its participation would have the effect of broadening this proceeding.

RULES OF PRACTICE: UNTIMELY INTERVENTION

A Petitioner's interest can adequately be protected or represented by another party where Petitioner's interest as a co-owner of a nuclear facility are, by Petitioner's own description, identical to those of a party that is also a co-owner. In this proceeding, this identity of interests is further reflected in the fact that, with the exception of the new suggestion for relief, Petitioner presents no merits arguments not already proffered by the existing party.

RULES OF PRACTICE: UNTIMELY INTERVENTION

The Commission's hearing tribunals have regularly rejected late-filed petitions submitted without good cause for the lateness and without strong coun-

tervailing reasons that override the lack of good cause. *See, e.g., Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 172-75 (1998) (collecting cases).

RULES OF PRACTICE: *AMICUS CURIAE* BRIEFS

Petitioner is free to monitor the proceeding and to file a post-hearing *amicus curiae* brief at the same time the parties to the proceeding file their post-hearing submissions under 10 C.F.R. § 2.1322(c).

MEMORANDUM AND ORDER

The Montaup Electric Company (''Montaup'') seeks to transfer its 2.9% ownership[1] interest in Seabrook Station, Unit 1, to the Little Bay Power Corporation (''Little Bay''). Montaup is one of eleven co-owners of the Seabrook Station, Unit 1. Little Bay is a wholly owned subsidiary of BayCorp Holdings, Ltd. (''BayCorp''), which is also the holding company for the Great Bay Power Corporation (the holder of a 12.1% ownership interest in Seabrook). On Montaup's behalf, Seabrook's licensed operator, the North Atlantic Energy Service Corporation (''NAESCO''), submitted the transfer application to the Commission for approval. The Atomic Energy Act (''AEA'') requires Commission approval of transfers of ownership rights. *See* AEA § 184, 42 U.S.C. § 2234. Recently promulgated NRC regulations (''Subpart M'') govern hearing requests on transfer applications. *See* Final Rule, ''Public Notification, Availability of Documents and Records, Hearing Requests and Procedures for Hearings on License Transfer Applications,'' 63 Fed. Reg. 66,721 (Dec. 3, 1998), *to be codified at* 10 C.F.R. §§ 2.1300 *et seq.*

Pursuant to Subpart M, the New England Power Company (''NEP'') — a 10% co-owner of the Seabrook plant — has filed a timely intervention petition opposing the Montaup-to-Little Bay transfer application as well as a petition for summary relief or, in the alternative, a request for hearing. Another co-owner, United Illuminating Company (''United,'' with a 17.5% ownership interest in the plant), has filed an untimely intervention petition. We grant NEP's intervention petition and request for hearing, limit the scope of that hearing, and deny United's late-filed request to intervene.

[1] All ownership percentages specified in this Order are approximate.

Background

Pursuant to section 184 of the AEA and 10 C.F.R. § 50.80 of our regulations,[2] Montaup and Little Bay seek approval of the proposed transfer as part of Montaup's efforts to divest all of its electric generating assets pursuant to the restructuring of the electric utility industry in Massachusetts and Rhode Island.[3] Under the transfer arrangement, Little Bay would (among other things) assume full responsibility for Montaup's remaining share of Seabrook's future costs, including obligations for capital investment, operating expenses,[4] and any escalation of decommissioning obligations in excess of Montaup's prefunded contribution (described immediately below).

In their application, Montaup and Little Bay offer the following two forms of assurance that the decommissioning and operating expenses associated with the 2.9% ownership interest will be fully paid. First, Montaup offers to provide an $11.8 million prefunded decommissioning payment — an amount that, assuming 4% inflation plus 1.73% rate of real return, would purportedly grow by the year 2026 to equal the amount required to satisfy the decommissioning funding obligation associated with Montaup's 2.9% interest in Seabrook. Montaup compares its proposed 1.73% rate of real return to the 2% rate provided for in the NRC's Final Rule, ''Financial Assurance Requirements for Decommissioning Nuclear Power Reactors,'' 63 Fed. Reg. 50,465 (Sept. 22, 1998), *corrected,* 63 Fed. Reg. 57,236 (Oct. 27, 1998), *to be codified at* 10 C.F.R. § 50.75(e)(1)(i).

Second, Little Bay submits estimates for the total operating expenses at Seabrook attributable to Montaup's 2.9% ownership share of Seabrook for the first 5 years of Little Bay's ownership and the sources of funds to cover those costs. Little Bay also proffers favorable revenue predictions for the future, based on the assumptions that Seabrook will operate until its current license expires in 2026 and that market revenues through the year 2026 should be sufficient to cover Little Bay's share of the plant's decommissioning expenses and operating expenses, even if the estimates for those costs are later revised upward. As a further indication of the adequacy of Little Bay's financial assurances, the application points out that Little Bay's take-or-pay sales contract with Great Bay requires the latter to pay for all of Little Bay's Seabrook-related costs,

[2] This regulation reiterates the requirements of AEA § 184, sets forth the filing requirements for a license transfer application, and establishes the following test for approval of such an application: (1) the proposed transferee is qualified to hold the license and (2) the transfer is otherwise consistent with law, regulations, and Commission orders.

[3] To achieve this divestiture, Montaup has negotiated comprehensive settlement agreements with the regulatory authorities in both these states — agreements approved by both states and the Federal Energy Regulatory Commission.

[4] For the sake of simplicity, this Order will use the phrase ''operating expenses'' to include both such expenses and capital investment.

whether or not Great Bay succeeds in reselling the electricity it buys from Little Bay.

Under the license transfer, NAESCO would remain the managing agent for the facility's eleven joint owners and would continue to have exclusive responsibility for the management, operation, and maintenance of the Seabrook Station. The license would be amended only for administrative purposes to reflect the transfer of Montaup's ownership interest to Little Bay.

The Commission, in its December 14, 1998 *Federal Register* notice of Little Bay's and Montaup's application (63 Fed. Reg. 68,801), indicated that the proposed transfer would involve no changes in the rights, obligations, or interests of the other ten co-owners of the Seabrook Station, nor would it result in any physical changes to the plant or the manner in which it will operate.

Intervention Petitions

Responding to the Commission's December 14th notice, NEP and United filed petitions to intervene pursuant to the Commission's Rules of Practice set forth in Subpart M.[5] Petitioners are concerned that Little Bay cannot provide adequate assurance that, as a Licensee, it can meet its financial obligations for the operation and eventual decommissioning of the Seabrook plant. This concern is grounded in the fact that the license transfer would shift the financial responsibility for Montaup's share of the Seabrook facility from a rate-regulated electric utility (Montaup) to an exempt wholesale generator (Little Bay). According to Petitioners, a transfer to an exempt wholesale generator (particularly this one) would lessen the financial assurance with respect to Montaup's current share of the plant and would commensurately increase the financial and radiological risks of the other owners, such as Petitioners.

In support, Petitioners explain that satisfaction of Montaup's obligations is currently assured by both the rate recovery it is guaranteed under its approved restructuring settlements and also the income from its other assets. By contrast, Little Bay (like all other exempt wholesale generators) cannot provide rate-recovery assurance, as it is dependent solely upon unguaranteed market revenue for the satisfaction of its financial obligations. (Little Bay purportedly lacks other assets on which it can rely for income.)

[5] In our December 14th *Federal Register* notice, we also indicated that, as an alternative to requests for hearing and petitions to intervene, persons were permitted to submit written comments to the Commission by January 13, 1999, regarding the license transfer application. The Commission has received one such comment, from co-owner Massachusetts Municipal Wholesale Electric Company, which raises arguments similar to those of NEP and United. We have referred this comment to the Staff for its consideration. As we indicated in the notice, the comment does not constitute a part of the decisional record.

Petitioners find scant comfort in Montaup's prefunded decommissioning payment and Little Bay's favorable revenue predictions. Petitioners assert that, if the transfer were approved, Little Bay would be obliged to sell its share of Seabrook's electric output to Great Bay (another exempt wholesale generator) whose ability to meet its contractual obligations to Little Bay would depend on Great Bay's own uncertain ability to resell that same electric output in the bulk power market at a sufficient price. Petitioners also point out that Great Bay's assets (like those of Little Bay) consist almost exclusively of an ownership interest in Seabrook, thereby precluding any meaningful additional source of revenue if Applicants' favorable 5-year forecasts of market revenues prove overly optimistic.

Further, although Petitioners recognize that Commission regulations accept Montaup's and Little Bay's two financial vehicles (prepayment and revenue prediction) as mechanisms by which entities that do not qualify as electric utilities under 10 C.F.R. § 50.2 may satisfy NRC financial assurance and financial qualifications requirements (*see* 10 C.F.R. §§ 50.33(f)(2), 50.75(e)(1)), Petitioners nevertheless assert that the reality of today's electric power market in New England undermines the financial assurances that these alternative methods might otherwise have offered.

Petitioners allege that developers have announced plans to construct sixty new generating units in New England with a collective capacity of more than 30,000 MW and that, although some of this capacity will probably never be built, a significant amount likely will be. Based on the expected resulting glut of electricity in the New England market, Petitioners conclude that Little Bay's 5-year revenue projections depend on highly questionable assumptions regarding Little Bay's and Great Bay's ability to sell electricity during the next 5 years (and beyond) at a price sufficient to meet Little Bay's operating and decommissioning cost obligations. Petitioners also question two assumptions underlying Little Bay's claim of adequate revenue — that the Seabrook plant will not experience a prolonged shutdown and that it will remain operational until the expiration of its current license in 2026.

Based on these market conditions, Petitioner NEP seeks two alternative forms of relief: either an evidentiary hearing on financial assurance and financial qualifications or (preferably) a summary order conditioning the Commission's approval of Montaup's license transfer request on Montaup's agreement to remain contingently liable should Little Bay prove unable to meet its financial obligations for the safe operation and decommissioning of Seabrook.

The other Petitioner, United, supports NEP's two remedial proposals, and adds a third of its own:

(1) The Commission would require BayCorp to build up a cash reserve to sustain Great Bay's and Little Bay's financial obligations in the event of a 1-year shutdown of the plant.

(2) The Commission would also prohibit BayCorp from withdrawing cash from Little Bay or Great Bay for any purpose other than supporting the financial obligations associated with Seabrook plant, until BayCorp has fully funded the reserve described above.
(3) Further, the Commission would prohibit BayCorp from acquiring additional ownership in Seabrook until its cash reserve is sufficient to support any incremental purchases (using the 1-year criterion described above) and until New Hampshire adopts legislation removing other Seabrook owners' exposure that might result from a default by Great Bay or Little Bay.
(4) And finally, the Commission would require Great Bay and Little Bay to obtain and maintain business interruption insurance for their ownership interest in Seabrook.

Montaup and Little Bay oppose NEP's and United's petitions. NAESCO takes no position. The NRC Staff is not participating as a party in this proceeding.

Discussion

I. NEP'S PETITION TO INTERVENE AND REQUEST FOR HEARING

To intervene as of right in a Commission licensing proceeding, a petitioner must demonstrate that its ''interest may be affected by the proceeding,'' or in common parlance, it must demonstrate ''standing.'' *See* AEA § 189a, 42 U.S.C. § 2239(a). The Commission's rules require further that a petition for intervention raise at least one admissible contention or issue. The standards for meeting these two requirements in license transfer cases come both from our Subpart M procedural regulations and from judicial cases on standing (to which we look for guidance). Though our requirements for standing and for admissible issues overlap somewhat (see, e.g., our discussion of Scope of Proceeding, *infra,* which bears on both standing and issue admissibility), we can summarize them as follows:

To show *STANDING,* a petitioner must

(1) identify an interest in the proceeding by

(a) alleging a concrete and particularized injury (actual or threatened) that
(b) is fairly traceable to, and may be affected by, the challenged action (the grant of an application), and

(c) is likely to be redressed by a favorable decision, and
(d) lies arguably within the ''zone of interests'' protected by the governing statute(s).

(2) specify the facts pertaining to that interest.

To show *ADMISSIBLE ISSUES,* a petitioner must

(1) set forth the issues (factual and/or legal) that petitioner seeks to raise.
(2) demonstrate that those issues fall within the scope of the proceeding.
(3) demonstrate that those issues are relevant and material to the findings necessary to a grant of the license transfer application.
(4) show that a genuine dispute exists with the applicant regarding the issues.
(5) provide a concise statement of the alleged facts or expert opinions supporting petitioner's position on such issues, together with references to the sources and documents on which petitioner intends to rely.

See 10 C.F.R. § 2.1308. *See generally Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 194-96 (1998) (standing); *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 348-49 (1998) (admissible contentions).

A. Standing

NEP satisfies the standing test. It advances a plausible claim of injury: the potential that NRC approval of the license transfer would put in place a financially incapable co-licensee, thereby increasing NEP's risk of radiological harm to its property and its risk of being forced to assume a greater-than-expected share of Seabrook's operating and decommissioning costs. *See, e.g.,* NEP's Intervention Petition at 3; NEP's Response at 2. Indeed, it is hard to conceive of an entity more entitled to claim standing in a license transfer case than a co-licensee whose costs may rise, and whose property may be put at radiological risk, as a result of an ill-funded license transfer. This kind of situation justifies standing based on ''real-world consequences that conceivably could harm Petitioners and entitle them to a hearing.'' *Yankee,* CLI-98-21, 48 NRC at 205.

NEP's allegations regarding its increased risk are sufficiently concrete and particularized to pass muster for standing. They are supported by two detailed affidavits and other evidentiary exhibits. The threatened injury is fairly traceable to the challenged action (here, the grant of the license transfer application) because the alleged increase in risk associated with Little Bay taking over Montaup's interest could not occur without Commission approval of the application. Similarly, the threatened injury can be redressed by a favorable decision because the Commission's denial of the application would prevent the transfer of interest.

The risk to NEP's interest in the Seabrook plant lies within the ''zone of interests'' protected by the AEA. We held several years ago in another case where a reactor co-owner contested a change in ownership, the AEA protects not only human health and safety from radiologically caused injury, but also the owners' property interests in their facility. *Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 48 (1994), citing AEA §§ 103b, 161b, 42 U.S.C. §§ 2133(b), 2201(b). Persons or entities who own (or co-own) an NRC-licensed facility plainly have an AEA-protected interest in licensing proceedings involving their facility.

One further matter bears discussion. Little Bay argues that NEP's claim of injury directly contravenes the statement in the *Federal Register* notice of this application that ''[t]he proposed transfer does not involve a change in the rights, obligations, or interests of the other co-owners of the Seabrook Station.'' *See* Little Bay's Answer to NEP's Intervention Petition, dated Jan. 13, 1999, at 11, citing 63 Fed. Reg. at 68,802. In our view, however, Little Bay is taking too literally the language of the notice, which was intended only to indicate that the terms of the transfer on their face do not change rights, obligations, or interests. We do not regard the notice as (in effect) barring intervention by co-owners or as precluding all argument that the effects of the transfer may have adverse effects on co-owners' interest.

Little Bay maintains that NEP is under *no risk whatever* of suffering financial harm because, under the Joint Ownership Agreement, neither NEP nor any other co-owner can be held liable for Little Bay's share of any expenses.[6] According to Little Bay, that Agreement undermines NEP's claim of heightened risk of liability for operating and decommissioning-fund expenses. We cannot agree with Little Bay that NEP has no legitimate concern whatsoever. The Commission itself has stated in a policy statement that, under ''highly unusual situations,'' it might hold co-owners financially liable for the share of such expenses attributable to a defaulting co-owner. *See* ''Final Policy Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry,'' 62 Fed. Reg. 44,071, 44,074, 44,077 (Aug. 19, 1997).[7] And the State of New Hampshire has apparently imposed similar joint and several liability on all Seabrook co-owners. *See* N.H. Senate Bill 140, signed by the Governor on June 11, 1998.

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[6] *See* Little Bay's Answer to NEP's Intervention Petition, dated Jan. 13, 1999, at 11 (''As set forth in the Seabrook Joint Ownership Agreement, the obligations of the joint owners are 'several and not joint,' so NEP[CO] cannot incur any liability from Little Bay as a result of this transaction''), citing Agreement for Joint Ownership, Construction and Operation of New Hampshire Nuclear Units (May 1, 1973), ¶6.1.

[7] The quoted language from our Policy Statement is currently the subject of a pending Request for Rulemaking (64 Fed. Reg. 432 (Jan. 5, 1999)) in which co-owners of another nuclear power reactor raise questions about the Commission's views on joint liability.

Under these circumstances, we cannot fairly find NEP's concerns implausible or that its claims of potential injury are insufficient for a threshold showing of standing.

B. Admissible Issues

NEP proffers two issues for Commission consideration: (1) whether the Montaup-to-Little Bay license transfer application contains sufficient assurance of adequate decommissioning funding, and (2) whether the license transfer application likewise contains sufficient assurance of adequate funding for operations. We reject the first issue for failure to present a genuine issue of material fact or law, but we conclude that the second issue is admissible and requires a hearing.

1. Financial Assurance Regarding Satisfaction of Decommissioning Funding Obligation

On the facts and allegations of this case, we see no conceivable violation of our regulation, 10 C.F.R. § 50.75, requiring licensees to show sufficient assurance of adequate decommissioning funding.[8] When Little Bay and Montaup filed their license transfer application in September 1998, they calculated an $11.8 million prepayment amount based on the assumption that the plant's total decommissioning costs would total $489 million (in current dollars), and that, by 2026, the $11.8 million would grow into the $14.2 million (again, in current dollars) necessary to meet Montaup's 2.9% share of Seabrook's decommissioning costs. That assumption derived from the cost formula set forth in section 50.75(c), using NUREG-1307 (Rev. 7, November 1997). Although the Applicants' calculations were based on then-current information when submitted in September 1998, the Commission staff in December created an an alternative

[8] For this reason, we do not decide the question, raised by both Montaup and Little Bay, whether NEP's decommissioning funding argument amounts in its entirety to an impermissible collateral attack on sections 50.75(c) and 50.75(e)(1). We wish to make clear, however, that a petitioner in an individual adjudication cannot challenge generic decisions made by the Commission in rulemakings. *See, e.g., Massachusetts v. NRC,* 924 F.2d 311, 330 (D.C. Cir. 1991), *cert. denied,* 502 U.S. 899 (1991). *Accord, Curators of the University of Missouri,* CLI-95-1, 41 NRC 71, 170-71 (1995); *American Nuclear Corp.* (Revision of Orders to Modify Source Materials Licenses), CLI-86-23, 24 NRC 704, 708-10 (1986); *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 21 n.33 (1974); *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 NRC 2069, 2073 (1982).

For example, no one would be free to argue in a license transfer case that site-specific conditions at a particular nuclear power reactor render unusable the generic projected costs calculated under our rule's cost formula. In our decommissioning rulemakings, we deliberately decided to avoid a requirement for site-specific cost estimates to show financial assurance. *See, e.g.,* Final Rule, ''General Requirements for Decommissioning Nuclear Facilities,'' 53 Fed. Reg. 24,018, 24,030-31 (June 27, 1988) (discussing 1988 rule). Nor could anyone argue that prepayment is not an acceptable means of providing financial assurance for decommissioning. Our rules expressly say that it is. Subpart M allows participants to ''petition that a Commission rule or regulation be waived'' in particular cases upon a showing that because of ''special circumstances . . . application of a rule or regulation would not serve the purpose for which it was adopted.'' *See* 10 C.F.R. § 2.1329.

method for calculating expected costs of low-level waste disposal, with the result that the estimated decommissioning cost for plants of Seabrook's type now can be decreased considerably, from $489 million to $289 million.[9]

As a result of the recent revision, the $11.8 million committed by Montaup *already* exceeds, by a healthy margin, the minimum amount required to fully fund its 2.9% share of Seabrook's decommissioning costs, as calculated under section 50.75(c) and the new decommissioning cost alternative — an amount of less than $8.4 million. This renders NEP's concerns, including Seabrook's allegedly high risk of early closure, inconsequential for our financial assurance determination.[10]

Montaup's promise to prepay considerably more than the minimum amount currently prescribed by the NRC financial assurance formula leaves NEP without any plausible decommissioning funding grievance, and (particularly in view of Montaup's minuscule share of the plant) gives us no reason to think that the public health and safety might in any respect be left unprotected. Prepayment is in fact the strongest and most reliable of the various decommissioning funding devices set out in section 50.75(e)(1). We conclude here, as a matter of law, that Montaup's prepayment provides sufficient assurance for its share of decommissioning costs and that there exists no genuine issue of material fact or law necessitating a hearing on decommissioning funding assurance. *See* 10 C.F.R. § 2.1306(b)(2)(iv).

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[9] *See* NUREG 1307 at 6, example 3 (Rev. 8, December 1998). Despite the $200 million downward revision, the Applicants have not sought to reduce Montaup's prepayment amount. Sometimes, in response to site-specific circumstances, utilities prudently set aside more funds than the NRC requires. The NRC focuses its requirements on the amount of money required to reduce residual radioactivity to levels that permit release of the property (*see* 10 C.F.R. § 50.2). However, release can also involve activities other than those falling within the NRC's definition of ''decommissioning'' — activities such as removal and disposal of spent fuel or of non-radioactive structures and materials beyond what is necessary to reduce residual radioactivity to required levels (*see* 10 C.F.R. § 70.75(c) n.1). The costs of these activities can amount to a large fraction of the NRC's required funding figure. Moreover, decommissioning funding is also subject to regulation by agencies having jurisdiction over rates — agencies such as the Federal Energy Regulatory Commission and state Public Utilities Commissions, and these agencies can set funding requirements that are in addition to funding requirements set by the NRC (*see* 10 C.F.R. § 50.75(a)).

[10] Since we find as a matter of law that the proposed payment by Little Bay provides adequate assurance for decommissioning, we need not reach the question whether NEP's decommissioning funding issue would otherwise be admissible for litigation. However, we note that there is substantial doubt whether an argument based on a theoretical early shutdown of a facility is within the scope of this proceeding. There is nothing about the transfer to a new owner that changes the expected life span or cost of decommissioning a facility. As a general matter, license transfer proceedings are not the appropriate place for considering changes to requirements applicable to the facility and all its owners, as opposed to requirements directed at the proposed transferee. Indeed, if NEP's premise were correct, it would be more appropriate to consider generically whether to impose a change in the decommissioning funding process for all owners of the plant. The financial nature of these issues does not necessarily make them relevant to the financial questions presented in this particular transfer proceeding. As with technical requirements for operation of the plant, the transferee takes the plant as it exists, including the projected costs and associated assumptions used to establish the amount of decommissioning funding required.

2. Financial Qualifications for Meeting Operating Expenses

NEP meets the requirements set out in Subpart M regarding the admissibility of the ''operating expenses'' issue. *See* 10 C.F.R. §§ 2.1306, 2.1308. Its petition and reply clearly set out the claim that Little Bay will lack sufficient financial resources to fulfill its obligations for operating expenses. NEP's pleadings, and the Applicants' own vigorous responses, demonstrate that a genuine dispute exists regarding this issue. NEP's arguments are certainly relevant and material. Indeed, they go to the very heart of the question whether Applicants' financial qualifications are adequate to pass statutory and regulatory muster. When promulgating Subpart M a few months ago, we expressly recognized that NRC review of license transfer applications ''consists largely of assuring that the ultimately licensed entity has the capability to meet financial qualification and decommissioning funding aspects of NRC regulations.'' *See* 63 Fed. Reg. at 66,724. NEP's claims, in short, lie at the core of the NRC's license transfer inquiry.

The Applicants argue that NEP's proposed issue lacks the specificity and factual support demanded by NRC rules. Our recently issued Subpart M, like its counterparts applicable to other types of Commission proceedings (*e.g.,* 10 C.F.R. § 2.714), does not permit ''the filing of a vague, unparticularized contention,'' unsupported by affidavit, expert, or documentary support. *Calvert Cliffs,* 48 NRC at 349. *See* 10 C.F.R. § 2.1306. Nor does our practice permit ''notice pleading,'' with details to be filled in later. Instead, we require parties to come forward at the outset with sufficiently detailed grievances to allow the adjudicator to conclude that genuine disputes exist justifying a commitment of adjudicatory resources to resolve them. *See Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 n.7 (1996).

In our view, NEP's initial pleadings in this case provide sufficient allegations and information to trigger further inquiry under Subpart M on the financial qualification issue. NEP maintains that Little Bay will prove incapable of meeting its financial obligations to Seabrook, and supports its view with ample references to the NRC decisions and other documents on which it intends to rely, with excerpts from filings by affiliates of Little Bay with the Securities and Exchange Commission, and with two affidavits from a senior NEP corporate officer who is clearly familiar with the electricity market in New England. While Applicants are correct that NEP bases much of its argument on speculation that future electric market conditions in New England and at Seabrook may preclude Little Bay from meeting its revenue projections, NEP rests its speculation on factual assertions regarding the current electricity market in New England, on proposed expansions in electricity production capacity in New England, on premature closure rate of nuclear plants in the region, and on Little Bay's own financial condition. ''Speculation'' of some sort is unavoidable when the issue

at stake concerns predictive judgments about an applicant's future financial capabilities.

Little Bay maintains that NEP impermissibly attacks NRC regulations when it contends that Little Bay is too thinly financed to meet its obligations to Seabrook. As NEP acknowledges, an NRC rule, 10 C.F.R. § 50.33(f)(2), specifies what information a license applicant must submit to show its financial qualification for operating expenses, and Little Bay has submitted what the rule contemplates, a 5-year cost-and-revenue projection. *See* NEP's Intervention Petition at 2, 6, 7. NEP, however, argues that it will suffer harm *despite* Little Bay's satisfaction of the methodological requirements of the regulation — both because current market conditions in New England undermine the effectiveness of section 50.33(f)(2) (*id.* at 2-3, 7-8) and because assumptions underlying Applicants' cost-and-revenue estimates are flawed (*id.* at 3, 7, 8).

As we noted above (note 8), participants in individual adjudications are precluded from collaterally attacking our generic regulations. Little Bay asks us to reject NEP's ''operating expenses'' argument as a collateral attack on section 50.33(f)(2). Little Bay essentially argues that the NRC in section 50.33 found generically that 5-year cost-and-revenue projections suffice, without more, to satisfy NRC financial qualification rules. Therefore, the argument goes, NEP's demand for additional protection amounts to an impermissible challenge to the adequacy of NRC rules.

Little Bay's argument founders on the text of the rule itself. Section 50.33(f)(2) nowhere declares that the proffering of 5-year projections will, *per se,* prove adequate in any and all cases. To the contrary, the rule contains a ''safety-valve'' provision explicitly reserving the possibility that, in particular circumstances, and on a case-by-case basis, additional protections may be necessary. *See* 10 C.F.R. § 50.33(f)(4) (to ensure adequate funds for safe operation, NRC may require ''more detailed or additional information'' if appropriate). As we detail below, NEP is entitled to argue that *this case* calls for additional financial qualification measures beyond 5-year projections and that the Applicants therefore have not met their burden under section 50.33(f)(2) to satisfy Commission financial qualification requirements.

The burden of proof under section 50.33(f)(2) is to ''demonstrate [that] the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license.'' In addition, section 50.33(f)(2) imposes certain filing requirements on the applicant — that it submit operating cost estimates for the next 5 years and indicate the source of funds to cover these costs. Little Bay's ''collateral attack'' argument conflates these two portions of section 50.33(f)(2) by assuming that the Applicants have met their burden of proof merely by complying with the filing requirements. Although satisfaction of those requirements is *necessary* to the grant of a license transfer application, such satisfaction cannot be deemed always *sufficient* to

satisfy the Applicant's burden of proof, else the NRC be irrevocably bound by Applicants' own estimates and left without authority to look behind them.

Always in question under section 50.33(f)(2) is whether the Applicant's cost and revenue estimates are reasonable. The adequacy of those estimates is challengeable (as here) by a petition for intervention under 10 C.F.R. § 2.1306 or by an NRC request for more detailed information. *See* 10 C.F.R. § 50.33(f)(4) (the Commission ''may request an . . . entity . . . to submit additional or more detailed information respecting its financial arrangements and status of funds if [we] consider[] this information appropriate''). *Accord* 10 C.F.R. Part 50, Appendix C, § IV.

In sum, NEP does not claim that 5-year cost-and-revenue projections are *per se* inadequate to meet financial qualification requirements — such a claim *would* be precluded as a collateral attack on NRC rules. Rather, NEP simply contends that, as NRC rules themselves contemplate, the circumstances of this particular transfer call for more detailed or extensive financial protection. We thus conclude that NEP's petition for a hearing does not constitute an impermissible collateral attack on section 50.33(f)(2) but instead raises an admissible issue for a hearing under Subpart M.

C. Scope of Proceeding

For the reasons set forth above, we grant NEP's intervention petition and hearing request. The scope of the hearing will be limited to the following issue: whether the Montaup-to-Little Bay license transfer application meets NRC rules for financial qualification regarding Seabrook's operating expenses (10 C.F.R. § 50.33(f)). Given the early stage of the proceeding and the existence of outstanding factual questions, however, we will hold in abeyance NEP's alternative request for the imposition of conditions.

Our grant of NEP's hearing request by no means suggests that NEP necessarily will succeed in its challenge to the transfer application. It faces a formidable task in persuading us that factors peculiar to Seabrook call for modification or rejection of what NEP acknowledges are financial qualification plans of the type ordinarily found acceptable by the Commission. *See, e.g.,* NEP's Intervention Petition at 2. Some aspects of NEP's position seem to us particularly troublesome. We will set out our concerns to guide the parties as they proceed to a hearing in this case.

First, as a general matter, NEP cannot insist that Applicants provide the impossible: absolutely certain predictions of future economic conditions. To be sure, safe operation of a nuclear plant requires adequate funding, but the potential safety impacts of a shortfall in funding are not so direct or immediate as the safety impacts of significant technical deficiencies. Generally speaking, then, the level of assurance the Commission finds it reasonable to require regarding

a licensee's ability to meet financial obligations is less than the extremely high assurance the Commission requires regarding the safety of reactor design, construction, and operation. The Commission will accept financial assurances based on plausible assumptions and forecasts, even though the possibility is not insignificant that things will turn out less favorably than expected. Thus, the mere casting of doubt on some aspects of proposed funding plans is not by itself sufficient to defeat a finding of reasonable assurance.

At the same time, though, funding plans that rely on assumptions seriously at odds with governing realities will not be deemed acceptable simply because their form matches plans described in the regulations. Relying on affidavits and various forms of financial data, NEP asserts that Little Bay's cost-and-revenue estimates fail to provide the required assurance because they do not reflect a realistic outlook for Little Bay itself or for the nuclear power industry in New England. As in other cases (*e.g., River Bend,* 40 NRC at 51-53), we cannot brush aside such economically based safety concerns without giving the Intervenor a chance to substantiate its concerns at a hearing, but we note that NEP's arguments ultimately will prevail only if it can demonstrate relevant uncertainties significantly greater than those that usually cloud business outlooks.

Finally, we cannot accede to NEP's seeming view that Little Bay inherently cannot meet our financial qualification rules because its rates are not regulated by a state utilities commission. This view runs counter to the premise underlying the entire restructuring and economic deregulation of the electric utility industry, i.e., that the marketplace will replace cost-of-service ratemaking. In our view, unregulated electricity rates are not incompatible with maintaining sufficient financial resources to operate a nuclear power reactor.

II. UNITED'S LATE-FILED PETITION TO INTERVENE

United filed its petition for a hearing 7 days after the deadline for filing such petitions. Section 2.1308(b) of our Subpart M regulations provides that untimely intervention petitions may be granted if the petitioner proffers good cause for the tardiness of its filing. The regulation further provides that the Commission will consider both the availability of other means by which petitioner's interest could be protected or represented by other participants and the extent to which the admission of the late-filing petitioner would broaden the issues or delay final action on the license transfer application.

As good cause, United claims it was under a misimpression that its intervention petition would be due 30 rather than 20 days after publication of the December 14th *Federal Register* notice. It further argues that its different recommendations as to remedy and its different view of the New England electricity market preclude NEP from effectively protecting or representing United's

interests. Finally, it asserts that its issues are ultimately the same as those already raised by NEP and that its 7-day tardiness will therefore not delay the ultimate resolution of the proceeding.

We cannot agree that United's failure to read carefully the governing procedural regulations constitutes good cause for accepting its late-filed petition. This failure appears especially egregious in light of the receipt by *two* senior corporate officials on December 16th of faxes from NAESCO notifying United that it had until January 4th to seek intervention and a hearing. The faxes even provided a copy of the *Federal Register* notice that set the filing deadline. *See* Attachment ''A'' to Montaup's Answer to United's Intervention Petition, dated Jan. 21, 1999. United thus had both constructive notice (through the *Federal Register* notice) and actual notice (through the two faxes) of the due date for its intervention petition.

We likewise disagree that United's participation would cause no delay in the resolution of this proceeding. United has offered an entirely new suggestion for relief. *See* pp. 213-14, *supra.* Consequently, United's participation would have the effect of broadening this proceeding. We also disagree that United's interests cannot be protected or represented by another party. United's interests as a co-owner of Seabrook are, by United's own description, identical to those of its fellow co-owner NEP. This identity of interests is further reflected in the fact that, with the exception of the new suggestion for relief, United presents no merits arguments not already proffered by NEP. (Although United asserts in conclusory fashion that its view of the New England electricity market differs from NEP's, its pleadings nowhere identify these alleged differences.)

In analogous situations in the past, our hearing tribunals have regularly rejected late-filed petitions submitted without good cause for the lateness and without strong countervailing reasons that override the lack of good cause. *See, e.g., Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 172-75 (1998) (collecting cases). We similarly reject United's effort to enter this case late. United is free, however, to monitor the proceeding and to file a post-hearing *amicus curiae* brief at the same time the parties to the proceeding file their post-hearing submissions. *See* 10 C.F.R. § 2.1322(c) (written ''post-hearing statements of position'' due 20 days after close of the oral hearing).

III. NAESCO'S STATUS IN THIS PROCEEDING

NAESCO assumes a peculiar posture in this proceeding. It asserts, on the one hand, to be one of the Applicants for the license transfer (as Seabrook's licensed operator, it forwarded the Montaup-to-Little Bay license transfer application to the Commission) and therefore entitled to participate in this proceeding. Yet,

on the other hand, it expressly claims neutrality regarding Little Bay's financial qualifications, the adequacy of Montaup's decommissioning funding assurance, the standing and interest of NEP, and the nature of any Subpart M proceedings; it even dissociates itself from the other two Applicants. It is therefore difficult to understand what exactly NAESCO intends to contribute as a party to this proceeding.

Although we are sympathetic to NAESCO's apparently awkward situation of being caught in the middle of a disagreement among various of the owners of the plant it operates, NAESCO cannot have its cake and eat it too by claiming applicant status yet not supporting its own application. At most, its party status appears to be nominal. We therefore instruct NAESCO to inform us within seven calendar days of the date of this Order whether it indeed supports the application which it has co-submitted. If it does, we will consider it an applicant with full rights to participate in this proceeding. If not, we will not consider NAESCO a party. However, under the latter circumstances, NAESCO would still be free (like United) to submit a post-hearing *amicus curiae* brief.

Procedural Matters

I. DESIGNATION OF ISSUES

As noted above, the hearing will be limited to the following issue: whether the Montaup-to-Little Bay license transfer application meets NRC rules for financial qualification under 10 C.F.R. § 50.33(f). NEP should be prepared to offer prefiled testimony and exhibits containing *specific* facts and/or expert opinions in support of its view that Little Bay's 5-year cost-and-revenue projections are inadequate under NRC rules. All parties should keep their pleadings as short, and as focused on the admitted issue, as possible. Redundant, duplicative, unreliable, or irrelevant submissions are not acceptable and will be stricken from the record. *See* 10 C.F.R. § 2.1320(a)(9). We also direct NEP to state explicitly what remedial measures (if any) it believes the Commission should take in addition to those specified in NEP's intervention petition.

II. DESIGNATION OF PRESIDING OFFICER

The Commission designates Judge Thomas S. Moore as the Presiding Officer in this license transfer proceeding under Subpart M.

III. NOTICES OF APPEARANCE

To the extent that they have not already done so, each counsel or representative for each party shall, not later than 4:30 p.m. on *March 15, 1999* (within 10 days from the issuance date of this Order), file a notice of appearance complying with the requirements of 10 C.F.R. § 2.713(b). In each such notice of appearance, the counsel or representative should specify his or her business address, telephone number, facsimile number, and Internet e-mail address. Any counsel or representative who has already entered an appearance but who has not provided one or more of these pieces of information should do so not later than the date and time specified above.

IV. FILING SCHEDULE

If the parties unanimously agree to a non-oral hearing, they must file their joint motion for a ''hearing consisting of written comments'' no later than 4:30 p.m. on *March 22, 1999* (i.e., within 17 days of the date of this Order).[11] No later than that same date, the parties should complete any necessary negotiations on a protective order regarding the proprietary data that accompanied the license transfer request and should submit a joint protective order to the presiding officer. If the parties are unsuccessful in negotiating such an order, they should inform the presiding officer by that date and indicate any areas in which they were able to agree. We also direct the parties to confer promptly on whether their dispute might be settled amicably without conducting a hearing.

All initial written statements of position and written direct testimony (with any supporting affidavits) must be filed no later than 4:30 p.m. on *April 5, 1999* (31 days from the issuance date of this Order).[12] All written responses to direct testimony, all rebuttal testimony (with any supporting affidavits) and all proposed questions directed to written direct testimony must be filed no later than 4:30 p.m. on *April 26, 1999* (52 days from the issuance date of this Order).[13] All proposed questions directed to written rebuttal testimony must be submitted

[11] *See* 10 C.F.R. § 2.1308(d)(2), providing for a 15-day filing period. However, here the 15th day falls on Saturday, March 20th, so the deadline is postponed until Monday, March 22nd, pursuant to 10 C.F.R. § 2.1314(a).

[12] *See* 10 C.F.R. §§ 2.1309(a)(4), 2.1310(c), 2.1321(a), 2.1322(a)(1), providing for filings within 30 days of the issuance date of this Order. However, here the 30th day falls on Sunday, April 4th, so the deadline is postponed until Monday, April 5th, pursuant to 10 C.F.R. § 2.1314(a).

[13] *See* 10 C.F.R. §§ 2.1309(a)(4), 2.1310(c), 2.1321(b), 2.1322(a)(2)-(3), the last two of which regulations provide for filings within 20 days of the filing of initial written statements of position and written testimony with supporting affidavits. However, here the 20th day falls on Sunday, April 25th, so the deadline is postponed until Monday, April 26th, pursuant to 10 C.F.R. § 2.1314(a).

to the Presiding Officer no later than 4:30 p.m. on *May 5, 1999* (61 days from the issuance date of this Order).[14]

Assuming that the parties do not unanimously seek a hearing consisting of written comments, the Presiding Officer will hold an oral hearing beginning at 9:30 a.m on *May 20, 1999* (15 days from the submittal of rebuttal testimony and 76 days from the issuance date of this Order), in the Hearing Room of the Commission's Atomic Safety and Licensing Board, Room 3-B-45 of the Commission's ''Two White Flint'' building, 11545 Rockville Pike, Rockville, MD. The subject of the hearing will be the issue designated above. Any party submitting prefiled direct testimony should make the sponsor of that testimony available for questioning at the hearing. Each party will be allotted 30 minutes for its oral argument on the issues specified above and 15 minutes for any rebuttal argument it wishes to offer. *See* 10 C.F.R. §§ 2.1309, 2.1310(a), 2.1322(b). The hearing will not include opportunities for cross-examination, although the Presiding Officer may question any witness proffered by any party.

Finally, all written concluding statements of position must be filed no later than 4:30 p.m. on *June 9, 1999* (20 days from the date of the oral hearing and 96 days from the issuance date of this Order). *See* 10 C.F.R. § 2.1322(c). The Commission expects to issue a final memorandum and order on the merits of this proceeding by August 13th, 65 days after the record closes.

The Commission is confident that the proceeding can be resolved fairly and efficiently within the prescribed time schedule. If Judge Moore anticipates any delay in the schedule, he should promptly notify the Commission of the reason for the delay and his anticipated new schedule.

[14] *See* 10 C.F.R. §§ 2.1309(a)(4), 2.1310(c), 2.1321(b), 2.1322(a)(4). The 7-day filing period specified in the last two of these regulations is, pursuant to 10 C.F.R. § 2.1314(b), extended by 2 days, because the period includes a Saturday and Sunday.

V. PARTICIPANTS IN THE HEARING AND THE PROCEEDING; SERVICE LIST

The three participants at the hearing will be:

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In addition, the following two entities are currently neither parties to this case nor participants in the hearing but are nevertheless entitled to submit *amicus curiae* briefs in this proceeding, and should therefore be included on the service list for this proceeding:

North Atlantic Energy Service
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The United Illuminating Company
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& Mellott, LLC
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fax: (412) 566-6099
e-mail:

ALSO: c/o James F. Crowe
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e-mail:

Pursuant to 10 C.F.R. § 2.1316(b)-(c), the NRC Staff has indicated that it will not be a party to this proceeding. Notwithstanding this fact, the Staff is still expected both to offer into evidence its Safety Evaluation Report (''SER'') and to proffer one or more sponsoring witnesses for that document. *See* 10 C.F.R. § 2.1316(b).

VI. SERVICE REQUIREMENTS

Although the parties have a number of options under 10 C.F.R. § 2.1313(c) by which to serve their filings, the preferred method of filing in this proceeding is electronic (i.e., by e-mail). Electronic copies should be in WordPerfect format (in a version at least as recent as 6.0). Service will be considered timely if sent not later than 11:59 p.m. of the due date under our Subpart M rules. However, the Commission's electronic filing system is not yet operational and will probably not be until October 1999. Therefore, until the system is operational, we will also require the parties to submit a single signed hard copy of any such filings[15] to the Rulemakings and Adjudications Branch, Office of the Secretary, U.S. Nuclear Regulatory Commission, 11555 Rockville Pike, Room

[15] We draw the attention to the difference between this requirement and that of Subpart G, which provides that any service whether by fax or e-mail on the Secretary should be followed with an original and two conforming copies of the service by regular mail in accordance with 10 C.F.R. § 2.708(d).

O-16-H-15, Rockville, MD 20852. The fax number for this office is (301) 415-1101 and the e-mail address is secy@nrc.gov.

Finally, we share Montaup's confusion regarding the service list used during much of this proceeding. The service list should include only the entities specified in Section V above, together with the Office of the Secretary, the Presiding Officer, the Commission's General Counsel — all of whom are listed in the service list attached to this Order — and also any counsel who enter their appearances pursuant to Section III above. To the extent that any of those wish service to be made upon people other than those listed above, they should notify the Commission's Office of the Secretary and all others currently on the service list no later than 4:30 p.m. on *March 15, 1999* (10 days of the issuance date of this Order).

Conclusion

For all the reasons set forth above, NEP's intervention petition and hearing request are granted and its alternative petition for summary relief is deferred. United's untimely intervention petition is denied. The hearing process shall move forward under the terms set out above.

IT IS SO ORDERED.

For the Commission[16]

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 5th day of March 1999.

[16] Commissioner McGaffigan would have preferred that the Commission, or a part thereof, be the presiding officer in this transfer proceeding.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 40-8968-ML**

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101,
Albuquerque, NM 87120) **March 23, 1999**

The Commission reviewed a petition from Intervenors for interlocutory review of a Presiding Officer's Memorandum and Order which posed several questions to the parties related to the technical qualifications of Hydro Resources, Inc. (HRI). The Intervenors seek reversal of the Presiding Officer's order because, in their view, the Presiding Officer has inappropriately provided HRI and the NRC Staff with a second opportunity to address issues that they had failed to address earlier. The Commission denies the petition because Intervenors have failed to demonstrate that the standards for interlocutory review have been met.

RULES OF PRACTICE: INTERLOCUTORY REVIEW

In determining whether to grant a petition for interlocutory review, the Commission considers whether the Presiding Officer's action either (1) threatens the party adversely affected with immediate and serious irreparable harm that could not be remedied by a later appeal or (2) affects the basic structure of the proceeding in a pervasive or unusual manner.

LICENSING BOARDS: AUTHORITY TO QUESTION PARTIES

The Presiding Officer has the discretion to seek additional information over and above that provided by the parties. *See* 10 C.F.R. § 2.1233(a).

MEMORANDUM AND ORDER

On March 12, 1999, Intervernors Eastern Navajo Diné Against Uranium Mining (ENDAUM) and Southwest Research and Information Center (SRIC) filed a petition for the Commission's interlocutory review of the Presiding Officer's Memorandum and Order (Procedural Issues) issued on March 3, 1999 (unpublished), and reaffirmed on March 9 when he declined to reconsider it. In particular, the Presiding Officer's order posed three questions to the parties related to the technical qualifications of Hydro Resources, Inc. (HRI). The Intervenors seek reversal of the March 3 order because, in their view, the Presiding Officer has inappropriately provided HRI and the Staff with a second opportunity to address issues that these parties had failed to address earlier.

In determining whether to grant a petition for interlocutory review, the Commission considers whether the Presiding Officer's action either (1) threatens the party adversely affected with immediate and serious irreparable harm that could not be remedied by a later appeal or (2) affects the basic structure of the proceeding in a pervasive or unusual manner. 10 C.F.R. § 2.786(g)(1) and (2); *see Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-94-15, 40 NRC 319 (1994); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-94-2, 39 NRC 91, 93 (1994). In their petitions, the Intervenors have failed to show that either of these factors has been met. In particular, the Commission does not agree with the Intervenors that the Presiding Officer's order has altered the basic structure of the proceeding. Likewise, we fail to see any irreparable harm that would befall the Intervenors should they be required to wait and raise their concerns on a later petition for review from an adverse merits decision.

In this proceeding, the Commission has issued *sua sponte* direction when it has determined that the Presiding Officer granted an unwarranted deadline extension. CLI-99-1, 49 NRC 1 (1999). However, since the propriety of the Presiding Officer's inquiry in this instance turns on fact-specific questions, we see no reason to interfere in the proceeding at this time, especially where such interference is likely to cause delay while we consider the merits on appeal. If, in the end, Intervenors are prejudiced by information that enters the record as a result of the Presiding Officer's questions, they will be free later to bring their grievance to the Commission.

Intervenors also sought a stay of the Presiding Officer's March 3 and March 9 orders pending disposition of the petition for review. In view of our denial of the petition, the stay request is moot.

For the foregoing reasons, the petition is denied.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 23d day of March 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Thomas D. Murphy, Special Assistant

In the Matter of **Docket No. 40-8968-ML**
(ASLBP No. 95-706-01-ML)
(Re: Leach Mining
and Milling License)

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101,
Albuquerque, NM 87120) **March 9, 1999**

Because Licensee's *in situ* leach mining project is not covered by 10 C.F.R. § 40.36, it is not necessary that it demonstrate financial assurance for decommissioning as a precondition for licensing. The license is valid under the regulations because Licensee will not be permitted to commence operations until it has complied with 10 C.F.R. Part 40, Appendix A, Criterion 9.

INTERPRETATION OF 10 C.F.R. § 40.36

The Presiding Officer examines 10 C.F.R. § 40.36 and determines that *in situ* leach mining falls within an exception to the financial qualifications provisions contained in that section.

INTERPRETATION OF 10 C.F.R. PART 40, APPENDIX A, CRITERION 10

Part 40, Appendix A, Criterion 10, of 10 C.F.R. contains regulatory requirements that must be met when nuclear wastes are left permanently on site. Since Licensee will transport its wastes off site, that provision is not applicable to it.

PARTIAL INITIAL DECISION
(Financial Assurance for Decommissioning Issues)

This Partial Initial Decision is one of several decisions covering challenges to proposed *in situ* leach (ISL) uranium mining operations for which License SUA-1508 has been issued to Hydro Resources, Inc. (HRI). The HRI project is described in LBP-99-1, 49 NRC 29 (1999). This Decision addresses Eastern Navajo Diné Against Uranium Mining (ENDAUM) and Southwest Research and Information Center (SRIC) (collectively, ''Intervenors'') joint written presentation (10 C.F.R. § 2.1233), Financial Assurance for Decommissioning, dated January 11, 1999 (Intervenors' Assurance Brief).[1]

The issues presented by Intervenors are primarily legal and can be addressed by considering applicable law. The HRI license is governed by 10 C.F.R. Part 40, which requires careful interpretation, beginning with the applicable definitions contained in 10 C.F.R. § 40.4. First, the definition of *Byproduct Material* defines the liquid wastes produced by *in situ* leach (ISL) uranium mining as byproduct material and it also specifies that underground ore bodies do *not* become byproduct material just because an ISL project has been undertaken:

> *Byproduct Material* means the tailings or *wastes* produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including *discrete surface wastes resulting from uranium solution extraction processes.* Underground ore bodies depleted by such solution extraction operations do not constitute ''byproduct material'' within this definition.

(Emphasis added.)

Because ISL produces byproduct material, it also meets the definition of *uranium milling*:

> *Uranium Milling* means any activity that results in the production of byproduct material as defined in this part.

[1] HRI Response on Technical and Financial Qualifications and Financial Assurance for Decommissioning, February 11, 1998 (HRI Qualifications Brief); Staff's Response on Technical Qualification, Financial and Decommissioning Issues, February 18, 1999 (Staff Qualifications Brief).

Furthermore, both pregnant lixiviant[2] and the yellowcake extracted from it are *source material,* pursuant to the following definition:

> *Source Material* means: (1) Uranium or thorium, or any combination thereof, in any physical or chemical form . . . .

The second clause of this definition, which is *not* quoted above, is separated by the disjunction ''or,'' indicating that if material complies with *either* clause in the sentence it is considered source material. Hence, when uranium (or uranium oxide) is suspended in the pregnant lixiviant it is ''uranium . . . in any physical or chemical form'' and it is source material.

This brings us, now, to the threshold of 10 C.F.R. § 40.36, whose meaning is hotly contested by the parties. Since pregnant lixiviant is source material, as we have just discussed, HRI's project falls within the following exception from section 40.36:

> Except for licenses authorizing the receipt, possession, and use of source material for uranium . . . milling . . . .

Hence, this section does *not* apply to this license and it is not necessary to discuss further Intervenors' arguments about failure to comply with the financial assurance provisions of this section. Since there is no violation of section 40.36, it is also unnecessary to consider Intervenors' argument that issuance of a license without a demonstration of financial assurance would be inimical to the public health and safety under 10 C.F.R. § 40.32(a). HRI will not be permitted to commence operations until it has complied with 10 C.F.R. Part 40, Appendix A, Criterion 9; consequently, there is no reason to believe that issuance of the license is inimical to public safety.

On the other hand, varying somewhat from my determination in LBP-99-1,[3] I have determined that 10 C.F.R. Part 40, Appendix A *does* apply to ISL mining. First, the heading of the Appendix says that it covers ''the disposition of tailings *or wastes*'' (emphasis added). Second, HRI is applying for a license to possess and use source material, as was just discussed. Accordingly, the first sentence of the Introduction to Appendix A does cover HRI's project, even though ISL mining does *not* fall within the clause that is separated by commas: ''byproduct material at sites formerly associated with such milling.''

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[2] *See* the description of the ISL process in LBP-99-1, 49 NRC at 31.

[3] In LBP-99-1, I determined that Appendix A was ''generally . . . not relevant'' to ISL mining but that ''[s]pecific criteria within Appendix A are applicable . . . .'' 49 NRC at 32-33. For reasons stated in this Partial Initial Decision, I now think that Appendix A does apply to ISL but that particular sections do not apply. In both approaches, it is necessary to consider the applicability of specific sections of Appendix A. Hence, this change in analysis does not affect the outcome.

Some of the provisions of Appendix A cover tailings and some cover wastes. By reading the criteria, it is not difficult to determine which apply to the HRI project. For example, Criterion 1 is addressed to permanent isolation of tailings and it does not apply to HRI, which does not plan to maintain any wastes on site permanently; it will transfer its wastes to an authorized disposal facility.[4]

This brings us to Criterion 10, which requires financial assurance for long-term surveillance of wastes. Despite the arguments of Intervenors (Intervenors' Assurance Brief at 6), that criterion is not applicable to HRI, which will take its wastes off site. It would make no sense to require them to fund long-term surveillance of a site from which all wastes have been removed.

Intervenors claim, without citation to the record or to any document, that HRI plans to establish surety only after completion of the Church Rock restoration demonstration project. Intervenors' Assurance Brief at 11. However, SUA-1508 LC9.5 prohibits that action and the Staff asserts that HRI will establish financial surety based on nine pore volumes, as required, before commencing operations. Staff Qualifications Brief at 19. I am persuaded, based on the evidence to which I have been directed, that there is no arrangement for HRI to depart from the condition contained in its license.

In this proceeding, it is not appropriate to challenge the validity of applicable regulations. 10 C.F.R. § 2.1239(a). Hence, the argument that a fair hearing has been denied by application of the regulations is beyond my jurisdiction. Intervenors' Assurance Brief at 20.

Intervenors have argued that it is improper to base surety for groundwater restoration on a Staff determination that it will take nine pore volumes for proper restoration of groundwater. *Id.* at 16. However, the requirement that restoration be estimated as being accomplished through flushing with nine pore volumes was reached through the professional judgment of the NRC and is contained in SUA-1508 LC9.5. The number of pore volumes was estimated by the Staff to be greater than the four pore volumes proposed by HRI. Staff's conclusion is that:

> On the basis of the data submitted by HRI, the staff conclude that practical production-scale groundwater restoration activities would be at most require a 9 pore volume restoration effort.

FEIS, NUREG-1508, at 4-40 (1997). Intervenors attempt to impugn the motives of the Staff but have not provided any analysis or expert testimony that casts doubt on the Staff estimate. Intervenors' Assurance Brief at 15-18. The Staff estimate, contained in LC9.5, establishes the amount of surety required before beginning the Church Rock Section 8 project. However, the surety amount may be increased if ''at any time'' it is determined that well-field restoration requires

[4] See the description of the ISL process in LBP-99-1, 49 NRC at 31.

greater pore volumes or a higher cost. SUA-1508 LC9.5. Hence, the surety may be adjusted *during* the Church Rock Section 8 ISL operations, and the surety for the other portions of the project may be affected by the experience in Section 8. There is no merit to Intervenors' argument that the Staff improperly utilizes nine pore volumes as a standard for calculating the amount of surety that is required before commencing operations.

ORDER

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 9th day of March 1999, ORDERED that:

1. Eastern Navajo Diné Against Uranium Mining and the Southwest Research and Information Center are denied relief with respect to their area of concern related to financial assurance for decommissioning issues.

2. This Decision is reviewable under 10 C.F.R. § 2.1253, pursuant to the procedures set forth in 10 C.F.R. §§ 2.786 and 2.763. The petition for review must be filed within 15 days of the service of this Decision.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. Thomas S. Elleman
Thomas D. Murphy

In the Matter of **Docket No. 50-029-LA-R**
(ASLBP No. 99-754-01-LA-R)
(License Termination Plan)

YANKEE ATOMIC ELECTRIC COMPANY
(Yankee Nuclear Power Station) **March 17, 1999**

In a proceeding considering the adequacy of the License Termination Plan (LTP) for the Yankee-Rowe reactor, the Atomic Safety and Licensing Board issues a Prehearing Conference Order that accepts four of the contentions advanced jointly by two Intervenors, rejects other proffered contentions, grants the requests for a hearing of the two Intervenors, and grants the request of a council of regional governments to participate as an interested governmental entity. The Board also consolidates the two Intervenors for the purpose of presenting the accepted contentions.

RULES OF PRACTICE: CONSIDERATION OF ISSUES

In a proceeding concerning the adequacy of an LTP, the scope of admissible contentions in the proceeding is coextensive with the scope of the LTP itself, which is governed by the requirements of 10 C.F.R. § 50.82.

RULES OF PRACTICE: CONSIDERATION OF ISSUES

In a proceeding concerning the adequacy of an LTP, issues that may be litigated include the adequacy of the site survey methodology.

REGULATIONS: PRESCRIBED DOSES

Although Commission rules do contemplate prescribed doses to average members of a critical group, they do not limit the scenarios in which the exposed individual must be placed. Alternative exposure scenarios may be appropriate based on site-specific factors that affect the likelihood and extent of potential future exposure.

PREHEARING CONFERENCE ORDER
(Ruling on Contentions)

This proceeding concerns the License Termination Plan (LTP) for the Yankee Nuclear Power Station, in Rowe, Massachusetts (Yankee-Rowe), for which Yankee Atomic Electric Co. (Licensee or YAEC) seeks approval. For reasons set forth below, we are approving four of the contentions advanced by two Petitioners for intervention — the New England Coalition on Nuclear Pollution, Inc. (NECNP), and the Citizens Awareness Network (CAN) — and are granting the requests for a hearing and petitions for leave to intervene of those Petitioners.

I. BACKGROUND

In a Memorandum and Order dated October 23, 1998, CLI-98-21, 48 NRC 185, the Commission determined, *inter alia,* that NECNP and CAN (Petitioners for intervention) had standing to become parties to this proceeding. It remanded the proceeding to the Atomic Safety and Licensing Board to determine whether the Petitioners had any viable contentions that would entitle them to be admitted to the proceeding as Intervenors. The Commission further ruled that the Franklin Regional Planning Board (FRPB) was not qualified, and hence could not participate, as an interested governmental entity pursuant to 10 C.F.R. § 2.715(c) and, additionally, lacked standing to participate as an intervenor. The Commission left open the possibility that the Franklin Regional Council of Governments (FRCOG), which had endorsed the FRPB petition, might seek participation rights as an interested governmental entity.

The Commission also outlined particular standards that the Licensing Board was to follow in ruling upon any proposed contentions. Among other matters, it

outlined general subjects that could be considered — indeed, must be considered now if ever — and others that could not be considered.

By Memorandum and Order (Schedules for Remanded Proceeding; Prehearing Conference), dated October 27, 1998 (later modified on November 30, 1998), the Licensing Board established schedules for the filing of proposed contentions, responses by the Licensee and NRC Staff, and for a prehearing conference for us to consider the contentions. Under the schedules, NECNP timely filed its proposed contentions on January 2, 1999 (NECNP Contentions) and CAN timely filed its proposed contentions on January 5, 1999 (CAN Contentions). The FRCOG timely filed a motion for leave to participate as a governmental entity on December 30, 1998.

The Licensee and the NRC Staff each filed their responses to the proposed contentions of NECNP and CAN on January 20, 1999 (YAEC Response to NECNP; YAEC Response to CAN; Staff Response). The Staff opposed all contentions. The Licensee initially appeared to accept reworded portions of two NECNP contentions and opposed other NECNP contentions and all of the CAN contentions. At the prehearing conference referenced below, the Licensee confirmed its opposition to all NECNP/CAN contentions and supported a position similar to that presented by the Staff. In a January 20, 1999 filing, the Licensee responded to the FRCOG motion, and the Staff responded to FRCOG on January 25, 1999. Both favored FRCOG participation as an interested governmental body, in the event a hearing were held on other Intervenors' contentions. A prehearing conference was held in Greenfield, MA, on January 26-27, 1999.[1]

The Licensing Board first outlines the general standards for contentions in this proceeding, including criteria defined by the Commission in CLI-98-21. Then we set forth our ruling on each of the contentions submitted by NECNP and CAN, as well as on the FRCOG motion. Because CAN, in its filing on contentions, has joined NECNP with respect to all of NECNP's contentions, we treat NECNP contentions first, referring to them as NECNP/CAN contentions. To the extent that CAN contentions and bases support or echo NECNP/CAN contentions, we deal with them in our discussion of the NECNP/CAN contentions. Next we discuss other contentions submitted by CAN. Where there is either overlap between the NECNP/CAN joint contentions and others submitted separately by CAN, or issue overlap among various NECNP/CAN contentions, we deal with the contentions consolidated by subject matter. Finally, we rule on the FRCOG Motion for Leave to Participate as an interested governmental

[1] The Licensing Board additionally conducted an evening session on January 26, 1999, to hear oral limited appearance statements from members of the public, as authorized by 10 C.F.R. § 2.715(a). Approximately 35 persons presented statements.

entity, dated December 30, 1998, which included several proposed contentions of its own.

II. GENERAL STANDARDS OUTLINED BY COMMISSION

In its Memorandum and Order, CLI-98-21, the Commission set forth standards for contentions in this particular proceeding. Beyond those generally applicable in all formal proceedings, *see* 10 C.F.R. § 2.714(b) and (d), they must relate to the LTP for which YAEC is seeking approval. As stressed by the Commission, ''[t]he scope of this proceeding is . . . coextensive with the scope of the LTP itself.'' CLI-98-21, *supra,* 48 NRC at 204.[2]

Regulatory standards that an LTP must satisfy are set forth in Title 10 of the *Code of Federal Regulations* (C.F.R.), Part 50 (Domestic Licensing of Production and Utilization Facilities), § 50.82 (Termination of License), which provides, in pertinent part, that an LTP must include:

> (A) A site characterization;
> (B) Identification of remaining dismantlement activities;
> (C) Plans for site remediation;
> (D) Detailed plans for the final radiation survey;
> (E) A description of the end use of the site, if restricted;[3]
> (F) An updated site-specific estimate of remaining decommissioning costs; and
> (G) A supplement to the environmental report, pursuant to [10 C.F.R.] § 51.53, describing any new information or significant environmental change associated with the licensee's proposed termination activities.

Significantly, the Commission indicated that spent fuel handling and storage and certain other matters are outside the scope of the LTP. In addition, the Commission excluded as subject matter in this proceeding any issues dealing with:

> (1) Staff's ''No Significant Hazards Consideration'' determination [or] issues pertaining to (2) the conduct of the January 13, 1998 public meeting, (3) spent fuel (including storage, management, and removal), (4) any future application by Yankee Atomic to terminate its Part 50 license, (5) the general ISFSI license currently available to Yankee Atomic pursuant to 10 C.F.R. § 72.210, [or] (6) any possible future application by Yankee Atomic for a site-specific license to establish and operate an ISFSI pursuant to 10 C.F.R. § 72.40. [CLI-98-21, *supra,* 48 NRC at 213.]

[2] The LTP (Rev. 0, May 1997) was submitted by the Staff to the Licensing Board on April 21, 1998. A revision (Rev. 1, December 1997) was also provided to the Board by the Staff on April 21, 1998. That revision modifies the LTP in certain respects. In reviewing claims by Petitioners with respect to the LTP, we utilize Rev. 1.

[3] The LTP provides (§§ 1.1 and 1.4, at 1-2 and 1-6) that the site will ''be returned completely to a 'green field' condition,'' so this particular criterion will not be involved.

The Commission also pointed to areas that were subject to litigation in this proceeding. In particular, it stressed that the LTP has at least one future consequence which must be litigated *now or never* — the site survey methodology. As it noted, ''[t]he LTP stage . . . is Petitioners' one and only chance to litigate whether the survey methodology is adequate to demonstrate that the site has been brought to a condition suitable for license termination. They are precluded from doing so at the license termination stage.'' 48 NRC at 206-07.

With these comments in mind, we turn to the contentions proffered by the Petitioners.

III. NECNP/CAN CONTENTIONS

NECNP submitted eight separate contentions (labeled A-H), with which CAN has joined. Some of those contentions have multiple bases or subparts, particularly Contention A, with ten bases, and Contention H, with six bases. We hereafter treat *seriatim* each of the bases and admit consolidated portions of contentions supported by certain bases identified below. (Because of subject-matter overlap among contentions, we consolidate and renumber those NECNP/CAN and CAN contentions or bases that we determine are admissible.)

NECNP/CAN Contention A claims that ''YAEC's LTP does not adequately characterize[4] the site'' for ten separate reasons set forth as differing bases for this contention.

1. *A.1*: YAEC's LTP does not adequately characterize the site's background radiation.

NECNP/CAN claim that background must be compared to neighboring areas and state that:

> YAEC has not detailed the distribution of radionuclides in off-site locations and has not surveyed off-site locations to the same precision as on-site locations.

NECNP Contentions at 3.

Petitioners augmented this basis at the prehearing conference (Tr. 10):

[4] We do not view the Petitioners' use of the term ''characterize'' to be limited to the concept in 10 C.F.R. § 50.82(a)(9)(ii)(A), ''site characterization.'' Rather, we view the term ''characterize,'' as used by Petitioners, to be synonymous with ''divulge'' or ''describe.''

> . . . Yankee has not determined background with sufficient precision, as we believe is required by the regulation, in order to make the kind of plan that is contemplated in the regulation.

YAEC interprets this contention as ''not done yet.'' Tr. 14-15. That is, YAEC will determine background, but it has not done so yet. YAEC points out that the survey process is an iterative one, with decision points throughout the total process. Tr. 19. The Staff points us to NUREG/CR-5849, *Manual for Conducting Radiological Surveys in Support of License Termination,* draft dated June 1992, a document that the Staff advises us to use to judge acceptability of the Licensee's plan. Tr. 28, 29.

NUREG/CR-5849 does say, in a phrase left out by the Staff in its response, that:

> Background is determined by measurements and/or sampling at locations on site or in the immediate vicinity of the site (*out to several kilometers from the site boundary*), which are unaffected by site operations. [Emphasis added.]

Compare NUREG/CR-5849 § 2.3.1, at 2.6, *with* Staff Response at 7. NUREG/CR-5849 goes on to state, also in § 2.3.1, at 2.6, that:

> Background samples and measurements for land areas should be collected at locations which are unaffected by effluent releases (upwind and upstream) . . .

See also, generally, the statement concerning background surveys (NUREG/CR-5849, § 2.3.1, at 2.5).

The Board agrees with YAEC that the Petitioners cannot at this time challenge whether the LTP has been or is being adequately implemented. Petitioners can and, as indicated by the Commission itself, should take advantage of this occasion to challenge the methodology and the plans for the survey. *See* CLI-98-21, *supra,* 48 NRC at 206-07. This is the time to challenge the plan, not how the plan is implemented. NECNP/CAN raise a specific and valid question whether the LTP adequately plans to determine background radiation necessary to determine radiation and radioactivity levels required to meet the requirements of 10 C.F.R. § 50.82(a)(11)(ii). We accept this basis, combined with related bases from other contentions, as an acceptable contention. (Contentions that we are accepting, which consolidate acceptable related portions of several contentions, are set forth in Part VI of this Order, *infra.*)

> 2. *A.2*: YAEC's LTP does not adequately characterize the site [because] YAEC cannot show that onsite locations have direct gamma exposure rates of ≤ 5 micro-Roentgens per hour (R/h) above background.

NECNP/CAN assert that, according to the LTP, YAEC has not yet conducted a complete survey of the YAEC site (NECNP Contentions at 5). They mention certain surface soil samples that have been taken and *in situ* gamma spec measurements that have been conducted (*citing* LTP at p. 2-4 for both) and acknowledge their usefulness for identifying local areas with higher than background γ-emitting radionuclides. NECNP/CAN conclude that YAEC needs to conduct a complete survey of the entire site using specified equipment to determine the presence and location of higher than background radiation readings. *Id.*

YAEC attributes this contention to ''a plain misreading of the LTP'' (YAEC Response to NECNP at 6). YAEC portrays NECNP/CAN as claiming that a particular type of measurement device will be utilized, when the type of device has not yet been selected. *See* Tr. 46. The Staff indicates that site surveys are ongoing and that NECNP/CAN have failed to demonstrate why the particular methodology they advocate for such surveys is necessary or appropriate (Staff Response at 7-8).

We reject NECNP/CAN's basis A.2, as set forth in NECNP Contentions at 5, as outside the scope of this proceeding. YAEC is not required to have conducted a complete survey of the site at this time. To the extent that this basis seeks to challenge the methodology of YAEC's survey, NECNP has not provided any support that YAEC's plan is inadequate with respect to the type of measuring instruments to be used. In that connection, Table 4.2 of the Final Status Survey Plan (FSSP), LTP at A-38, identifies several gamma-ray detecting instruments to be used in the site survey that have sensitivities of less than 5 R/h, implying a capability of detecting radiation levels in the stated range.

> 3. *A.3*: YAEC's LTP does not adequately characterize the site [because] direct γ [gamma] exposure rates of 5 R/h are not protective.
>
> *A.4*: YAEC's LTP does not adequately characterize the site [because] direct γ [gamma] exposure rates at 1 meter above ground will not protect children and other persons.
>
> *E.1*: YAEC's LTP is designed only to maintain *doses to an adult male* below 15 mrem per year; doses to children will likely be higher. [Emphasis in original.]
>
> *H.4*: YAEC's Final Status Survey Plan (FSSP) [part of the LTP] permits radiation exposures to exceed 15 mr/y.
>
> *CAN Contention 1*: Site release.

Contentions A.3, A.4, E.1, and H.4, as well as CAN Contention 1, are related and are considered collectively. All include as support the affidavit of an expert, Dr. Marvin Resnikoff, who attended the prehearing conference and had participated in the preparation of the contentions (Tr. 96-97).

In A.3, NECNP/CAN contend that, under the LTP, YAEC proposes to determine where areas of the site with direct gamma readings greater than 5 R/h above natural background are located. They contend that the exposure rate in these areas is not protective of public health and safety and, in addition, will not maintain the total effective dose equivalent (TEDE) to less than 15 mrem/yr for a full-time resident. NECNP/CAN calculate that, under the YAEC methodology, the TEDE would equal 17 mrem/yr for a full-time resident and hence would exceed the 15-mrem/yr standard. The 15-mrem/yr standard could only be satisfied, in their view, by a residential scenario in which an adult male spends 55% of his time indoors, 20% outdoors, and 1% gardening — unrealistic, in their opinion, for the particular site. They add that the dose rate of 5 R/h over background is only protective in the foregoing scenario. They further claim that a person such as a child, a stay-at-home parent, or home-bound individual would receive a direct gamma dose greater than 15 mrem/yr. *See* NECNP Contentions at 5-8.

In A.4, NECNP/CAN similarly claim that the direct gamma dose at the site posed by the LTP, 5 R/h at 1 meter above ground, provides a higher (effective) dose for children than for an adult and that the dose for children must be taken into account in determining LTP dose levels. In support of this claim, NECNP/CAN state that children (and other small persons) are closer to the radiation source (direct gamma radiation from contaminated land surfaces, i.e., groundshine) than are adult males, and they cite scientific authority to the effect that ''the dose to organs of the body from external radiation increases with decreasing body size.'' They seek inclusion in the LTP of a requirement that YAEC evaluate the likely radiation dose to a child and that it consider such information in determining release criteria for the site. *See* NECNP Contentions at 8-9.

In E.1, NECNP/CAN maintain, relative to the site remediation plans, that YAEC's LTP is designed to maintain doses to an adult male below 15 mrem/yr, and that doses to children will likely be higher. This is essentially the same claim as in A.4 (although not limited, as there, to gamma doses) since, they claim, it neglects to adequately take into account children.

In H.4, NECNP/CAN claim that the LTP's Final Status Survey Plan (FSSP) permits radiation exposures to exceed 15 mrem/yr, for the same reasons (e.g., failure to adequately consider children) as set forth for Contention A.3 above. *See* NECNP Contentions at 35.

The Licensee opposes all these contentions on the ground that they are attempts to reassert the challenge to the ''average member of the critical group'' site release criterion that the Commission has already ruled to be impermissible. *See* CLI-98-21, *supra,* 48 NRC at 211 n.14. The Licensee cites 10 C.F.R. § 20.1402 as defining the permissible site release criteria in terms of a TEDE of 25 mrem/yr above background to an ''average member of the critical group''

and it refers to 10 C.F.R. § 20.1003 for a definition of ''critical group'' — i.e., ''the group of individuals reasonably expected to receive the greatest exposure to residual radioactivity for *any applicable* set of circumstances [emphasis supplied].''

Based on the Board's review, the LTP indicates, at p. 1-2, that the methods governing the final status surveys are derived from regulatory guidance, specifically Regulatory Guide 1.86, Draft NUREG/CR-5849, and Draft NUREG-1500. The LTP references the ''critical group'' as being based on the residential scenario set forth in NUREG-1500, ''Working Draft Regulatory Guide on Release Criteria for Decommissioning: NRC Staff's Draft for Comment,'' dated August 1994. LTP at 2.1; FSSP at A-11. ''The average member of the critical group in [that] scenario is represented by an individual who lives on the site, ingests groundwater produced from beneath the site, and ingests food grown on site.'' NUREG-1500, at F-2. (These scenarios are described in greater detail in NUREG/CR-5512, Vol. 1, to which NUREG-1500 refers.)

Under the LTP (Rev. 1, at A-50), ''[a]ll realistic pathways for exposure, including direct exposure, drinking water, and agriculture, will be included.'' (Pathways are defined in NUREG-1500, at F-2 and F-3.) The LTP further states (Rev. 1, at A-50) that the ''objective of this analysis will be to demonstrate that the annual dose to any real individual will be well below the 15 mrem. [T]he dose calculated shall be the peak annual TEDE expected within the first 1000 years after decommissioning.''

According to the Licensee, NECNP's contentions here under review do not attack either the ''critical group'' or the exposure model for the average member; rather, they are portrayed by YAEC as contending that, for purposes of calculating a per-hour dose rate (which can be converted into TEDEs) ''one must use hypothetical persons [e.g., children] with personal circumstances that render them atypically susceptible to radiation.'' YAEC Response to NECNP Contentions at 7 n.8. The Licensee adds that NECNP would have the required showing to be that everyone in the critical group would receive less than 25 mrem/yr. The Licensee notes in this regard that it should be obvious that if every member were to receive less than 25 mrem/yr, then the average must therefore be less than 25 mr/yr and less than permissible under NRC rules. In addition, YAEC observes that, by setting a standard based on average exposure, the regulation necessarily contemplates that some individuals receive more and some less than the regulatory standard. In short, according to the Licensee, these contentions would constitute a challenge to a regulatory standard that is impermissible under 10 C.F.R. § 2.758.

The Staff also views these contentions as a challenge to NRC regulations, but it reasons that the applicable standard is not that established by 10 C.F.R. § 20.1402 but, instead, the criteria imposed under the Site Decommissioning Action Plan (Site Decommissioning Management Plan) (SDMP), for LTPs

submitted prior to August 20, 1998, such as that under consideration here.[5] The SDMP includes a cleanup criterion of less than 5 R/h above natural background at 1 meter for cobalt-60, cesium-137, and europium-152 that may exist in concrete, components, and structures. 57 Fed. Reg. 13,389, 13,390 (1992). The claim that the 5 R/h above background is not adequately protective, in the Staff's view, constitutes an impermissible challenge to NRC regulations — i.e., to the SDMP criteria referenced above. *See* Staff Response at 9.

In reviewing all these proposed contentions, it is apparent that the governing regulatory standard for the LTP here is that set forth in the SDMP, as asserted by the Staff. Any claim that the standard is not adequately protective would amount to an impermissible challenge to regulations. Contention A.3, to the extent it seeks criteria more restrictive than 5 R/h above background, would constitute such a claim and hence (to the extent it seeks more restrictive criteria) is rejected as a challenge to governing regulations.

On the other hand, the Licensee additionally has committed, in the LTP, to site-release criteria that require that the TEDE to the average member of the critical population group from residual contamination be maintained at less than 15 mrem/yr, criteria that we recognize would conform to the dose criteria set forth in 10 C.F.R. § 20.1402. LTP § 4.1, at 4-1. Those criteria define dose to a critical group. Because the LTP in fact commits to the 15-mrem/yr dose criteria that is consistent with 10 C.F.R. § 20.1402, we will also treat that standard as governing (as well as the SDMP release criteria). Thus, to the extent these contentions attempt to substitute a defined individual (e.g., child) for an average member of a critical group, they also constitute a challenge to NRC regulations, particularly the dose criteria defined in 10 C.F.R. § 20.1402. To the extent they attempt to substitute a defined individual for a critical group, these contentions are also rejected because they challenge 10 C.F.R. §§ 20.1402 and 20.1003. The Commission has already ruled in this regard that such challenges are not permissible. *See* CLI-98-21, *supra,* 48 NRC at 211 n.14.

There is one aspect of Contention A.3, however, that does not appear to be a challenge to governing regulations — i.e., the NECNP/CAN assertion (NECNP Contentions at 6-7) that:

> A full-time resident, spending time indoors and outdoors, would receive a direct gamma dose of 17 mrem/yr; . . . Thus, for a full-time resident, the TEDE would exceed 15 mrem/yr, under the YAEC survey methodology. A dose rate of 5 R/h greater than background is only protective under a residential scenario in which an adult male spends 55% of the time indoors, 20% outdoors and 1% gardening. This restricted scenario for direct exposure level, together with other pathways, will maintain TEDE below 15 mrem/year [as set forth in the

[5] The Commission, in 10 C.F.R. § 20.1401(b), exempts from current regulatory standards sites complying with the ''Site Decommissioning Management Plan (SDMP) Action Plan of April 16, 1992 (57 FR 13389).'' *See*, in particular, 10 C.F.R. § 20.1401(b)(3).

LTP] *for a hypothetical adult male,* according to NUREG-1500, using DandD software. [Emphasis in original.]

NECNP/CAN object to the use in the LTP of the above-stated residential scenario. Beyond their claim to have children considered, which we have discussed earlier and rejected, they seek a gardening scenario in which the exposed individual spends more of his time outside, performing gardening-type activities. As further explained at the prehearing conference:

> the residential scenario is different for the critical groups that are involved who may be present 100 percent of the time . . . . [Tr. 52.]
>
> . . . the rule that Yankee is following or would like to follow in the way that it does is to protect the average member of the most affected population, and this for them is an adult male weighing over 200 pounds who resides at the site only eight hours a day, is indoors 55 percent of the time, and is outdoors gardening one percent of the time.
>
> This standard has no relevance to our community. [Tr. 67.]

Contrary to the Licensee's assertion, this portion of Contention A.3 in fact does take issue with the ''critical group'' scenario.

Although Commission rules do contemplate prescribed doses to average members of a critical group, they do not limit the scenarios in which the exposed individual must be placed. As set forth in NUREG-1500, ''Working Draft Regulatory Guide on Release Criteria for Decommissioning: NRC Staff's Draft for Comment,'' which is incorporated into the LTP (*see, e.g., id.* at 1-2, A-vii, A-29), ''[t]he NRC staff anticipates that alternative exposure scenarios may be appropriate based on site-specific factors that affect the likelihood and extent of potential future exposure to residual radioactive contamination.'' NUREG-1500, at 12-13.

To the extent NECNP/CAN Contention A.3 challenges the scenario used in conjunction with the critical group referenced in the LTP, it sets forth an acceptable contention which, if proved, would require the LTP to be amended to define the average member of the critical group to be a gardener. We accept that portion of NECNP/CAN Contention A.3, as well as the related portion of CAN Contention 1.

4. *A.5*: On-site subsurface contamination not characterized.

   H.1: On-site subsurface contamination not surveyed.

   CAN Contention 2: Soil remediation.

   CAN Contention 7: Investigation of Handling of Rad Waste.

   CAN Contention 8: Waste Contamination Investigation: Groundwater, Soil and River Sediment Contamination.

NECNP/CAN Contentions A.5 and H.1 and CAN Contentions 2, 7, and 8 are all related and are considered collectively. NECNP/CAN challenge the plan for subsurface soil surveys by stating:

> YAEC has not characterized the full extent of on-site subsurface contamination.

NECNP Contentions at 3.

NECNP/CAN contend that subsurface contamination be determined to ensure adequate input into the NRC's DandD computer code (used for calculating screening values to demonstrate compliance with dose limits) and that YAEC appears to be sampling soil only to a depth of 15 cm. They argue that unless YAEC determines the full extent of soil contamination, it cannot determine the full costs for remediating the site. NECNP Contentions at 9, 10.

YAEC and the Staff exhort us to reject this basis. The Board agrees with YAEC (YAEC Response to NECNP at 10, 23-24) and the Staff (Staff Response at 23-24) that NECNP cannot use costs as a basis for this contention. Prior case law at CLI-96-1, 43 NRC 1, 9 (1996) appears controlling. In addition, in response to a Board question, YAEC advised (Tr. 17-19) that there may not be a clear division in the LTP between site characterization surveys and the FSSP. *See* LTP, generally, at 2-1 to 2-9.

The Board has reviewed the FSSP of the LTP. In section 4.4.4, YAEC provides some information on surface soil sampling but, as asserted by the Petitioners, criteria for subsurface soil sampling do not appear to be demonstrated. In that regard, 10 C.F.R. § 50.82(a)(9)(ii)(D) requires ''[*d*]*etailed* plans for the final radiation survey'' (emphasis supplied). A plan that does not address the general strategy for the measurement of subsurface radioactivity cannot be viewed as adequately meeting the requirements of 10 C.F.R. § 50.82. We are thus admitting a contention on subsurface soil sampling.

To the extent that CAN Contention 7 and CAN Contention 8 challenge the methodology for determining subsurface soil contamination, they are resolved by our ruling on this contention that permits consideration of the appropriate methodology. To the extent that CAN Contention 7 challenges the need for a NEPA analysis, it is discussed under CAN Contention 6, in Item IV.6, *infra,* and is there rejected.

CAN Contention 8 appears to express a concern that areas offsite in the Deerfield River beyond the site boundary and in Sherman Pond require monitoring. CAN Contentions at 23, 24. The Licensee, however, has committed to modify the LTP to conduct sediment analyses at the discharge point in the south end of Sherman Pond. *See* Attachment 1 to Letter from YAEC to Staff, BYR 97-064, dated December 18, 1997, at response to Question 3. In addition, the LTP § 2.4.6, at p. 2-7, discusses surveys conducted on the Deerfield River and

Sherman Pond. The FSSP § 4.4.4 also requires monitoring of observation wells for tritium and other radionuclides. FSSP at A-29, A-30.

To the extent that CAN Contention 8 challenges alleged YAEC radioactivity releases to offsite areas and a concomitant need to clean up those releases, it does not reflect adversely on the adequacy of the LTP, which in fact deals with the particular releases identified by the Petitioners. The LTP is only intended to ensure that ''the *facility and site* are suitable for release in accordance with the criteria for decommissioning in 10 C.F.R. Part 20, Subpart E.'' 10 C.F.R. § 50.82(a)(11)(ii) (emphasis supplied). The discharge points may be deemed part of the facility but are in fact covered by the LTP. Presumably, monitoring at these locations defines the highest levels at the offsite boundary. These levels will then be compared to the site release criteria. Accordingly, this portion of CAN Contention 8 has not established a ''genuine dispute'' with the Licensee with respect to the monitoring of offsite discharge points and is thus rejected.

On the basis of our review of the LTP and the arguments of the parties and Petitioners, the Board determines that NECNP/CAN have raised a specific and valid question whether the LTP adequately plans for determining onsite subsurface radioactive contamination to the extent necessary to meet the requirements of 10 C.F.R. § 50.82(a)(11)(ii). We therefore accept as a contention the bases set forth under NECNP/CAN A.5 relative to that topic.

5. *A.6*: YAEC has not detected all α-emitters likely to be present at Yankee-Rowe.

   H.2: YAEC must survey all α-emitters likely to be present at the Yankee-Rowe site.

In support of this contention, NECNP/CAN claim that YAEC is not surveying for α-emitters [alpha-emitters], such as plutonium isotopes and americium-241. NECNP also contends that YAEC should take soil samples and, specifically, measure for gross α. Further, YAEC ''should conduct an α-spec for all α-emitters on soil samples YAEC takes from over the entire 2000-acre site.'' NECNP Contentions at 10.

YAEC would characterize this basis as ''not done yet.'' Tr. 101-03. The Staff argues that the report referenced by NECNP (*see* NECNP Contentions at 10 n.17) is not sufficient basis for surveying the site for α-emitters.

Again the Board agrees with NECNP/CAN that they have raised a specific and valid contention whether the LTP adequately plans for determining the extent of α-emitter radioactive contamination to the extent necessary to meet the requirements of 10 C.F.R. § 50.82(a)(11)(ii). The Board's view is that the issue raised by NECNP/CAN is that the plan is not complete with respect to its description of the survey methodology. The bottom line is the validity and acceptance of the final site survey which will be the final basis for terminating the

license. Neither YAEC nor the Staff at this contention stage has demonstrated that the LTP and site survey plan, in their present form, meet the acceptance criteria established by the NRC. A ''genuine dispute'' between YAEC and the Petitioners is here present, and an accepted contention on this subject is set forth in Section VI, *infra.*

6. *A.7*: YAEC's LTP does not adequately characterize the site [because] YAEC's designation of affected versus non-affected areas of the site is arbitrary.

NECNP/CAN argue that, based on a review of NRC inspection reports, YAEC impermissibly reclassified an area from affected to nonaffected. NECNP Contentions at 10, 11. YAEC responds that the LTP explains in detail how the site is divided into gross classifications for survey purposes, how the gross classifications are tested, and how reclassification may be triggered based on survey results; and, whether one agrees or disagrees, the process is far from arbitrary (YAEC Response to NECNP at 11). The Staff claims NECNP has misinterpreted the inspection report. Both YAEC and the Staff fault NECNP/CAN for failing to satisfy the contention criteria set forth in 10 C.F.R. § 2.714(b).

A reading of both the inspection report and the LTP indicates that the reclassification clearly was based on criteria contained in the LTP and thus cannot be classified as an arbitrary decision. There is accordingly not an adequate basis for the NECNP/CAN contention that YAEC has arbitrarily characterized the site. In any event, this claim does not challenge the LTP but the future implementation of the LTP. It is thus not a permissible challenge that can be asserted in this proceeding. For these reasons, the contention is rejected.

7. *A.8*: YAEC's LTP does not adequately characterize the site [because] YAEC has averaged out high soil concentrations of radiation.

NECNP/CAN claim that, rather than investigating the cause of high soil concentrations, YAEC takes the occurrence as reason to take more samples until the average of all samples falls below guideline values. They assert that, by such averaging, YAEC philosophy is not consistent with NUREG/CR-5849. NECNP Contentions at 12.

In response, YAEC claims the methodology is not as portrayed by NECNP/CAN but, rather, that the LTP does indeed follow precisely the NUREG/CR-5849 methodology. As further pointed out by YAEC and the Staff, this challenge stems in part from a misinterpretation of an NRC inspection report, which pertains to an example of implementation of the plan, not the adequacy of the plan itself. YAEC Response to NECNP at 12; Staff Response at 13, 14.

We agree with YAEC and the Staff that NECNP/CAN have misinterpreted the inspection report. Our reading of the LTP is that it appears to track NUREG/CR-5849. *See* FSSP § 4.3.3 and NUREG/CR-5849, Fig. 4-4. The survey data and direct sampling results discussed in the inspection report are for the purpose of locating regions that require remediation and for measuring radioisotope concentrations that are the inputs to the dose calculation model.

We conclude that this basis does not challenge the LTP but only an aspect of the implementation of the LTP. It is not a permissible challenge in this proceeding and thus is rejected.

8. *A.9*: YAEC's LTP does not adequately characterize the site [because] YAEC's scan surveys are consistently biased toward low readings.

Citing an NRC Inspection Report, NECNP/CAN claim that side-by-side comparisons between YAEC's energy-compensated Geiger Mueller (GM) detector with Oak Ridge's much more precise Pressurized Ionization Chamber (PIC) showed a low bias by 10% to 20%. They further assert that YAEC employed a conversion factor to correct GM rates, without having identified the basis for the discrepancy. NECNP Contentions at 12.

YAEC (YAEC Response to NECNP at 12) and the Staff (Staff Response at 14, 15) point out that the Petitioners give no reason why such a bias causes the LTP to be inadequate, specifically, why the conversion factor used is inadequate. YAEC adds that the ''discrepancy'' lies in the differing response tendencies of the two types of detectors.

In our view, this basis does not challenge the LTP but the implementation of the LTP. It is not a challenge for which we could grant meaningful relief in this proceeding. Accordingly, we reject this contention.

9. *A.10*: YAEC's LTP does not adequately characterize the site [because] YAEC has not evaluated scanning sensitivity for field survey instruments.

Under basis A.10, NECNP/CAN claim, citing an NRC inspection report, that YAEC has performed a site survey but has not yet evaluated the scanning sensitivity for field survey instruments. NECNP Contentions at 12, 13. As YAEC (YAEC Response to NECNP at 13) and the Staff (Staff Response at 15) point out, however, this basis does not challenge the adequacy of the LTP but rather the implementation of what already exists in the plan. Because only the adequacy of the LTP, and not its implementation, is at issue in this proceeding, this topic is not open for litigation in this proceeding and, for that reason, we reject this contention.

10. *B.*: YAEC's LTP Contains Unreviewed Safety Questions.

D.: Inadequacy of YAEC's Plans for Final Site Survey.

G.: Inadequacy of YAEC's Remaining Cost Estimate.

CAN-3: NRC Oversight and Abdication of Authority.

CAN-4: Security.

CAN-5: Monetary Security.

These contentions, including all four parts of NECNP/CAN B and both parts of NECNP/CAN D, focus upon and challenge portions of YAEC's plans for handling and disposal of spent fuel. As such, they are barred from consideration in this proceeding by the Commission's Order in CLI-98-21 and hence are rejected for litigation.

In seeking admittance of the foregoing contentions, NECNP/CAN recognize that they might well be rejected (as they have been) because of the Commission's ruling in CLI-98-21. They seek our advice as to when such contentions might be litigated, particularly those pertaining to dry storage. NECNP/CAN also ask us to present these questions to the Commission, if we do not know the answers. NECNP Contentions at 17-19.

We do not know the answer to the questions in this regard posed by NECNP/CAN. We are highlighting the questions so that the Commission may be aware of them and may wish to respond in the context of determining any possible petitions for review of this Prehearing Conference Order (to the extent that review may be available, *see* 10 C.F.R. § 2.714a) or of our Final Initial Decision.

11. *C.*: YAEC's Site Remediation Plans are Inadequate.

NECNP/CAN claim that, contrary to the requirements of 10 C.F.R. § 50.82(a)(9)(ii), YAEC's site remediation plans are based upon inadequate data and will not protect public health and safety. NECNP Contentions at 19. They support this claim by asserting that, during the site characterization process, subsurface soil contamination monitoring has been inadequate and will continue to be inadequate through the FSSP. NECNP then asserts that the inadequacy in these monitoring activities means that YAEC has not determined the full volume extent of radioactive contamination on the site. NECNP Contentions at 19-20.

NECNP concedes that this contention is basically additional justification for its Basis A.5 discussed above. *See* Tr. 146. YAEC and the Staff urge us to exclude this contention. YAEC asserted in its defense against admitting Contention A (*see* Tr. 17-19) that site characterization surveys and final site

surveys are concurrently performed. Thus, according to YAEC, this contention addresses implementation and is not admissible.

However, to the extent that the basis for this contention supports NECNP/CAN Contention A.5, we accept it as an additional basis for Contention A.5. To the extent that it is critical of YAEC's implementation of its site characterization plan, we reject this basis. In summary, we have included the substance of this contention in Contention A.5 and this portion of Contention C is consolidated with, and will be litigated as part of, that contention.

12. *E.*: Inadequacy of YAEC's Site Remediation Plans.

E.1: *See* discussion under Item 3.

E.2: YAEC's Guideline Values are not supported and, in any case, are too high.

H.3: YAEC's FSSP method for determining Guideline Values is vague.

NECNP/CAN claim YAEC Guideline Values are not supported and are too high. With regard to this basis, YAEC and the Staff appear to agree that NECNP/CAN's concern about Ag-108m is a nonissue, since in fact, the FSSP does require summing ratios. *See* FSSP at A-10, Eq. 3.1.

Based on our review of the FSSP, the concerns expressed in the basis for Contention E.2 appear to us to be nonissues for the reasons expressed by YAEC and the Staff and do not appear to present a controversy. We accordingly reject this contention.

13. *F.*: Inadequacy and Insufficiency of YAEC's LTP ALARA Analysis.

H.5: YAEC's ALARA analysis is completely *ad hoc* and vague.

NECNP/CAN claim that the ALARA analysis in the LTP is inadequate. They claim that, contrary to NRC regulations, the YAEC LTP does not show that the ''residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA).'' 10 C.F.R. § 20.1402.

NECNP bases this contention on the supposition that YAEC uses an *ad hoc* and flawed cost-benefit analysis with respect to determining whether soil remediation activities YAEC proposes are ALARA. NECNP Contentions at 27-29; Tr. 149-50. Both the Staff and YAEC counter that NECNP's arguments are not directed to an inadequacy in the methodology of performing the ALARA analysis. The Staff points out that the methodology used by YAEC follows the general approach outlined in NUREG-1500. Staff Response at 21. YAEC asserts that the values that NECNP would use in the cost-benefit analysis are just not realistic. YAEC Response to NECNP at 20-23; Tr. 150-52.

We agree that the bases put forth by NECNP/CAN for this contention are inadequate to demonstrate a genuine dispute concerning YAEC's methodology in determining whether the site remediation work to be done at Yankee-Rowe will be ALARA. *See* 10 C.F.R. § 2.714(b)(2)(iii). To the extent that NECNP's bases challenge the implementation of YAEC's ALARA strategy, that matter is not at issue in this proceeding. This contention is rejected.

> 14. *H.*: Inadequacy of YAEC's Final Status Survey Plan. [All five bases for this contention discussed and resolved through related contentions, as indicated below.]
>
> *H.1*: On-site subsurface contamination not surveyed. [*See* Item III.4, NECNP/CAN Contention A.5.]
>
> *H.2*: YAEC must survey all α-emitters likely to be present at Yankee Rowe site. [*See* Item III.5, NECNP/CAN Contention A.6.]
>
> *H.3*: YAEC's FSSP method for determining Guideline Values is vague. [*See* Item III.12, NECNP/CAN Contention E.2.]
>
> *H.4*: YAEC's FSSP permits radiation exposures to exceed 15 mr/y. [*See* Item III.3, NECNP/CAN Contention A.3.]
>
> *H.5*: YAEC's ALARA analysis in the FSSP is completely *ad hoc* and vague. [*See* Item III.13, NECNP/CAN Contention F.]
>
> *H. Additional Bases*: The full extent of site contamination has not been determined, based on (1) below-building contaminated piping is sitting within the water table, and (2) the estimated background Cs-137 soil concentration of zero pCi/g should be memorialized in the FSSP.

These additional bases (NECNP/CAN Contentions at 36, 37) are each derived from NRC Inspection Report No. 50-29/98-03. The Licensee, in its response to the NECNP contentions, fails to address these additional bases. The Staff, however, contends that the asserted bases do not support these claims. The first claim relates to the discovery of piping, but the report does not indicate that the piping is contaminated. Nor does the report provide any basis for NECNP's ''speculation'' regarding contamination of the water table. We agree with the Staff and reject the contention for failing to demonstrate that a genuine dispute exists with YAEC on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii).

The second of these bases cites the inspection report to the effect that YAEC had prepared a study of background soil at offsite locations to obtain background readings for Cs-137. NECNP/CAN note that YAEC stated that for affected areas it will assume a background radiation level of zero for Cs-137. NECNP/CAN applaud this assumption but seek to have it memorialized in the FSSP. The Staff asserts (Staff Response at 26-27) that there is no requirement that YAEC assume a background radiation level of zero for Cs-137, and faults the contention for failing to provide an explanation why it should be incorporated in the FSSP.

Thus, according to the Staff, the basis fails to explain why a genuine dispute exists, as required by 10 C.F.R. § 2.714(b)(2)(iii).

We perceive a dispute between YAEC and NECNP/CAN on this matter but, lacking any regulatory requirement that the FSSP include any such assumption, we could not grant the relief sought by NECNP/CAN and reject the contention on that basis. This will not, of course, preclude YAEC from assuming a background radiation level of zero for Cs-137 in the FSSP, if it elects to do so. And, indeed, at the prehearing conference, YAEC committed to apply a zero Cs-137 background for disturbed soil areas as well as to asphalt in the affected areas. Tr. 258.[6]

IV. CAN CONTENTIONS

1. CAN Contention 1: Site Release

This contention is discussed and resolved under NECNP/CAN Contention A.3, Item III.3, *supra.*

2. CAN Contention 2: Soil Remediation

This contention is discussed and resolved under NECNP/CAN Contention A.5, Item III.4, *supra.*

3. CAN Contention 3: NRC Oversight and Abdication of Authority

This contention, which is among those challenging the Commission's handling of spent fuel handling and storage, is discussed and resolved under NECNP/CAN Contention B, Item III.10, *supra.*

4. CAN Contention 4: Security

This contention, which is another raising an aspect of spent fuel handling and storage, is discussed and resolved under NECNP/CAN Contention B, Item III.10, *supra.*

[6] The transcript of the prehearing conference should be corrected to reflect that this commitment was made by Thomas Dignan, Esq., representative of YAEC.

5. CAN Contention 5: Monetary Security

This contention relates to costs of an ISFSI and is included among those discussed and resolved under NECNP/CAN Contention B, Item III.10, *supra.*

6. CAN Contention 6: Waste Issues

This contention asserts that the NRC Staff violated the National Environmental Policy Act (NEPA) by failing to prepare a supplemental Environmental Impact Statement (EIS) for the cleanup of the Yankee-Rowe site. In support, it claims that there is both documented and undocumented contamination of the site and that a further study is necessary to determine the sources, extent, and potential for plumes of contamination (including tritium) under the surface of the soil.

YAEC and the Staff each urge us to reject this contention. YAEC claims that CAN fails to comprehend the nature of an EIS by claiming that one is required whenever a new impact is discovered. YAEC adds that approval of the LTP is not a major federal action involving increased environmental risk that might trigger the need for an EIS; rather, the LTP will eventually result in a reduction of environmental impact.

YAEC also references the Commission's Final Generic EIS for decommissioning as including all the potential effects to which CAN refers. YAEC asserts that, where a supplemental EIS is sought, a petitioner must show both that the federal action is one that would require an EIS in its own right and that, for some specific reason, the conclusions of the generic EIS are not applicable to the particular licensing action in question. Further, YAEC questions our jurisdiction to determine that a supplemental EIS is required — although it concedes that a hearing record and decision (as could be created if we were to admit this contention) might in effect serve as an addendum to an EIS. *See New England Coalition v. NRC,* 582 F.2d 87, 93-94 (1st Cir. 1978); *Citizens for Safe Power v. NRC,* 524 F.2d 1291, 1294 & n.5 (D.C. Cir. 1975); *Ecology Action v. AEC,* 492 F.2d 998, 1000-02 (2d Cir. 1974). *See* YAEC Response to CAN at 15, 16.

For its part, the Staff asserts that CAN's claims are groundless, that the Commission's regulations clearly set forth when an EIS must be prepared (*see* 10 C.F.R. § 51.20(a)) and none of the reasons set forth by CAN meet these requirements. Staff Response at 36, 37.

Leaving aside the jurisdictional arguments propounded by the Licensee, we agree both with the Staff analysis and with YAEC's assertions that CAN has not provided adequate justification to warrant our consideration of the environmental impacts of the LTP. We accordingly reject this contention.

7. CAN Contention 7: Investigation of Handling of Rad Waste

This contention is discussed and resolved under NECNP/CAN Contention A.5, Item III.4, *supra.*

8. Waste Contamination Investigation: Groundwater, Soil, and River Sediment Contamination

This contention is discussed and resolved under NECNP/CAN Contention A.5, Item III.4, *supra.*

V. FRCOG PARTICIPATION

By Motion dated December 30, 1998, FRCOG filed a motion to permit it to participate as an interested governmental entity, pursuant to 10 C.F.R. § 2.715(c). FRCOG identifies itself as the regional government created by the Massachusetts legislature to replace the Franklin County Commission, the former county government, and it sets forth several areas of interest that it wishes to have explored in the proceeding. In the cover letter to its motion, FRCOG advises that it will utilize the services of the FRPB, which the Commission had found not to be a governmental entity and to lack standing to intervene.

Both YAEC and the Staff offer no opposition to FRCOG participation, so long as a hearing were granted on at least one of the contentions proffered by NECNP or CAN. They both oppose any of FRCOG's areas of interest as being considered appropriate contentions.

Having considered the FRCOG statement of its organization, we find it to qualify as an interested governmental entity and permit it to participate under 10 C.F.R. § 2.715(c). FRCOG has not submitted formal contentions in this proceeding but has listed certain areas of interest. Because these areas of interest do not qualify as contentions, we do not admit them as such but only note that, to a large extent, they involve issues similar to those that we have admitted (or, with respect to spent fuel storage, rejected) earlier in this order. *See Gulf States Utilities Co.* (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760, 768-69 (1977). FRCOG will, of course, be permitted to participate in the adjudication of any of the issues that we are admitting as contentions.

FRCOG requests additional relief in the form of $100,000 to support its efforts. As this Board ruled in LBP-98-12, 47 NRC 343, 358 (1998), NRC does not possess the authority to grant such a request. (This ruling was not modified by the Commission in CLI-98-21.)

With regard to FRCOG's request that YAEC conduct no activity ''furthering'' the LTP, this is outside the authority of this Board. *See* 10 C.F.R. § 50.91(a)(4).

Finally, FRCOG requests 30 days' notice before a hearing or a meeting. Commission regulations do not establish such a requirement for meetings, and we lack authority to impose one for meetings not directly tied to the adjudication before us. With regard to hearings, this Board has authority to set schedules for hearings (10 C.F.R. § 2.718), and will exercise this authority consistent with the needs of all parties or participants such as FRCOG. As appropriate, we also will be guided by the Commission's recent *Statement of Policy on Conduct of Adjudicatory Proceedings,* CLI-98-12, 48 NRC 18 (1998).

VI. ADMITTED CONTENTIONS

Based on our discussion above, we are consolidating various bases relating to similar subject matter and admitting the following four contentions:

> *Contention 1.* Contrary to the requirements of 10 C.F.R. § 50.82, the methodology YAEC employs in its LTP Final Site Survey Plan to determine background radiation is not adequate to demonstrate that the LTP will assure the protection of public health and safety.
>
> *Contention 2.* Contrary to the requirements of 10 C.F.R. § 50.82, the methodology YAEC employs in its LTP Final Site Survey Plan to determine subsurface soil contamination is not adequate to demonstrate that the LTP will assure the protection of public health and safety.
>
> *Contention 3.* Contrary to the requirements of 10 C.F.R. § 50.82, the methodology YAEC employs in its LTP Final Site Survey Plan to determine alpha emitting radioactivity is not adequate to demonstrate that the LTP will assure the protection of public health and safety.
>
> *Contention 4.* Contrary to the requirements of 10 C.F.R. § 50.82, the methodology YAEC employs in the LTP for the selection of applicable scenarios for the calculation of its final release doses is not adequate to demonstrate that the LTP will assure the protection of the public health and safety.

In the litigation of these contentions, NECNP and CAN are both considered sponsors and are hereby consolidated for that purpose.

VII. SETTLEMENT

In its regulations, the Commission recognizes that it is in the public interest for particular issues or an entire proceeding to be settled, and it encourages parties and licensing boards to seek fair and reasonable settlements. 10 C.F.R. § 2.759. We believe that the issues in this proceeding are amenable to settlement and encourage the parties to seek a fair and reasonable settlement of any or all of the contentions that we are approving in this Order.

VIII. ORDER

In light of the foregoing discussion, and based on the entire record of this proceeding, it is, this 17th day of March 1999, ORDERED:

1. NECNP/CAN Contentions A.1, a portion of A.3, A.5, A.6, a portion of C, and portions of H, as discussed above, are hereby admitted as contentions in this proceeding, as set forth in Part VI of this Order. The requests of NECNP and CAN for a hearing on those contentions are hereby *granted.* NECNP and CAN are *admitted* as parties to this proceeding. The Licensing Board will issue a Notice of Hearing in the near future.

2. The remaining NECNP/CAN and CAN contentions or bases are hereby rejected.

3. The motion for FRCOG to participate as an interested governmental entity is hereby *granted* to the extent indicated earlier in this Order.

4. NECNP and CAN are hereby consolidated for the purposes of litigation of the admitted contentions.

5. A telephone prehearing conference will be convened on Wednesday, March 31, 1999, at 10 a.m. EST, to work out schedules for discovery, other prehearing conferences, and the evidentiary hearing.

6. This Order is subject to appeal in accordance with the provisions of 10 C.F.R § 2.714a. Any petitions for review meeting applicable requirements set forth in that section must be filed within 10 days of service of this Prehearing Conference Order.

THE ATOMIC SAFETY AND
LICENSING BOARD

Charles Bechhoefer, Chairman
ADMINISTRATIVE JUDGE

Dr. Thomas S. Elleman
ADMINISTRATIVE JUDGE

Thomas D. Murphy
ADMINISTRATIVE JUDGE

Rockville, Maryland
March 17, 1999

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Thomas D. Murphy, Special Assistant

In the Matter of **Docket No. 40-8968-ML**
(ASLBP No. 95-706-01-ML)
(Re: Leach Mining and Milling License)

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101, Albuquerque, NM 87120)

March 18, 1999

The Presiding Officer ruled that, pursuant to 10 C.F.R. § 40.4: ''background radiation'' does *not* include radiation from source, byproduct, or special nuclear materials regulated by the Commission. Accordingly, the Presiding Officer asked the parties to answer questions to clarify whether Licensee is in compliance with 10 C.F.R. § 20.1301, which states: ''(a) Each licensee shall conduct operations so that — (1) The total effective dose equivalent to individual members of the public from the licensed operation does not exceed 0.1 rem (1 millisievert) in a year, *exclusive of the dose contributions from background radiation . . . .*''

MEMORANDUM AND ORDER
(Questions Concerning Radioactive Air Emissions)

MEMORANDUM

This Memorandum covers Radioactive Air Emission issues raised by the Eastern Navajo Diné Against Uranium Mining (ENDAUM) and the Southwest

Research and Information Center (SRIC).[1] ENDAUM and SRIC (collectively, Intervenors) request me to reject the license application of HRI on the grounds of these two principal alleged air emission deficiencies:

> First, HRI and the NRC Staff fail to provide reasonable assurance that radioactive emissions from the Crownpoint Project will be maintained within regulatory limits in 10 C.F.R. Part 20. In fact, existing non-background levels of radiation at the Church Rock [sic] already exceed regulatory limits, thus precluding the addition of a new source that would further jeopardize public health and safety. Second, the Final Environmental Impact Statement purported to support the issuance of the license misrepresents, distorts, or fails to disclose key information about the significant impacts of airborne emissions from the Crownpoint site.

In order to resolve this issue properly, the Presiding Officer has determined, for reasons set forth below, that additional information is required, as specified in the accompanying ORDER.

DISCUSSION

Radiation will be produced from ISL mining because radon is dissolved in pregnant lixiviant, which comes from the ground under pressure. When the lixiviant is no longer under pressure, the radon comes out of solution and is released to the atmosphere.

In support of its first allegation, Intervenors argue that to the extent radon-222 is a decay product of radium-226, a constituent of uranium ore, it cannot be considered to constitute background radiation and cannot be excluded from evaluating HRI's compliance with Part 20. Intervenors' Brief at 3-6. Intervenors claim that the Staff and HRI ignore the statement of purpose of Part 20 which clearly provides that the regulations are designed to protect members of the public from all sources of radiation other than background, including unlicensed sources. Intervenors' Brief at 7; *see also* 10 C.F.R. § 20.1001(b).

Intervenors also assert that HRI and the Staff in their Environmental Report and FEIS improperly exclude from their dose calculations contributions from sources of radon and gamma radiation at the Church Rock site by mischaracterizing them as ''natural background radiation.'' Intervenors' Brief at 8. Intervenors cite section 3.7 of the DEIS as evidence for elevated radiation levels at the Church Rock site. Intervenors theorize that based on combined elevated radon emissions and elevated gamma radiation readings at offsite locations resulting

[1] ENDAUM and SRIC filed their Brief (Intervenors' Brief), accompanied by Testimony of Bernd Franke (Franke Testimony), on January 11, 1999. Hydro Resources, Inc. response on February 11, 1999 (HRI Response) included an Affidavit of Alan C. Eggleston, Ph.D., dated February 10, 1999 (Eggleston Affidavit). The Staff of the Nuclear Regulatory Commission responded on February 18, 1999 (Staff Response) and attached an Affidavit of Christepher A. McKenney (Staff Exh. 1).

from prior mining activities, the dose to the nearest resident is already in excess of the limits set in Part 20. Intervenors' Brief at 9-14. Finally, Intervenors [vaguely] challenge HRI's dose projections by citing their expert's contention that a time-weighted groundwater source term should have been used as the basis for the calculations instead of the arithmetically averaged groundwater source term used by the Staff and HRI in their use of the MILDOS code to calculate offsite doses.

Intervenors' expert, Franke, calculates that a large part of the annual dose from radon-222 in a given year occurs from exposures over very few hours at situations where wind speed and atmospheric dispersion are low. Franke calculates in a ''worst-case'' situation that there is a 50% chance that the regulatory limits will be exceeded. Intervenors' Brief at 14-19. Franke Testimony Exh. 2 at 10-12.

HRI responds that Intervenors misinterpret Part 20. HRI argues that:

> demonstrating both common sense and a grasp of the obvious, the agency charged with promulgating regulations to control airborne radiological emissions from Atomic Energy Act regulated facilities has developed a regulation requiring licensee's operations to meet prescribed emissions limits calculated based solely on radiation sources within the licensee's control.

HRI Response at 7.

The NRC Staff agrees with HRI that the Intervenors have misread Part 20 and disagrees with the findings in Franke's testimony. The Staff argues that 10 C.F.R. § 20.1302(b)(1) actually refers to ''the total effective dose equivalent to the individual likely to receive the highest dose from the licensed operation.'' Staff then avers that the dose should be calculated or measured by identifying a real individual, not a hypothetical individual. The Staff's expert, McKenney, then uses conservative assumptions — other than the assumption that all radiation now on the site is background radiation — and finds that HRI could not release sufficient radon to exceed the regulatory requirements during plant operations. McKenney also postulates an alternate worst-case scenario for a hypothetical individual and calculates a dose less than regulatory criteria. Staff Response at 4-5 *citing* Franke Testimony Exh. 2 at 10-11 and Staff Exh. ¶¶ 9 and 10.

However, Mr. McKenney rejects the argument made by Intervenors that a substantial portion of the radiation present on the site is *not* entitled to be counted as background. Mr. McKenney states, at 2-3 of his affidavit (attached to the Staff Response):

> The Franke Report, at 2, states that ''existing radon levels generated by previous uranium mining'' must be considered in evaluating whether HRI would be able to comply with 10 C.F.R. Part 20 requirements. I disagree. The statement of consideration (SOC) for Part 20 states that the licensee is not responsible for sources beyond the licensee's control. *See* 56

> Fed. Reg. 23360, at 23374 (May 21, 1991). The basis of this SOC guidance lies in the fact that the pedigree of airborne radon (or other nuclides) cannot be determined. Thus, one cannot distinguish between radon produced by the NRC-licensed activities of one or more licensees, and radon emanating from natural background sources. Similarly, one cannot distinguish radon produced by windblown uranium mill tailings from that released as part of in-situ leach mining or from the natural surrounding environment. The pedigree of the radon is based on what the source is, not where the source is located. Moreover, as a practical matter, if licensees had the responsibility to modify their effluents based on the action of other sources nearby, licensees could violate a license condition or the dose limit in Part 20 without releasing anything.

In support of their second allegation about deficiencies in the FEIS, Intervenors state that:

> By ignoring data in its own possession regarding existing gamma radiation levels, by distorting data on existing radon levels, and by misrepresenting existing radon levels as ''natural background'' radiation, the NRC creates the false impression that airborne radiological emissions from the Crownpoint Project will be far below regulatory limits, and that therefore they will have little or no impact on public health. Thus, the FEIS ''impairs fair consideration'' of the environmental impacts of the Crownpoint Project by misleading agency decision makers and the public into believing that they are benign.

Intervenors cite Franke's testimony, discussed above, as evidence that the combined existing and prospective radiation levels of the Crownpoint project pose a significant health threat to the neighboring population. According to the Intervenors, these threats are not acknowledged in the FEIS. Intervenors' Brief at 22-23.

HRI argues that the FEIS is adequate and that Intervenors misinterpret background radiation and NRC regulations. In addition HRI avers that elevated gamma radiation at the Section 8 Church Rock site was measured before a site cleanup was performed. HRI reiterates that in accordance with License Conditions 9.8 and 10.30, it will monitor the site to establish background levels. HRI claims that remnant radiation from previous mining and milling activities at Church Rock is now due only to natural background. HRI Response at 13-14.

The Staff points out that Mr. Franke's findings may show invalidly high radiation readings because a temporary radon cover was placed on the mill tailings cell there in 1995, which was after the Franke Study was completed.[2] Staff also states, without explaining the significance, that the underground mine site on the adjacent Section 16 (*see* FEIS at 3-20) has never been completely remeditated.[3]

[2] McKenney Affidavit at 2-3 (¶ 5).
[3] *Id.* at 3 (¶ 5).

The NRC Staff does not address any of the Intervenors' allegations concerning the FEIS.

ANALYSIS

Discussion of Background Radiation

Our analysis of Intervenors' argument begins with 10 C.F.R. § 20.1301 and with the regulatory definition of background radiation found in 10 C.F.R. §§ 40.4 and 20.1003. (The definitions of background radiation, source material, and byproduct material are identical in both sections.)

Section 20.1301 states:

> (a) Each licensee shall conduct operations so that—
>
> (1) The total effective dose equivalent to individual members of the public from the licensed operation does not exceed 0.1 rem (1 millisievert) in a year, *exclusive of the dose contributions from background radiation* . . . .

This definition places a limit on the ''total effective dose equivalent.'' It then defines a class of contributions to dose that are excluded. One type of excluded dose is the dose from background radiation. It appears that the list of excluded doses, which includes other irrelevant sources of dose, is intended to be a complete listing of excluded dose. Hence, I infer that if the source of a dose is not *excluded* then it is included in the total effective dose equivalent from licensed operations, for the purpose of complying with 10 C.F.R. §§ 20.1301 and 20.1302.

Background radiation is excluded from the total effective dose equivalent. Background radiation *includes* radiation from ''naturally occurring radioactive material.'' Thus, at first blush, background radiation appears to *include* uranium ore, which is naturally occurring. However, our analysis may not rest there because of the regulatory definition of background radiation:

> ''*Background radiation*'' does *not* include radiation from source, byproduct, or special nuclear materials regulated by the Commission.

10 C.F.R. §§ 40.4 and 20.1003 (emphasis added). It is therefore necessary to determine whether the material left in or on the ground after prior mining activities contains *source, byproduct, or special nuclear materials regulated by the Commission.* If the material is excluded by this clause, then it is *not* part of background radiation.[4]

[4] When the words of the regulation are clear, there is no need to refer to the Statement of Considerations to interpret them.

First, are there radiation or radon emissions from *source material* on HRI's site? The first clause of the definition of source material states that material is source material if it is ''uranium or thorium . . . in any physical or chemical form.'' The second clause of the definition defines the amount of uranium or thorium whose presence qualifies an ''ore'' as source material. Under this clause, ''ore'' is source material if it contains ''by weight one twentieth of one percent (.05%) or more of . . . uranium [thorium, or a combination of the two].'' The record appears to be barren concerning whether ore of the required enrichment is found at Church Rock.

Second, are there radiation or radon emissions from *byproduct material* found at the HRI site? The relevant language from the definition of *byproduct material*'' is:

> tailings . . . produced by the extraction . . . of uranium or thorium from ore processed primarily for its source material content . . . .

Under this definition, some of the material left underground or on the surface of the ground on the HRI site must be considered ''tailings'' because it resulted from the extraction of uranium.

Mr. McKenney testifies, in this regard, on page 3 of his affidavit (attached to the Staff Response), that:

> one cannot distinguish between radon produced by the NRC-licensed activities of one or more licensees, and radon emanating from natural background sources. Similarly, one cannot distinguish radon produced by windblown uranium mill tailings from that released as part of in-situ leach mining or from the natural surrounding environment. The pedigree of the radon is based on what the source is, not where the source is located. Moreover, as a practical matter, if licensees had the responsibility to modify their effluents based on the action of other sources nearby, licensees could violate a license condition or the dose limit in Part 20 without releasing anything.

I have considered Mr. McKenney's testimony and I do not find that it addresses the specific words that define ''background radiation.'' However difficult it may be to separate out radiation coming from source material or byproduct material from background radiation, it is necessary to do so in order to determine the background radiation level, as defined in the regulations.[5] If it is not empirically feasible to make this separation, then it may be necessary to adopt a conservative assumption concerning the amount of radiation that does not qualify as background.

I would note that tailings and an unremediated underground mine site are different from other sources of radiation that are ''out of the control'' of HRI.

[5] There is no reason to suspect that special nuclear materials are present on the site.

These problems were left by a prior landowner that is part of the chain by which HRI obtained its title. If the prior owners chose to leave tailings or a mine on their land, it is appropriate that the value of the land for future mining be affected. It would be a strange regulatory regime that permitted an owner to sell land with tailings or a mine to another owner, who would be allowed to treat this preexisting condition as background radiation. There is no reason to believe that the Commission would interpret its regulations to foster that result.

This step-by-step interpretation of NRC regulations has taken us part of the way along the road suggested by Bernd Franke in his study, ''Crownpoint Uranium Solution Mining Project: Review of Outdoor Radon Levels and External Gamma Radiation,'' January 5, 1999, Attachment to Intervenors' Brief. However, it has not taken us the whole way. Mr. Franke concludes, at 7:

> Second, the levels reported for Church Rock are consistently high; the magnitude of the concentrations is far in excess of what one would expect from natural background and thus constitutes a strong indicator of non-background activity. The results of all available measurements are summarized in Table 1. While one would expect natural background concentrations to be similar to those measured at Crownpoint (between 0.10 and 0.28 pCi/l), the levels at Church Rock are approximately one order of magnitude (i.e., roughly 10 times) higher than those in the Crownpoint area, and 10 to 20 times higher than the range of reported background radon concentrations nationally. It is highly likely that the elevated levels of radon at Church Rock are due to significant contributions from non-background sources.
>
> Prior uranium mining and milling activities are the most likely cause for the elevated concentrations of radon in the Church Rock area. . . .

However, Mr. Franke's conclusion overlooks another likely cause of elevated radon concentrations. These concentrations could be natural, resulting from a rock formation that contains uranium.

If there are releases from a uranium-laden rock formation, the formation may be sufficiently rich to be ''source material'' or it may be neither source material nor byproduct material. In that case, radiation from the rock formation *is* part of background radiation.

On the other hand, it could well be that land that is not part of the HRI operation and that has not been disturbed by prior mining may have elevated levels of radiation. If that land is not part of the HRI operation, then radiation coming from that land is not included in 10 C.F.R. § 20.1301 because it has nothing to do with how HRI ''shall conduct operations.'' It is not clear how to draw the geographical limit on the area that contributes to radiation from the HRI project and to separate it from land that is outside the project area. Accordingly, I will ask the parties to assist me in determining how to draw that limit.

Discussion of the Legal Standard Limiting HRI's Operations

HRI has attempted to show compliance with 10 C.F.R. Part 20, Subpart D — Radiation Dose Limits for Individual Members of the Public by complying with 10 C.F.R. § 20.1302(b)(1). If it complies with that subsection, then it need not also comply with 10 C.F.R. § 20.1302(b)(2) because the two subparts are separated by the disjunction ''or.'' Thus, HRI may comply with *either* of the two subsections and be in compliance with the regulations.

Section 20.1302(b) states:

> A licensee shall show compliance with the annual dose limit in § 20.1301 by—
>
> (1) Demonstrating by measurement or calculation that the *total effective dose equivalent to the individual likely to receive the highest dose from the licensed operation* does not exceed the annual dose limit. [Emphasis added.]

This is the standard with which HRI has chosen to comply. HRI Response at 14.

ORDER

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 18th day of March 1999, ORDERED that:

1. Responses to the following questions should estimate annual radiation doses.

2. Based on empirical evidence and analysis, what portion of the total effective dose equivalent (TEDE) from the Church Rock site should *not* be considered to be background radiation either because it is from source material or from byproduct material?

3. Based on legal argument, empirical evidence, and technical analysis, how should we calculate the annual TEDE to the individual member of the public likely to receive the highest dose from the HRI Church Rock operations? Include the TEDE from ISL processes. Also include the TEDE from source material and from byproduct material that is inside the geographic area that is part of the HRI Church Rock operations.

4. For the purpose of responding to Question 3, what is the appropriate location of the individual likely to receive the highest dose from the HRI Church Rock operations? Please supply additional estimates of annual radiation doses at locations specified by other parties.

5. Based on legal argument and technical analysis, how did you determine the geographic area that should be considered part of HRI operations in answer to Question 3?

6. Has the FEIS adequately addressed the combined impacts of radiation from the project and from elevated levels of radiation in the area of the project?[6]

7. Answers to the previous questions (presentations) should be filed within 20 days of the receipt of this Memorandum and Order by e-mail.

8. Presentations are limited to twelve pages plus attached evidence of up to thirty pages. Presentations may reference materials that are already in the record.

9. Parties may respond (responses) to presentations within 10 days of when they first receive the complete presentation. Responses may reference materials that are already in the record.

10. Responses are limited to a total of twelve pages.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

[6] HRI, ENDAUM, and SRIC, which have already submitted a responsive discussion, need not answer this question. Failure to file an answer will not preclude them from filing a response.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Dr. Richard F. Cole, Special Assistant

In the Matter of **Docket No. 55-32442-SP**
(ASLBP No. 99-753-01-SP)
(Appeal of Denial
of Operator's License)

SHAUN P. O'HERN
(Denial of Reactor Operator's License) **March 26, 1999***

The Presiding Officer, working with the aid of his technical assistant, reviews in detail the arguments of the parties concerning the correct answer to examination questions and determines that Mr. O'Hern earned a passing score on his written examination to become a reactor operator.

INITIAL DECISION
(License Granted to Mr. Shaun P. O'Hern)

Shaun P. O'Hern contests the Nuclear Regulatory Commission Staff's (Staff's) decision that he failed the written portion of his license examination, administered on April 6, 1998.[1] He argues that he correctly answered questions 7, 54, and 87 and that question 59 was invalid and should be deleted from the

*Re-served March 30, 1999.

[1] Mr. O'Hern's Written Presentation was filed December 7, 1998. The Staff of the Nuclear Regulatory Commission (Staff) responded on January 19, 1999. On February 11, 1999, Mr. O'Hern responded to an invitation to file further information.

examination. Mr. O'Hern states that an ''Appeal Board'' had previously determined that he should be granted an Operating License but that the result had been overruled by Region III, which concluded that his final score was 78.9%, which is below the passing score of 80.0%.

In this Decision, each question will be reviewed separately.[2]

QUESTION 7 (From Hearing File (HF) Tab 2, Examination):

From full power operation, a transient has occurred. The following annunciators were received:

3D73, Trip Actuators A1/A2 Tripped
3D74, Trip Actuators B1/B2 Tripped
3D99, APRM Upscale Neutron/Thermal Trip

Immediately after receipt of these annunciators, the following parameters were reported to the NASS:

Reactor Power	48% and stable
RPV Level	164 inches, decreasing slowly
Reactor Pressure	1085 psig, increasing slowly

With these plant conditions, what is the first action that must be performed, and which indication must be observed to verify proper response?

a. Manually operate SRVs to stabilize pressure at less than 1050 psig; observe Div 1 and 2 post-accident recorders.

b. Place the SVLCV Bypass Valve Mode Switch in STARTUP, and verify RPV level is not increasing.

c. Initiate Alternate Rod Insertion; perform OD-7 option 2.

d. Place the reactor Mode switch in SHUTDOWN; verify blue group scram lights are OFF.

ANSWER: d.

To begin with, note that answer (d) has two clauses. The question asks for an ''action'' *and* an ''indication'' that must be observed. Hence, for answer (d) to be correct, both clauses in the answer (the action *and* the indication) must be correct.

I have carefully considered the arguments of the parties, the specific wording of the question itself and the definition of ''verify'' found in ST-OP-802-3001-001 (Rev. 1), III.B.74 at 33 (HF Tab 39). My conclusion is that this question is not valid and should be struck from the examination.

[2] The Motion of the Staff to reply to Mr. O'Hern's last filing is denied, except to the extent addressed below at p. 276. There have already been ample opportunities for the Staff to explain the examination that was given to Mr. O'Hern.

Answer (d), which the Staff presents as the correct[3] answer to this question, is misleading. Mr. O'Hern argues, on the first page of his discussion of this question, that:

> The question stem states that annunciators 3D73, Trip Actuators A1/A2 Tripped and 3D74 Trip Actuators B1/B2 Tripped were received. The question also stated that in order to select a correct answer that I needed to determine the first action that MUST be performed and which indication MUST be observed to verify proper response of the action. Answer (d.) stated that I should verify that the blue group scram lights are off as the correct answer for the indication that MUST be observed to verify proper response of taking the Mode Switch to SHUTDOWN. In order to verify that an action provided the desired response there has to be a change in some indication. I will prove that if the 3D73 and 3D74 annunciators actuated as stated in the question, that the blue group scram lights also go off.

I do not travel the whole road with Mr. O'Hern in the explanation of his response to this question. However, I have noticed that the question stem does not state whether or not the blue group scram lights are already off. I agree with Mr. O'Hern that the blue scram lights should go off under these circumstances,[4] so I understand his expectation that they are already off. Hence, checking the lights only after placing the Reactor Mode switch into SHUTDOWN would not ascertain that there was any change in control board indication. The lights may already be off. If that is so, then noticing that they are still off will not verify shutdown.

Staff's answer concerning this question does not contradict Mr. O'Hern's concern. Staff states that, ''With reactor power at 48% all control rods have not inserted due to a fault condition(s) in the RPS and/or control rod systems. Therefore, all of the blue group scram lights *may not be off.*'' (Emphasis added.) While this is undoubtedly true, it is also true that the lights may be off. Hence, using the lights to verify SHUTDOWN may not properly verify the state of the reactor.[5]

---

[3] NUREG-1021, Appendix B at 8 of 26 states that: ''The four-distractor multiple choice item with only one correct answer is the only style acceptable for NRC examinations.'' F 19 Tab 19 at 8 of 26.

[4] Mr. O'Hern demonstrates that if the 3D73 and 3D74 annunciators actuate, then the blue group scram lights should also go off. Written Presentation, Tab 2, throughout. Staff does not contradict this argument.

[5] In addition, I note that the answer appears to make use of the word ''verify'' in a way that is semantically confusing and that fails to comply with standard plant usage. In the Plant Definitions, ''verify'' is defined as:

> *Verify:* Use available indication (status lights, direct and indirect values of associated plant and system parameters, etc.) and/or physical observation to establish, that, as applicable, the specified action has occurred or conditions are as stated.

Had the correct answer used the word ''verify'' in this way, then it might have stated: ''Place the reactor Mode switch in SHUTDOWN; verify all control rods are fully inserted.'' This is, in fact, the wording of the abnormal operating procedure on reactor scram. The purpose of ''verifying'' something, is to make sure that the *reactor* has reached an expected state. The word is intended to be applied to an ''action'' or to ''conditions.'' It is not intended to be applied to an indicator, such as a set of lights. The lights are used in the process of verification. One does not apply the Plant Definition of ''verify'' and speak of verifying that ''lights are OFF.''

I have concluded that the Staff's suggested answer is ambiguous and confusing. HF 14 at 4 of 39 (NUREG-1021, ES-401). I must now determine whether Mr. O'Hern's suggested answer is correct. It is close to being correct, but I have determined that his answer also falls short.

To follow Mr. O'Hern's answer, we begin at the top of RPV Control Sheet 1, 29.100.01 SH 1, Rev. 6 (HF Tab 33). This procedure applies because the reactor condition for this question is that there is a scram condition and reactor power cannot be determined to be less than 3%. Although no one has explained whether just one entry condition must be met or whether all must be met, it is clear that both Mr. O'Hern and the Staff believe that this procedure is applicable, and I accept that assumption.[6] Following through the procedural schematic, we reach the decision step (diamond-shaped box): ''are ALL rods full in''? That condition is *not* met, so we branch to the right. Mr. O'Hern then directs us to Sheet 1A. The Staff also directs us to Sheet 1A.

On Sheet 1A, we find that there are several ''legs'' of the procedure and that we are directed to ''execute concurrently.'' Using Mr. O'Hern's diagram of this procedure, I can easily follow the pink highlight line he has added. That line shows that, since there is no SRV cycling, we are referred to step FSP-3. Pursuant to that step, we are referred to Table 4 and we find a direction to use the SRVs to control pressure providing that the torus level is greater than −112 in. Staff does not challenge that it is correct to use the SRVs, as permitted in Table 4. What the Staff does object to, in the following language, is that this step is not *required*:

> Although the candidate's postulated action, to stabilize RPV pressure < 1093 psig, may be allowable as a concurrent action, it is not yet required, and therefore not a correct answer choice, since reactor pressure is 1085 psig and less than the threshold pressure value of Step PSP-3 — 1093 PSIG — where action must be taken. Moreover, compliance with this step is not limited to use of only the SRV system but allows for the use of other Table 4 systems to control pressure.

HF Tab at the page numbered ''3.''

While the Staff's comment is correct, it is not adequately sympathetic to the plight that the candidate faced due to the invalidity of alternative (d), which has already been determined, above. The question, which is multiple choice, says ''what is the first action that must be performed.'' Looked at in that light, it is reasonable that Mr. O'Hern selected alternative (a).

Based on Mr. O'Hern's responses, it is clear that he realized he was faced with an ATWS and also that he knew the procedures that were applicable. Despite the Staff's misgivings, there is no reason to fear from his answer to

[6] Written Presentation of Mr. O'Hern, Tab 2 (Question 7) at 3 (unnumbered); Staff Response (Affidavit of Mr. Peterson at 14-15, ¶ 28; at 18, ¶ 30).

this question that as an operator he would take nonconservative action. He acknowledges that putting the reactor in shutdown is a correct response.

Looked at from the standpoint of a reactor operator, it is clear that if he were directed to control pressure using the SRV valve, then he should do so. The action is authorized, providing that the senior reactor operator makes the judgment that it is appropriate to control reactor pressure when the pressure is somewhat below the setpoint for action and the pressure is also increasing.

The problem with this analysis is that until the pressure reaches the setpoint, it is not authorized as a ''concurrent action.'' Until the setpoint is reached, the procedure specifies that the reactor should *first* be put into shutdown. After that action is taken and confirmed, it might then also be appropriate to control reactor pressure under the circumstances set forth in the stem of this question.

Accordingly, I have determined that there is no correct answer and that the question should be considered invalid.

QUESTION 54 (From HF Tab 5):

Question: Heavy thunderstorms just caused a load-reject from 100% power. The reactor conditions are:

- APRM Power stable at 20%
- No indications of control rod position
- Recirc pumps tripped
- All MSIV's are open
- Reactor Level being maintained by feedwater
- Reactor Pressure being maintained through Turbine Bypass Valves
- Mode switch in SHUTDOWN

The NSO's first actions should be:

a. Initiate ADS

b. Initiate ARI

c. Inject SLC

d. Drive control rods in

CORRECT ANSWER: b.

Mr. O'Hern's first reason for not providing the suggested answer, ''Initiate ARI,'' is that ARI may already have occurred. However, this answer is not adequate. Since APRM Power is stable at 20%, there is an indication that ARI has not been successfully accomplished. Staff correctly state that Step FSQ-7 of Procedure 29.100.01 SH 1A requires that an ARI be *confirmed.* HF Tab 10 at 7 (as numbered). Since it is not possible to confirm ARI with the data given, it is necessary to activate the ARI. While Mr. O'Hern objects to the use of FSQ-7 because the procedure was not made available to him during the examination,

I think it reasonable to expect that the candidate would know that when an important operator action is taken that it would need to be confirmed. *Compare* Written Presentation Tab 3 (Question 54) at 1.

I am not persuaded that the Appeal Board ruled that Mr. O'Hern had passed question 54. *See* HF Tab 9 (Memorandum from John L. Pellet at 12). The NRC Analysis of Question 54 (*id.* at 8) shows that Mr. O'Hern did not answer this question correctly. I am persuaded by Mr. John F. Munro, a Senior Reactor Engineer employed by the NRC's Operator Licensing and Human Performance Branch, that the Table found in the Appeal Board's memorandum was included by error and should not be relied on. Staff Response (Munro Affidavit at 4).

I conclude that Mr. O'Hern's answer to this question was not correct.

QUESTION 59:

If the Reactor Mode switch is in START/HOT STANDBY, which one of the following instruments is NOT required to be operable?

a. Reactor Vessel Level 1 for ADS

b. Reactor Vessel Pressure High for ARI

c. Reactor Vessel Pressure for High Pressure Scram

d. Reactor Vessel Level 2 RWCU System Isolation

ANSWER: b.

Mr. O'Hern contests this question on the ground that it goes beyond the responsibility of a Reactor Operator, as trained at Fermi. He says:

> We were trained to recognize that a piece of equipment or an instrument was Tech Spec related and then, using the Fermi Technical Specifications, to determine the appropriate LCO. We were not expected to memorize each piece of equipment and each instrument and determine entry into an Action Statement. In fact, the use of references such as procedures and Technical Specifications, etc., for determining proper operations and regulatory requirements is required by Reactor Operators.

O'Hern Affidavit of February 11, 1999, at 1 of RO Question 59.

As Mr. O'Hern points out, the written examination for a reactor operator is prepared pursuant to 10 C.F.R. § 55.41: *Written examination: Operators.* That section provides that the examination should be based on an understanding of ''the knowledge, skills, and abilities needed to perform licensed operator duties.'' It then sets forth a variety of sources of information from which to identify the knowledge, skills, and abilities. Among the sources to be examined are ''the training program.''

Mr. O'Hern also argues that he was improperly tested at the level of senior operator. He correctly states that 10 C.F.R. § 55.43(b)(2), which relates to *senior*

operators, requires testing on ''facility operating limitations in the technical specifications and their bases.'' He also is correct in stating that there is no item in the regulation governing the testing of *operators* that mentions technical specifications. *See* 10 C.F.R. § 55.41(b).

Staff responds by stating that the question was selected by the facility licensee, based on the Fermi lesson objective, 01-10, which states:

> Given the conditions or parameters associated with the Reactor Pressure Vessel Instrumentation, determine if entry into action statements of Technical Specifications would be required.

Staff Response (Peterson Affidavit at 32-33, ¶49 and at 30, ¶47, citing Hearing File Item 41, at 7). Staff also asserts, without explanation, that ''The question does not require detailed memorization of Technical Specifications or understanding of the bases, but rather requires general application of operational systems and procedural knowledge required to recognize system functions for applicable operational conditions.'' Staff Response (Peterson Affidavit at 33, ¶50).

Mr. O'Hern's assertion that he was not trained in this skill and that he needed to have the Technical Specifications for reference is not addressed by Staff. However, this point appears to have been made initially in Mr. O'Hern's February 11, 1999 affidavit, to which Staff has not had an opportunity to respond. Under the circumstances, were this question necessary to determine whether Mr. O'Hern passed the examination, it would be appropriate to permit the Staff to respond to this new point. If it were determinative of the outcome of the case, I also would request the Staff to explain how Mr. O'Hern could have answered this question from general knowledge and without reference to the Technical Specifications. Then, I would permit Mr. O'Hern to respond to this new showing. However, since this information would not affect the result of this case, it is not appropriate to delay the decision of this case.

QUESTION 87:

The plant is operating at 96% power with the following indications on the A Recirculation Pump Seal:

Seal #1 Pressure 980 psig
Seal #2 Pressure 10 psig
Annunciator 3D123, RECIRC PMP A STAGING SEAL FLOW HIGH/LOW is alarming.
Flow indication indicates 0.4 gpm.

Which of the following seal conditions exist?

a. Seal # 1 has failed

b. Seal # 2 has failed

c. # 1 Seal Labyrinth is plugged

d. # 2 Seal Labyrinth is plugged

ANSWER: c.

According to the testimony of Mr. Peterson, this question was originally drafted so that it had two correct answers, a failed #2 seal or a plugged #1 labyrinth. The question as presented to Mr. O'Hern was modified to include a flow indication of 0.4 gpm which, according to Mr. Peterson, confirmed an actual low flow condition and allowed the candidates to differentiate between the two possible conditions (High/Low) identified by the annunciator alarm. Staff Response (Peterson Affidavit at 35, ¶54). Seal failures are associated with high seal flows while plugging of labyrinths is associated with low seal flow conditions.

According to ARP 3D123 Rev. 6, at 2 (Hearing File 44), low flow is less than 0.5 gpm and high flow is greater than 0.9 gpm. *Id.* The 0.4 gpm stated in the question stem therefore indicated a low flow condition. The indications that the #1 seal is plugged are: (1) #2 seal pressure decreasing, and (2) a #1 seal low flow alarm of 0.5 gpm decreasing. Indications for a #2 seal failure are: (1) #2 seal pressure decreasing, and (2) a high seal flow alarm of 0.9 gpm increasing. Peterson at 34, item 53.

Mr. O'Hern has demonstrated that his answer, (b), is also correct. He stated that normal pressure for Seal #2 is 500 psig (approximate) and normal flow past FSE N007 (input to 3D123) is between 0.5 and 0.9 gpm. Mr. O'Hern contends that if seal #2 is at 10 psig (as stated in the question), the reduced driving force will cause the flow past FSE N007 to be less than 0.5 gpm, causing 3D123 to alarm. Hearing File Tab 5.

Mr. O'Hern also stated that if Seal #2 failed, the pressure would decrease by venting at the point of failure to the primary containment, as this flow path would be the least restrictive. Thus, flow past FSE-N007 would be reduced to less than 0.5 gpm and 3D123 would alarm. *Id.* Additionally, technical information in the Hearing File shows that for one scenario of a partial failure of the #2 seal, there is a seal leakage rate of 0.31 gpm, which would cause a low flow alarm. HF Tab 44 at 7. Staff agreed with these arguments. Staff Response (Peterson Affidavit at 36, ¶56).

Staff has two responses to Mr. O'Hern's argument and neither response is adequate. First, Mr. Peterson states that if the #2 seal failed, then annunciator 3D121 would be activated. However, the stem of the question is silent as to whether an additional annunciator was activated. In particular, it does *not* say that 3D123 is the *only* annunciator that is alarming and it would have taken very few words to say so. Consequently, a #2 seal failure cannot be ruled out on the grounds that the stem of the question does not mention an additional

annunciator. Second, Mr. Peterson notes that Mr. O'Hern ''did not indicate any need for additional information,'' as he could have done at the time of taking the test (Peterson Affidavit at 35, ¶55). However, this examination is intended to be a multiple-choice question with one correct answer. If Mr. O'Hern supplies a correct answer, there is no reason for him to seek clarification of the question.

Accordingly, Mr. O'Hern's answer shall be marked correct.[7]

ORDER

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 26th day of March 1999, ORDERED that:

1. Question 7 is struck from Mr. Shaun P. O'Hern's examination as invalid.
2. Mr. O'Hern's answer to Question 54 shall continue to be marked incorrect.
3. A determination concerning Mr. O'Hern's contention that Question 59 should be struck from his examination shall be held in abeyance.
4. Mr. O'Hern's answer to Question 87 is marked correct rather than incorrect.
5. Accordingly, Mr. O'Hern's score shall be raised from 75/95 (78.9%) to 76/94 (80.85%) and he has passed his examination as a Reactor Operator.
6. Parties may petition for review of this Initial Decision pursuant to 10 C.F.R. § 2.1253.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

[7] Should it subsequently be determined that Mr. O'Hern's answer is *not* correct, then consideration should be given to whether or not to invalidate this question as being too difficult, based both on the complexity of the technical argument and the disagreement among the qualified people who have been struggling with Mr. O'Hern's appeal.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of **Docket Nos. 50-275**
50-323

PACIFIC GAS AND ELECTRIC COMPANY
(Diablo Canyon Nuclear Power Plant, Units 1 and 2) **March 12, 1999**

By a petition dated November 24, 1998, submitted by David Lochbaum (Petitioner) on behalf of the Union of Concerned Scientists, the Petitioner requested that (1) the U.S. Nuclear Regulatory Commission (NRC) modify the operating licenses for Diablo Canyon Nuclear Power Plant to require the plant's owners to have an independent contractor evaluate the facility's safety culture, (2) the independent contractor monitor the safety culture until the NRC concurs that a safety-conscious work environment has been established and maintained, and (3) an informal public hearing on the petition be held in the vicinity of the site. The Petitioner alleged that Diablo Canyon's treatment of a control room operator who has raised safety concerns may be an obstacle to the free and open expression of safety issues, thus creating a ''chilling effect'' at Diablo Canyon.

The Director of the Office of Nuclear Reactor Regulation issued a Director's Decision on March 12, 1999, concluding that the Licensee had already retained Synergy Consulting Services (Synergy) to perform a comprehensive assessment of the Diablo Canyon safety culture, and therefore the intent of the petition had been met. The Licensee committed to performing a followup survey to measure the corrective action in 2001 and that NRC resources will continue to be applied as appropriate to address work environment concerns.

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

I. INTRODUCTION

By letter dated November 24, 1998, David A. Lochbaum (Petitioner) requested that the Nuclear Regulatory Commission (NRC) take action with regard to Diablo Canyon Nuclear Power Plant (DCNPP) regarding his concerns about the work environment. Specifically, the Petitioner stated that the work environment at DCNPP was not conducive to an employee raising safety issues freely without fear of retaliation. The Petitioner requested that the NRC modify the operating licenses for DCNPP Units 1 and 2 to require that the plant's owner have an independent contractor evaluate the facility's safety culture. The Petitioner further requested that the independent contractor monitor the safety culture until the NRC concurs that a safety-conscious work environment has been established and maintained. The Petitioner also requested that an informal hearing be held near DCNPP to present new information on the safety culture at Diablo Canyon. On December 30, 1998, the NRC Staff acknowledged receipt of the request for a petition pursuant to section 2.206 of Title 10 of the *Code of Federal Regulations* (10 C.F.R. § 2.206) and informed the Petitioner that his request to modify the license would be granted formal petition status. This reply also explained that the Petitioner's request for an informal public hearing would not be granted because the request did not satisfy the requirements as stated in NRC Management Directive 8.11 regarding granting of an informal public hearing and because a public meeting was planned to discuss the results of DCNPP's safety culture survey at which the public would be able to make statements. Notice of the receipt of the petition indicating that a final decision with respect to the requested action would be forthcoming within a reasonable time was published in the *Federal Register* on January 6, 1999 (64 Fed. Reg. 917).

My Decision in this matter follows.

II. DISCUSSION

Request To Modify Operating Licenses for DCNPP Units 1 and 2 To Have an Independent Contractor Evaluate the Facility's Safety Culture and Monitor the Safety Culture Until the NRC Concurs That a Safety-Conscious Work Environment Has Been Established and Maintained

The Licensee, in August 1998, retained Synergy Consulting Services (Synergy) to perform a comprehensive assessment of the DCNPP safety culture. The

Licensee commissioned Synergy in response to its own concerns regarding the safety culture at DCNPP to determine whether a ''chilling'' effect exists or had been created by actions that had been taken at DCNPP including removal of a control room operator from licensed duties. Synergy distributed its survey at DCNPP in October and November 1998. Nearly 1000 employees and contractors responded. This represented 62% of the workforce. The survey document consisted of 37 multiple-choice questions with 204 subparts. There were also forty-five employees interviewed as part of the survey. The survey was commissioned to re-baseline the organizational culture, including the environment for addressing employee concerns. The survey also covered an assessment of ''facilitative leadership'' principles and the effectiveness of certain recent organizational changes.

The results of the survey were presented in a public meeting held on January 15, 1999, at the Embassy Suites Hotel in San Luis Obispo, California. Synergy rated the safety culture at DCNPP as ''adequate to good'' and discussed the full scope of its findings at the meeting. Synergy concluded that DCNPP personnel are very willing to identify potential nuclear safety issues or concerns, but that deliberate actions are required to further improve the safety culture. Synergy ranked DCNPP at the 51st percentile with respect to the safety culture. The Synergy survey indicated that the Nuclear Generation organization ranked the lowest at the 38th percentile. The survey indicated that DCNPP can improve the work environment by generally treating all employees with more dignity and greater trust and respect, and by having managers deal in a straightforward, honest, and truthful manner. These perceptions are related to employee comfort level in voicing general opinions and ideas and the way in which the management has dealt with employees and their issues and concerns. Synergy also made several recommendations on ways to improve the safety culture at DCNPP. Some of these improvements dealt with trust of the management at DCNPP, effective management of change at DCNPP, employee concerns regarding the future of DCNPP, management and supervisory practices, and the employee concerns program. The Licensee made a presentation on the corrective actions that have taken place and the plan for future corrective actions to address the recommendations made by Synergy.

Following the Licensee's presentation at the January 15, 1999 public meeting, the NRC opened the meeting for public statements. A copy of the meeting summary, Licensee presentation slides, executive summary from the Synergy survey, and a set of complete meeting minutes was sent to the Petitioner. The regional office is reviewing the entire meeting transcript and will identify issues for followup as appropriate.

Regarding the Petitioner's request that the independent contractor monitor the safety culture until the NRC concurs that a safety-conscious work environment has been established and maintained, it is not typical NRC practice to become

involved in the manner that was suggested by the Petitioner unless there is a set of egregious circumstances related to a site's safety culture as would be evidenced by complaints that were investigated and determined to be valid by the NRC. In the particular case of Diablo Canyon, the Licensee has proactively taken actions to address safety culture issues, thereby avoiding degradation of the safety culture environment to a level where NRC involvement would be needed. In addition, the Licensee stated that it would perform another survey in December 2001 to determine the effects of the changes. The NRC will monitor these corrective actions as part of the routine inspection process. Also, the NRC does respond to individuals with such concerns and maintains an allegation process, inspection staff, and Office of Investigations staff to follow up on issues as necessary. In this particular instance at DCNPP, the NRC has expended and will continue to expend resources to address concerns related to the work environment.

As evidenced in the above discussion, the Petitioner's request to modify the licenses at DCNPP, Units 1 and 2 to require that the Licensee enter into contract with an independent contractor to evaluate the safety culture at DCNPP and for the NRC to concur that a safety-conscious work environment has been established and maintained has, in effect, been accomplished. As a result, the action requested in the Petitioner's request is not necessary and no proceeding will be instituted in whole or in part, with respect to the request.

III. CONCLUSION

The NRC has determined, for the reasons given in the preceding discussion, that the intent of the petition has been met. It is also concluded that a followup survey by DCNPP to measure the success of corrective actions is scheduled to be performed in 2001 and should track progress. Additionally, NRC resources will continue to be applied as appropriate to address work environment concerns.

As provided for in 10 C.F.R. § 2.206(c), a copy of this Decision will be filed with the Secretary of the Commission for the Commission's review. This Decision will constitute the final action of the Commission 25 days after issuance

unless the Commission, on its own motion, institutes review of the Decision at that time.

FOR THE NUCLEAR
REGULATORY COMMISSION

Roy P. Zimmerman, Acting Director
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 12th day of March 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of **Docket No. 50-259**
(License No. DPR-33)

TENNESSEE VALLEY AUTHORITY
(Browns Ferry Nuclear Plant, Unit 1) **March 29, 1999**

On April 5, 1998, Mr. David A. Lochbaum submitted a petition on behalf of the Union of Concerned Scientists pursuant to 10 C.F.R. § 2.206. The petition requested the NRC to (1) revoke the operating license for Browns Ferry Nuclear Plant, Unit 1; (2) require the Tennessee Valley Authority (TVA) to submit either a decommissioning plan or a lay-up plan for Unit 1; (3) conduct NRC inspections at Browns Ferry Unit 1 against the decommissioning plan or the lay-up plan; and (4) hold a hearing in the Washington, DC area. On May 7, 1998, notice of receipt of the petition was published in the *Federal Register* (63 Fed. Reg. 25,243). On September 28, 1998, notice of an informal hearing to be held on October 26, 1998, was published in the *Federal Register* (63 Fed. Reg. 51,626).

In his petition, Mr. Lochbaum asserted that because Unit 1 has been on ''administrative hold'' since June 1, 1985, and has not operated since then, revoking the operating license and requiring relicensing if TVA later decides to restart Unit 1 is a better and safer process than is the current restart process of Inspection Manual Chapter (IMC) 0350. Mr. Lochbaum further asserted that a decommissioning plan would provide assurance that the irradiated fuel is stored safely and that Units 2 and 3 are sufficiently independent of Unit 1 for safe operation. Additional assertions were introduced during the informal public hearing. The Staff reviewed the assertions made by Mr. Lochbaum in the petition and during the hearing, and concluded that actions 1, 2, and 3 requested in the petition should be denied. The bases for the Staff's conclusions are detailed in this Director's Decision.

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

I. INTRODUCTION

On April 5, 1998, Mr. David A. Lochbaum filed a petition,[1] pursuant to Title 10 of the *Code of Federal Regulations* (10 C.F.R. § 2.206), on behalf of the Union of Concerned Scientists (Petitioner).

Petitioner requested the Nuclear Regulatory Commission (NRC) to (1) revoke the operating license for Browns Ferry Nuclear Plant, Unit 1; (2) require the Tennessee Valley Authority (TVA) to submit either a decommissioning plan or a lay-up plan for Unit 1; (3) conduct NRC inspections at Browns Ferry Unit 1 against the decommissioning plan or the lay-up plan; and (4) hold a hearing in the Washington, DC area.

As the basis for the request, Petitioner asserts that because Unit 1 has been on ''administrative hold'' since June 1, 1985, and has not operated since then, revoking the operating license and requiring relicensing if TVA later decides to restart Unit 1 is a better and safer process than is the current restart process of Inspection Manual Chapter (IMC) 0350. Further, a decommissioning plan would provide assurance that the irradiated fuel is stored safely and that Units 2 and 3 are sufficiently independent of Unit 1 for safe operation.

Petitioner notes that while Unit 1 has been in administrative hold status, the NRC has issued numerous bulletins, generic letters, and information notices. TVA's typical action in response to these NRC communications is to delay addressing the issues until prior to returning the unit to service. Petitioner notes a similar response was provided by TVA to the NRC's letter of October 9, 1996, which requested information pertaining to the adequacy, availability, and control of design-basis information.[2,3] Petitioner speculates that the configuration management problems and plant material condition that led to the shutdown in 1985 only could have worsened since then. Thus, Petitioner believes that requiring relicensing for Unit 1 if the decision is made to restart would ''wipe the licensing slate clean and allow TVA, the NRC, and the public to examine restarting the plant without the burden of unraveling the mess caused by more

[1] The petition can be viewed and downloaded from the NRC World Wide Web page (http://www.nrc.gov/NRC/PUBLIC/2206/petitions/g980199/g980199.html). Copies of the petition also are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555-0001, and at the local public document room located at the Athens Public Library, South Street, Athens, Alabama 35611.

[2] NRC letter from James M. Taylor, Executive Director for Operations, to Craven Crowell, Chairman, TVA Board of Directors, dated October 9, 1996.

[3] This letter was sent to TVA on Browns Ferry Units 2 and 3, Sequoyah Units 1 and 2, and Watts Bar Units 1 and 2 dockets. It was not sent on the Browns Ferry Unit 1 docket because that facility was not operating, and it was known to the NRC that extensive design-basis reconstitution will be required before the facility may be restarted.

than a decade of licensing limbo.'' Petitioner further asserts that the NRC cannot meaningfully inspect a facility in a degraded condition and in an uncertain licensing status.

On April 29, 1998, the NRC acknowledged receipt of the petition and informed Petitioner that the petition had been assigned to the Office of Nuclear Reactor Regulation (NRR) for response. Petitioner was informed that the request for a hearing was denied because the petition did not provide new information that raised the potential for a significant safety issue and did not allege any violations of NRC requirements. Petitioner was advised that any new information that should be considered by the NRC in evaluating the issues raised in the petition should be provided promptly to the NRC in writing.

On June 5, 1998, Petitioner reiterated the request for a hearing and cited NRC Bulletin 94-01, ''Potential Fuel Pool Draindown Caused by Inadequate Maintenance Practices at Dresden Unit 1,'' as an example of what could involve one or more significant safety issues. Bulletin 94-01 was sent to (1) all holders of operating licenses or construction permits for nuclear power reactors (for information) and (2) all holders (except Shoreham) of licenses for nuclear power reactors that are permanently shut down with spent fuel in the spent fuel pool (for action). Petitioner argued that Bulletin 94-01 should have been sent to the Unit 1 Licensee for action instead of merely for information because Unit 1 is more nearly like a permanently shutdown facility than an operating facility and the conditions described in the bulletin could have existed at Unit 1.

By letter dated August 7, 1998, Petitioner was informed that the NRC had reconsidered its earlier denial of the request for a hearing and had decided that holding an informal public hearing would be appropriate,[4] even though such a hearing was not required under the criteria for such hearings as provided in NRC Management Directive 8.11, ''Review Process for 10 CFR 2.206 Petitions.'' The August 7 letter also addressed the issues surrounding Bulletin 94-01 and its applicability to Browns Ferry Unit 1. The hearing was held on October 26, 1998, in the Browns Ferry Nuclear Plant Training Center.[5]

[4] The NRC concluded that the petition raised novel issues with respect to maintaining an operating license for a facility for which there are no plans for future operation and that the information that might be presented during an informal public hearing could constitute a valuable resource for the NRC in reaching a decision with regard to the petition.

[5] The hearing transcript can be obtained from the NRC World Wide Web page (http://www.nrc.gov/NRC/PUBLIC/2206trans.html). Copies of the transcript are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW, Washington, DC 20555-0001, and at the local public document room located at the Athens Public Library, 504 E. South Street, Athens, Alabama 35611.

II. BACKGROUND

TVA is the holder of operating licenses for three nuclear power units at the Browns Ferry site. In March 1985, TVA voluntarily shut down Units 1 and 3 because of questions relating to primary containment isolation testing at Unit 1 and reactor water level instrumentation at Unit 3. Unit 2 was in a refueling outage, but TVA voluntarily decided not to restart the unit as scheduled because other questions and concerns arose about the adequacy of TVA's nuclear program. In September 1985,[6] the NRC requested TVA to submit its plans for correcting problems and improving performance in its overall nuclear program and at Browns Ferry. The Commission did not order TVA to obtain its approval before restarting the plants because of prior verbal agreement between TVA and NRC to that effect; however, TVA was required, pursuant to 10 C.F.R. § 50.54(f), to inform the NRC if TVA intended to change this commitment. In late 1985, TVA submitted its corporate nuclear performance plan (CNPP) to address weaknesses in the TVA corporate nuclear program. The CNPP was followed by the Browns Ferry Nuclear Performance Plan to address site-specific weaknesses and to resolve additional concerns raised by the NRC. These plans formed the regulatory framework for the restart of Unit 2.

In July 1987, the NRC concluded[7] that organizational, staffing, and programmatic improvements already in place or under way would resolve the problems at the corporate level. In January 1991, the NRC concluded[8] that TVA's commitments and corrective action programs for Unit 2 were acceptable, and in April 1991, the Commission approved Unit 2 restart. Unit 2 restarted May 24, 1991. TVA submitted its corrective action plan for returning Units 1 and 3 to service in 1991,[9] and generally used the same methods, criteria, and technical positions for Unit 3 that were approved for the restart of Unit 2. In February 1992, an NRC Restart Panel was formed in accordance with NRC IMC 0350. TVA completed the recovery of Browns Ferry Unit 3 in 1995, and the Commission authorized the Regional Administrator to approve restart of Unit 3 upon completion of certain open issues. The NRC Administrator for Region II issued restart approval on November 19, 1995. Units 2 and 3 have operated well since their respective restarts, and this performance is reflected in the NRC systematic assessment of licensee performance reports issued since the restart of Unit 2.

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[6] NRC Letter from William J. Dircks, Executive Director for Operations, to Charles Dean, Chairman, TVA Board of Directors, dated September 17, 1985.

[7] NUREG-1232, Volume 1, ''Safety Evaluation Report on Tennessee Valley Authority Revised Corporate Nuclear Performance Plan,'' July 1987.

[8] NUREG-1232, Volume 3, Supplement 2, ''Safety Evaluation Report on Tennessee Valley Authority: Browns Ferry Nuclear Performance Plan. Browns Ferry Unit 2 Restart,'' January 1991.

[9] Letter from Mark O. Medford, Vice President, Nuclear Assurance, Licensing, and Fuels, TVA, dated January 9, 1991.

In April 1996, TVA requested removal[10] of Browns Ferry Unit 1 as a Category 3 plant from the NRC's list of problem plants. TVA stated that no decision had been reached on the long-term operational status of Unit 1, and the unit is defueled and maintained in lay-up status. Those shared systems that support operation of Units 2 and 3, however, will continue to be kept in service. TVA noted that there are no plans for equipment refurbishing or recovery activities at Unit 1. TVA committed to inform the NRC immediately of a decision to return Unit 1 to service, to implement the same programs used for the Unit 3 recovery, and to not restart Unit 1 without prior Commission approval. Unit 1 was removed from the list of problem plants[11] on June 21, 1996.

III. DISCUSSION

The hearing provided Petitioner the opportunity to present information related to issues that have a bearing upon the actions requested in the petition. Petitioner, represented by Mr. David Lochbaum, was joined in presenting information to support the petition by Ms. Ann Harris, a representative of We the People of Tennessee and spokesperson for the National Nuclear Safety Network. The NRC Staff has reviewed the transcript of the hearing to identify the relevant issues to be considered in addition to the filing of April 5, 1998. The following paragraphs discuss the issues raised in the petition and in the hearing. Related issues have been grouped together and are addressed in the following paragraphs.

Petitioner Issues

> The NRC does not inspect Browns Ferry Unit 1.
>
> The NRC cannot meaningfully inspect Browns Ferry Unit 1 because the NRC does not have an ''Administrative Hold'' category.
>
> The NRC cannot meaningfully inspect Browns Ferry Unit 1 because it is not in compliance with NRC regulations, including the ''Maintenance Rule.''

Petitioner asserts that, contrary to a statement made in a letter[12] to him by the NRC Project Manager for Browns Ferry, he has information that shows that

[10] Letter from Oliver D. Kingsley, President and Chief Nuclear Officer, TVA, dated April 16, 1996, to James M. Taylor, NRC Executive Director for Operations.

[11] NRC Letter from James A. Taylor, Executive Director for Operations, to Oliver D. Kingsley, President and Chief Nuclear Officer, TVA, dated June 21, 1996.

[12] NRC Letter from Albert W. De Agazio, Browns Ferry Project Manager, to David A. Lochbaum, Union of Concerned Scientists, dated January 23, 1998. This letter also was an attachment to the April 5, 1998 petition submitted by Mr. Lochbaum.

NRC inspectors do not look at Browns Ferry Unit 1 at all. Petitioner asserted further that NRC inspectors could not meaningfully inspect Unit 1 because NRC regulations recognize only two categories of power plants: operating plants and permanently closed plants.

Browns Ferry Unit 1 is sometimes referred to as being in an ''Administrative Hold''[13] status, but this is a TVA designation and it is irrelevant for regulatory purposes. Browns Ferry Unit 1 is an operating reactor subject to all the terms and conditions that are specified in Operating License DPR-33,[14] the uncertainty of its return to service notwithstanding. The Unit 1 Technical Specifications (TSs) are maintained, are in force, and must be complied with. The operating license and associated TSs are amended periodically, usually in concert with similar changes for Units 2 and 3.

Some Unit 1 systems or components[15] are required to support the unit in its current defueled condition, or they directly support the safe operation of Units 2 or 3. These systems and components are maintained and operated as required under applicable plant programs or TSs. The remaining systems and components[16] have been placed in lay-up status to protect their economic value and to preserve the equipment in the event a decision is made to restart the unit.

Unit 1 is subject to both routine and reactive NRC inspection, and the unit is inspected by NRC inspectors. However, the operational status of the facility is considered when determining the frequency, type, and scope of inspections, and the amount of inspection effort is substantially less than for a comparable facility in active service because much of the equipment and systems serve no safety function while the unit is shut down and defueled. Thus, the NRC inspection effort for Unit 1 is focused mostly upon those areas that have a direct bearing upon safety. Generally, this includes those structures, systems, and components (SSCs) that are necessary to ensure the safe storage of Unit 1 irradiated fuel and to support the safe operation of Units 2 and 3. The inspection effort includes no or little effort for SSCs that are not needed to provide a safety function for the current plant operating status.

Petitioner, in the original petition and during the hearing, relied upon information compiled by the NRC that led him to conclude that Unit 1 is not inspected at all. The sources of the tables used by Petitioner, though not fully identified, appear to be taken from certain NRC documents that were intended

[13] ''Administrative Hold'' is a TVA designation that denotes that while no decision has been made regarding future operation of the facility, the option for restart at an unspecified future date is being retained.

[14] Operating License No. DPR-33 was issued to TVA for the operation of Browns Ferry Unit 1 on December 20, 1973. The license expires on midnight October 20, 2013.

[15] This includes such systems (or portions thereof) as spent fuel pool cooling and cleanup, raw water, fire protection, reactor/refuel zone ventilation, radiation monitoring, residual heat removal, reactor building closed cooling water, certain electrical systems, and emergency diesel generators.

[16] Many of these systems and components have been drained, deenergized, and disassembled, as appropriate.

primarily for internal management use, but the information has been released through at least one Freedom of Information Act request, and similar information has been presented at several of the annual Regulatory Information Conferences sponsored by NRR. We acknowledge that the NRC documents are misleading and could lead a person to that conclusion regarding Unit 1 inspection. Until 1997, NRR compiled quarterly various program and management information in a ''White Book,'' intended for internal purposes. The documents included data on inspection efforts expended at single-, dual-, and triple-unit sites. In those documents, Browns Ferry was shown as a dual unit site, though it is actually a triple-unit site. Unit 1 was not included because it was not in operational service. This was done so that the data could be used for comparison purposes to other dual-unit sites. Although these documents[17] have described incorrectly the Browns Ferry site as a dual-unit site, the fact remains that Unit 1 is inspected by NRC inspectors. This inspection activity is adequately demonstrated by the results of a review of NRC inspection reports for Browns Ferry issued for the 3-year period 1996 through 1998. Of 32 inspection reports issued for that period, 10 refer to NRC inspection of Unit 1 issues (Table I). Table I does not include inspection activities associated with the systems ''shared'' between the units or inspection of common buildings; those items are routinely inspected as support for Units 2 and/or 3.

NRC IMC 0030, ''Policy and Guidance for Development of NRC Inspection Manual Programs,'' provides guidance for the development of the NRC inspection program, and the inspection program at Browns Ferry has been developed in accordance with this guidance. For the 12-month period from October 1, 1997, through September 30, 1998, the actual NRC inspection effort expended at Unit 1 was approximately 12% of the effort expended at either of the other units. On a site basis, Unit 1 received approximately 6% of the total inspection hours for the site. Thus, the greater inspection effort at the operating units allows the NRC to adequately assess the Licensee's performance and to focus its efforts into areas that have the greater safety significance as opposed to inspecting in areas of Unit 1 that have little or no safety significance.

Petitioner asserts that Browns Ferry Unit 1 is not in compliance with NRC regulations. To support this contention, Petitioner states that usually TVA has deferred taking actions with respect to Browns Ferry Unit 1 requested by numerous generic communications issued since 1985. TVA typically has committed to completing the actions before returning the unit to service, if such a decision is made. As additional support for this contention, Petitioner notes that there is an outstanding issue regarding Unit 1 compliance with 10 C.F.R. § 50.65, commonly referred to as the maintenance rule.

[17] Publication of these documents was discontinued at the end of 1996.

Table I
Browns Ferry Unit 1 Inspection Activities (1996 through 1998)

Inspection Report	Date	Inspection Activity
50-259/96-01	02/29/96	Radioactive material postings
50-259/96-03	04/15/96	Connection of Unit 1 and Unit 2 spent fuel pool volumes, spent fuel pool design-basis and operating information
50-259/96-05	06/18/96	Updated final safety analysis report description of spent fuel pool systems
50-259/96-06	08/15/96	Continuous air monitoring systems
50-259/96-10	11/07/96	Housekeeping issues
50-259/96-12	12/20/96	Lay-up and preventive maintenance program implementation
50-259/97-03	04/22/97	Spent fuel pool cooling system walkdown, identification that Unit 1 pool makeup valve operator had been removed
50-259/97-04	05/21/97	Maintenance rule implementation
50-259/97-08	08/29/97	Sampling of raw cooling water discharge
50-259/97-12	02/12/98	Repairs to a radiation monitoring system valve

IMC 0720 provides guidance with regard to NRC generic communications on nuclear reactor issues. Generic communications consist of bulletins, generic letters, and information notices. Bulletins may transmit information to the addressees, request specified actions, and require a written response. Generic letters request that analyses be performed or descriptions of proposed corrective actions be submitted regarding matters of safety, safeguards, or environmental significance. The addressees may be asked to accomplish the actions and report their completion by letter. Information relating to these actions may be requested on a voluntary basis or in accordance with section 182a, Atomic Energy Act of 1954, as amended, and 10 C.F.R. § 50.54(f). Usually, this type of generic letter requests new or revised licensee commitments or other continuing actions but may not explicitly or coercively solicit licensee commitments. Information notices provide information regarding safety, safeguards, or environmental issues. Information notices normally are used to bring significant, recently identified safety, security, or environmental information to the attention of licensees. Addressees are expected to review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems.

IMC 0720 states that the various types of generic communications are not used to impose regulatory requirements, and they are not to be used as a substitute for the rulemaking process. Thus, the fact that a licensee merely provides the written response required by the Atomic Energy Act and/or NRC rules and regulations but does not, or will not, implement other requested action(s) does not, by itself, constitute being in noncompliance with a regulatory requirement and does not constitute a basis for suspension or revocation of the operating license. In such circumstances, the NRC may take other action commensurate with the safety significance of the issues. Such actions could vary in severity from acceptance by the NRC that the licensee has a valid basis for not taking the requested actions up to the NRC's issuing an order to shut down (or to remain shut down) until the particular safety issue is resolved in an acceptable manner. With regard to Browns Ferry Unit 1, the Licensee has either taken the requested actions in the generic communications when necessary or has committed to address the issues raised before the unit can be restarted. Furthermore, although TVA has no announced plans for restarting the facility, TVA has agreed not to restart it without specific approval from the Commission. Thus, any Commission action taken with regard to revoking the Unit 1 operating license merely because of TVA's deferral of actions requested in generic communications pending a decision to restart Unit 1 would serve no useful purpose.

With the possible exception of 10 C.F.R. § 50.65, the Commission is not aware of any noncompliance issues with applicable NRC rules and regulations at Browns Ferry Unit 1. Furthermore, Petitioner has not offered any contradictory credible information, either in the original petition or during the hearing. However, the issue of Unit 1 compliance with section 50.65 is still undergoing review by the NRC Staff, and no final decision has been made.

The issue regarding section 50.65 arose from an inspection of the implementation of section 50.65 at the Browns Ferry plant from April 4 through April 8, 1997.[18] The inspection team found that the Licensee considered Unit 1 status (shut down and defueled) for implementing section 50.65. Thus, a number of Unit 1 systems, such as high-pressure coolant injection, which normally would be included within the scope of section 50.65 for an operating plant, were not included, and performance monitoring, data collection, and trending were not being performed on these systems. However, those Unit 1 systems that support Unit 2 and/or Unit 3 operation, systems that are common to Unit 2 or Unit 3, or systems required to maintain safe shutdown of Unit 1, such as spent fuel pool cooling, were properly scoped under section 50.65, and performance monitoring, data collection, and trending were being performed on these systems.

[18] NRC Inspection Report 50-259/97-04, 50-260/97-04, and 50-296/97-04, issued May 21, 1997.

At issue is whether scoping Unit 1 SSCs by considering the defueled and indefinite shutdown condition of Unit 1 satisfies section 50.65. The Staff has informed the Licensee that the issue can be resolved by one of three approaches, namely, certify per 10 C.F.R. § 50.82(a)(1) that Unit 1 operations have ceased permanently, submit a request for exemption from those aspects of section 50.65 that currently are not being met, or revise the scope of the Unit 1 maintenance program to meet the requirements of the rule. On February 4, 1999, TVA submitted a request for a temporary partial exemption from the requirements of section 50.65. The Staff currently is reviewing the proposed exemption request.

Petitioner Issues

TVA would exceed its statutory debt limit if Browns Ferry Unit 1 is closed prematurely.

TVA may lack the money needed to put Browns Ferry Unit 1 into the operating category, or the permanently closed category.

TVA does not have the necessary funds for decommissioning funding assurance.

Petitioner has made a number of assertions regarding the ability of TVA to fund operations and/or decommissioning of Unit 1 but has not provided any facts in support thereof. The NRC, however, has no regulatory authority with regard to issues related to TVA's statutory debt limit or other financial matters and decisions other than decommissioning funding assurance.

On November 23, 1998, the Commission's amended rules for ''Financial Assurance Requirements for Decommissioning Nuclear Power Reactors'' became effective.[19] The amendments require power reactor licensees to report periodically on the status of their decommissioning funds, and on changes in their external trust agreements and other financial assurance mechanisms, and also allow licensees to take credit for certain earnings on decommissioning trust funds. The amendments also added a definition of the term ''Federal Licensee'' to address the issue of which licensees may use statements of intent. As now defined in 10 C.F.R. § 50.2, a Federal Licensee means any NRC licensee, the obligations of which are guaranteed by and supported by the full faith and credit of the United States government. In the past, TVA has relied upon statements of intent to have decommissioning funds available. The purpose of the statement of intent is to obtain a commitment by another, and superior, governmental entity that the obligations of the subordinate governmental entity will be paid by the superior entity if the subordinate entity cannot pay them. Such a commitment represents support for the obligations by the full faith and credit of the United States.

[19] Final rule changes to 10 C.F.R. Parts 30 and 50 on financial assurance requirements for the decommissioning of nuclear power plants were published in the *Federal Register* on September 22, 1998 (63 Fed. Reg. 50,465).

TVA agrees[20] that the revised definition excludes TVA from relying upon this funding mechanism and has informed the NRC that statements of intent will no longer be relied upon for decommissioning funding assurance. TVA has provided documentation for three external Master Decommissioning Trusts that were established in 1996. TVA has stated that the external trusts arrangements meet the requirements for an external sinking fund (10 C.F.R. § 50.75(e)(ii)). The trust arrangements meet the requirement that the account be segregated from Licensee assets and placed outside the Licensee's administrative control. During the hearing on October 26, 1998, a representative of the TVA's Office of the General Counsel stated that the external trust fund arrangements exceeded several hundreds of millions of dollars. As required by 10 C.F.R. § 50.75(f)(1), TVA is to report to the NRC by March 31, 1999, and at least once every 2 years thereafter, the status of its decommissioning funding, including the amount of decommissioning funds estimated to be required, the amount accumulated to the end of the calendar year preceding the date of the report, and a schedule of the annual amounts remaining to be collected. The NRC will review the status of TVA's decommissioning funding report, and if necessary, appropriate action will be taken to ensure compliance with NRC regulations.

Petitioner Issue

> A decommissioning plan would ensure safe storage of Browns Ferry Unit 1 irradiated fuel and would ensure sufficient independence of Units 2 and 3 from Unit 1.

Petitioner contends that Unit 1 irradiated fuel stored in its spent fuel pool will continue to represent a threat to public health for many years. The probability of an accident involving stored fuel is considered to be sufficiently small to make the overall risk to the public from an accident acceptable; however, Petitioner contends that the probability is small only because NRC regulations for design features and administrative controls at both permanently closed plants and operating plants minimize the chances of an accident. Petitioner asserts that there are no regulations for plants in Administrative Hold status, and, thus, there are no regulations that apply to Unit 1.

As previously stated, Administrative Hold is a TVA designation, not an NRC designation, and, thus, for NRC regulatory purposes, Browns Ferry Unit 1 is an operating reactor and is subject to all terms and conditions of the Unit 1 operating license, TSs, and all applicable NRC regulations, contrary to Petitioner's assertion that Unit 1 is unregulated.

[20] Letter from Mark J. Burzynski, Manager, Nuclear Licensing, TVA, dated December 21, 1998, to NRC.

Each of the reactors at Browns Ferry has its own spent fuel storage pool, but the pools of Units 1 and 2 are joined by a transfer canal that allows fuel assemblies to be transferred between the Unit 1 and Unit 2 fuel storage pools. The fuel storage facilities are shared only for Units 1 and 2, and the transfer canal is the only shared feature. The Unit 1 spent fuel storage pool is located on a common refueling floor with and in the same structure that houses the Units 2 and 3 spent fuel storage pools.

Units 2 and 3 are in active operational status; thus, each unit is refueled periodically, requiring discharge of recently irradiated fuel into the storage pools. Compared to Unit 1 fuel that was last discharged in 1985, recently discharged fuel from Unit 2 or Unit 3 is substantially more radioactive and produces greater decay heat. Thus, the consequences of an accident involving recently discharged irradiated fuel would be more severe than the same accident involving Unit 1 fuel. It follows that TSs, administrative controls, technical requirements, and design features that are adequate to ensure the safe storage of Unit 2 or Unit 3 spent fuel are also adequate to ensure safe storage of Unit 1 irradiated fuel.

Thus, whether or not Unit 1 was to be declared permanently shut down, the fuel storage requirements would not be changed. Requiring the Licensee to declare the permanent shutdown of Unit 1 and to submit a postshutdown decommissioning activities report, as requested by Petitioner, would have no effect upon the risk to the public from a potential fuel-handling accident or from accidental draining of the fuel storage pool because the existing technical specifications and administrative controls would not be changed, and existing design features to preclude draining of the storage pools would be maintained. Additionally, the SSCs required to ensure safe storage of irradiated fuel in the Unit 1 storage pool are operated, tested, and maintained to ensure that they are capable of performing their function.

With regard to Petitioner's assertion that a decommissioning plan would ensure sufficient independence of Units 2 and 3 from Unit 1, it is not at all clear which safety issue would be addressed. As currently licensed, the Browns Ferry units incorporate some sharing of certain structures and systems to obtain redundancy and improve reliability, but aside from the shared and common features, each unit is capable of operating independently of the other units, and each unit's TSs and technical requirements take into account the shared and common features that must be operable to support safe operation of that unit. Requiring the Licensee to declare the permanent shutdown of Unit 1 and to submit a postshutdown decommissioning activities report would require retaining those sections of the Unit 1 TSs that are necessary to support the safe operation of Units 2 and 3.

Continuing Operational Safety of Browns Ferry Unit 1

The Browns Ferry Unit 1 TSs are maintained and amended periodically as necessary, as is the case with Units 2 and 3, and TVA is required to operate Unit 1 in conformance with the TSs and technical requirements. Inasmuch as Unit 1 is shut down and defueled, a number of safety and nonsafety systems and components are not required to be operational. These systems and components have been drained, deenergized, and disassembled, as appropriate, and have been placed in a lay-up condition to protect and preserve the equipment pending a decision to resume power operations. The lay-up program is described in plant procedures and includes periodic monitoring of the condition of the equipment and lay-up status.

Unit 1 systems and components required to perform a function while the unit is in its current defueled status or that are required to support Units 2 and 3 operations are operated, maintained, and periodically tested in conformance with applicable TSs, and are included within the scope of the maintenance rule (10 C.F.R. § 50.65) program. Design and configuration control is maintained for these systems, and modifications or temporary alterations are performed under the provisions of 10 C.F.R. § 50.59.

Certain systems and components not required to perform a function while Unit 1 is shut down and defueled may not now conform to the design basis or may not have been modified to meet the actions requested by various NRC generic communications issued since the unit shut down. This, by itself, does not constitute a basis for revoking the license since the facility is in an operational mode in which the equipment is not required to be operable. TVA has committed to implementing a Design Baseline Verification Program for Unit 1 prior to returning Unit 1 to service.

Units 1 and 2 share a common control room that is staffed continually by licensed reactor operators, and the Unit 1 control boards are given regular attention similar to the operating units. Operators and engineers routinely tour areas of Unit 1 containing the systems and equipment that the TSs require to be operable to ensure safe storage of irradiated fuel and to support operation of the other units.

Relicensing Versus Applying the IMC 0350 Process

Petitioner asserts that revoking the operating license and requiring relicensing if TVA later decides to restart Unit 1 is a better and safer process than is the current restart process in IMC 0350. Petitioner believes that this would ''wipe the licensing slate clean and allow TVA, the NRC, and the public to examine restarting the plant without the burden of unraveling the mess caused by more than a decade of licensing limbo.''

NRC IMC 0350 provides Staff guidelines for approving restart of nuclear power plants that have been shut down either voluntarily or involuntarily because of a significant operating event, complex equipment problems, or serious Licensee management deficiencies. The guidelines have been used successfully for the restart of Browns Ferry Unit 3, Crystal River Unit 3, and Millstone Unit 3 and are being used for the D.C. Cook reactors and Millstone Unit 2. In each case, a plant-specific restart plan is developed using the IMC for guidance. The restart action plan identifies expected NRC actions to be taken before approving restart and includes an inspection plan to ensure that an adequate inspection record is created to support the restart decision. IMC 0350 specifies that the NRC Commissioners are to be adequately informed of Staff restart actions on a continuing basis through Commission papers or through the Executive Director for Operations, and as necessary, the Staff will brief the Commissioners. IMC 0350 provides the opportunity for public participation through public meetings. Through such meetings, the public may hear and comment on the Licensee's restart plans and the results of NRC reviews of the restart activities. Public comments and concerns are considered by the NRC and may be factored into the restart review, as appropriate.

During the hearing on October 26, 1998, Petitioner was questioned by an NRC representative regarding why it is believed that the processes used by TVA and NRC to recover Units 2 and 3 would not work for recovery of Unit 1. Petitioner indicated that the process is ''not very objective and it's basically up to the whims of the restart team as to what is safe, where the lines are drawn.'' However, when asked if there would be an issue if the process is applied correctly with openness and public involvement, Petitioner responded by referencing the use of the process at Millstone and indicating that it [IMC 0350] is a good process, but that it wasn't followed [at Millstone]. Thus, Petitioner's issue does not appear to be the process but its implementation. Petitioner conceded that the IMC 0350 process is working very well in the case of the D.C. Cook plant, and that if it were used at Browns Ferry Unit 1 as it is being used at D.C. Cook, there would be reasonable expectation that a good product would be realized.

IV. SUMMARY AND CONCLUSIONS

The NRC has determined that

> Petitioner has not identified any credible safety concern that has been created by the current ''Administrative Hold'' status of the unit that would not otherwise exist if the operating license were to be revoked. Absent a credible safety concern, there is no regulatory basis for suspending or

revoking an operating license merely because the Licensee chooses not to operate the unit.

The Licensee is required to comply with and is, with one possible exception to the Staff's knowledge, in compliance with all current applicable regulations for operating reactors and is required to comply with Unit 1 TSs and other technical requirements for the current operational mode of the unit. The issue of compliance of Unit 1 with 10 C.F.R. § 50.65 is the subject of an ongoing review, and resolution is expected soon.

Unit 1 is inspected by NRC inspectors, but at a reduced scope that is appropriate for the status of the unit.

Decommissioning Unit 1 would not provide any greater degree of safety for the Unit 1 irradiated fuel, for radiation control, or for Units 2 and 3 than is currently provided by the requirements of the operating license, TSs, and the Technical Requirements Manual.

There is no demonstrated credible basis for the assertion that facility restart based upon IMC 0350 is a less reliable process for resolving the safety concerns of a problem plant than the relicensing process. The IMC 0350 process has been demonstrated by a number of restart efforts, including those for Browns Ferry Unit 3.

For the reasons stated herein Petitioner's requests for the NRC to revoke the Browns Ferry Unit 1 operating license and to require TVA to submit a decommissioning plan or a lay-up plan for Unit 1, and for the NRC to conduct inspections against the decommissioning plan are denied.

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

FOR THE NUCLEAR
REGULATORY COMMISSION

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,
this 29th day of March 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Carl J. Paperiello, Director

In the Matter of

UNITED STATES ARMY CORPS OF ENGINEERS **March 26, 1999**

The Natural Resources Defense Council (NRDC) submitted a petition requesting that the NRC assert authority to ensure that the United States Army Corps of Engineers' (the Corps or USACE) handling of radioactive materials in connection with the Formerly Utilized Sites Remedial Action Program (FUSRAP) is executed in accordance with a properly issued license and all other applicable requirements.

In sum, Congress has given NRC no clear directive to oversee USACE's ongoing effort under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to complete the FUSRAP cleanup project. Indeed, Congress has provided NRC no money and no personnel to undertake an oversight role. In addition, Congress has made it clear that the Corps is to undertake FUSRAP cleanup pursuant to CERCLA which waives permit requirements for onsite activities. In these circumstances, the NRC is disinclined to read its statutory authority expansively, and to commit scarce NRC resources, to establish and maintain a regulatory program in an area where, under congressional direction, a sister federal agency already is at work and has committed itself to following appropriate safety and environmental standards.

Accordingly, the petition is denied insofar as it requests NRC to impose licensing and other regulatory requirements on the Corps for that agency's handling of radioactive material at FUSRAP sites. Both the permit waiver provision of CERCLA and the ambiguity regarding DOE's role in the program lead to the conclusion that NRC should not inject itself into the FUSRAP program at this time. Absent specific direction from Congress to the contrary,

NRC will continue to refrain from regulating the Corps in its cleanup activities at FUSRAP sites.

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

I. INTRODUCTION

On October 15, 1998, Thomas B. Cochran, Ph.D., Director, Nuclear Program, Natural Resources Defense Council (NRDC), and James Sottile IV, Caplin & Drysdale, Chartered, filed a petition on behalf of NRDC (the ''Petitioner'') addressed to L. Joseph Callan, Executive Director for Operations, U.S. Nuclear Regulatory Commission (NRC). The petition requests that NRC exert authority to ensure that the Corps of Engineers' handling of radioactive materials in connection with the Formerly Utilized Sites Remedial Action Program (FUSRAP) is effected in accord with a properly issued license and all other applicable requirements.

II. BACKGROUND

During the 1940s, 1950s, and 1960s, the Manhattan Engineer District and the Atomic Energy Commission performed work at a number of sites throughout the United States as part of the nation's early atomic energy program. Although many of the sites were cleaned up under guidelines in effect at the time, residual contamination remains at many of the sites today. The contaminants at these sites involved primarily low levels of uranium, thorium, and radium, with their associated decay products. The U.S. Department of Energy (DOE) began FUSRAP in 1974 to study these sites and take appropriate cleanup action. By 1997, DOE had identified forty-six sites in the program and had completed remediation at twenty-five sites with some ongoing operation, maintenance, and monitoring being undertaken by DOE. Remedial action was planned, under way, or pending final closeout at the remaining twenty-one sites.

On October 13, 1997, Congress passed the 1998 Energy and Water Development Appropriations Act,[1] which transferred administration of FUSRAP to the U.S. Army Corps of Engineers (the Corps or USACE) and appropriated $140,000,000 to the Corps for the completion of FUSRAP activities. The language in the law reads as follows:

[1] Energy and Water Development Appropriations Act, 1998, Pub. L. No. 105-62, 111 Stat. 1326 (1997).

> For the expenses necessary to administer and execute the Formerly Utilized Sites Remedial Action Program to clean up contaminated sites throughout the United States where work was performed as part of the nation's early atomic energy program, $140,000,000, to remain available until expended: *Provided,* that the unexpended balances of prior appropriations provided for these activities in this Act or any previous Energy and Water Development Appropriations Act may be transferred to and merged with this appropriation account, and thereafter, may be accounted for as one fund for the same time period as originally enacted.[2]

The legislative history behind this provision offers little guidance regarding the details of the Corps' new involvement. The Conference Committee report states that ''(t)he conferees have agreed to transfer the Formerly Utilized Sites Remedial Action Program (FUSRAP) to the Corps of Engineers, and funding for this program is contained in Title I of the bill.''[3] The House Appropriations Committee report indicates that this change stems from concerns over the cost of the FUSRAP program under DOE. The Committee report concludes that ''(c)learly, the problem must be in the contract management and contract administration function performed by the Department of Energy and the management and operating contractors who actually subcontract for most of the cleanup work.''[4] Finally, citing the Corps' efforts under the Formerly Used Defense Sites (FUDS) program, the report indicates that there are significant cost and schedule efficiencies to be gained by ''having the Corps of Engineers manage the Department of Energy's FUSRAP program as well.''[5]

Given the lack of guidance in the legislative history, two members of Congress sought to clarify the law's intent through subsequent correspondence. In a November 6, 1997 letter to Energy Secretary Federico Pena and Defense Secretary William Cohen, Senator Pete Domenici and Representative Joseph McDade indicated, among other things, that:

> Transfer of the FUSRAP program to the U.S. Army Corps of Engineers makes management, oversight, programming and budgeting, technical investigations, designs, administration, and other such activities directly associated with the execution of remediation work at the currently eligible sites a responsibility of the Corps of Engineers. It should be emphasized that *basic underlying authorities for the program remain unaltered and the responsibility of DOE* [emphasis added].

The Energy and Water Development Appropriations Act for Fiscal Year 1999 (FY99), P.L. 105-245, continued the Corps' involvement as the implementing agency for the FUSRAP. In particular, the 1999 Act provided that response actions by the United States Army Corps of Engineers under FUSRAP shall be

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[2] *Id.*
[3] H.R. Conf. Rep. No. 105-271, at 85 (1997).
[4] H.R. Rep. No. 105-190, at 99 (1997).
[5] *Id.*

subject to the administrative, procedural, and regulatory provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601 *et seq.*), and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Chapter 1, Part 300. In addition, the 1999 Act provided that, ''except as stated herein, these provisions do not alter, curtail or limit the authorities, functions or responsibilities of other agencies under the Atomic Energy Act (42 U.S.C. 2011 *et seq.*). . . .''[6]

To date, NRC has not regulated activities conducted under FUSRAP, including those activities conducted by the Corps since the transfer of the program. The Petitioner, however, believes that NRC should regulate the Corps' FUSRAP activities, arguing that the Appropriations Act did not purport to transfer authority over FUSRAP to the Corps. As such, according to the Petitioner, the Corps may not legally administer the program absent proper oversight because, unlike DOE and (in most cases) DOE contractors, the Corps is not exempt from the licensing requirements of the Atomic Energy Act (*see* 42 U.S.C. § 2014(s)). The Petitioner further indicates that DOE has publicly stated that it cannot extend its licensing exemption for private contractors to the Corps and that DOE has no regulatory authority over the Corps for the latter's FUSRAP activities. The Petitioner concludes that ''the Corps does not have the legal authority to run FUSRAP without first obtaining a license from the NRC.''

In support of its position, the Petitioner notes that the institutional mission of the Corps is not focused on the safety and security of the nation's nuclear activities. In addition, NRC's failure to regulate the Corps' FUSRAP activities is claimed to be inconsistent with the intent of the laws governing the utilization and cleanup of nuclear materials. Finally, the Petitioner adds that, with very few exceptions, Congress intended that no person should be permitted to handle nuclear materials except in accordance with a license issued by NRC.

In a November 30, 1998 letter NRC informed the Petitioner that the petition had been received and was currently under review. On the same date, NRC forwarded the petition to the DOE and the Corps for their comment. In a January 12, 1999 letter, the Chief Counsel for the Corps, Robert M. Andersen, responded to NRC's request. DOE responded to NRC's request in a January 14, 1999 letter from William J. Dennison, Assistant General Counsel for Environment.

The Corps' Response

In its response, the Corps states that it is not required to obtain a license from NRC for its FUSRAP activities. The Corps' response emphasizes that Congress directed the Corps to conduct its FUSRAP activities pursuant to the CERCLA.[7]

[6] Pub. L. No. 105-245, Title I.
[7] 42 U.S.C. § 9601 *et seq.*

The Corps' principal argument is that no NRC license is required because of the federal permit waiver for onsite removal or remedial actions in section 121(e)(1) of CERCLA. The Corps also believes that the AEA exempts FUSRAP activity from NRC licensing. In its opinion, ''Congress intended for USACE to fill the shoes of the AEC successor agency responsible for FUSRAP cleanup, that is DOE, an agency not considered a 'person' subject to licensing under the AEA.'' The Corps further posits that, in transferring the FUSRAP program, Congress expressed no intent that the agency obtain an NRC license for that activity and, instead, sought a seamless transition ''unimpeded by procedural requirements outside of CERCLA.''

Nevertheless, the Corps commits to meeting the substantive requirements of both the Atomic Energy Act (AEA) and CERCLA. It acknowledges that NRC license requirements may apply to portions of FUSRAP response actions conducted off site, beyond the scope of the permit waiver. The letter concludes by acknowledging that the substantive provisions of NRC regulations are applicable or relevant and appropriate requirements (ARARs) for many FUSRAP response actions under CERCLA and, as such, the Corps will look ''to NRC for guidance in interpreting and implementing these requirements on the sites.''

DOE's Response

DOE's response differs in several respects from that of the Corps. On the matter of DOE's continued involvement with FUSRAP and oversight of the Corps, the Department ''respectfully disagrees'' with the Corps. According to its submittal, DOE is not authorized to regulate the Corps' FUSRAP activities and cannot transfer its AEA authorities to the Corps. In the Department's view, ''(t)he transfer legislation did not make the Corps a DOE contractor, or otherwise subject the Corps' activities to the control or direction of DOE.'' The letter also indicates that DOE and the Corps are currently developing a memorandum of understanding (MOU) to clarify their respective roles and responsibilities as a result of the legislative transfer. Nevertheless, DOE believes that, with the exception of a few ''administrative issues,'' there are no remaining issues between the two agencies that should affect NRC's disposition of the NRDC petition. The letter concludes that NRC should ''evaluate the licensability of the Corps' activities in the same manner as it would evaluate the activities of any other 'person' within the meaning of the Atomic Energy Act.'' DOE defers to NRC on this question. The letter does not contain a DOE position concerning the viability of the Corps' CERCLA argument.

III. DISCUSSION

The NRC Staff has completed its evaluation of the Petitioner's requests and the responses from the Corps of Engineers and the Department of Energy. For the reasons discussed below, the NRC denies the Petitioner's request insofar as it calls on NRC to require the Corps to obtain a license for activities conducted at FUSRAP sites.

CERCLA Permit Waiver

Pursuant to section 121(e)(1) of CERCLA, ''(n)o Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section.''[8] This provision waives any NRC license requirements that would apply to the Corps' activities at FUSRAP sites conducted pursuant to CERCLA.

The Corps argues that, because Congress specifically subjected FUSRAP sites to the provisions of CERCLA in the 1999 Act, section 121(e)(1) applies to Corps' response actions at FUSRAP sites. In developing regulations for the implementation of CERCLA, the Environmental Protection Agency (EPA) addressed the section 121(e)(1) waiver provision for federal agency CERCLA response actions in section 300.400(e) of the National Contingency Plan (NCP). That provision states, in pertinent part:

> *Permit requirements.* (1) No federal, state, or local permits are required for on-site response actions conducted pursuant to CERCLA sections 104, 106, 120, 121, or 122. The term on-site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of response actions.''[9]

In the preamble of the final rule that proposed this section, EPA provided:

> Proposed § 300.400(e)(1) states that the permit waiver applies to all on-site actions conducted pursuant to CERCLA sections 104, 106, or 122; in effect, this covers all CERCLA removal and remedial actions (all ''response'' actions). However, a number of other federal agencies have inquired as to whether this language would reach response actions conducted pursuant to CERCLA sections 121 and 120. In response, EPA has made a non substantive clarification of the applicability of the permit waiver in CERCLA section 121(e)(1) to include on-site response actions conducted pursuant to CERCLA sections 120 and 121. . . . The addition of CERCLA section 120 simply recognizes that the permit waiver applies to federal facility

[8] *See also* 10 C.F.R. § 300.400(e).
[9] 40 C.F.R. § 300.400(e)(1).

cleanups conducted pursuant to CERCLA section 120(e), which are also selected and carried out in compliance with CERCLA section 121.[10]

Section 121(e)(1) applies to federal agencies such as the Corps in this case. The Corps may take the role of ''lead agency'' in a CERCLA cleanup action. The NCP defines ''lead agency'' as ''the agency that provides the OSC/RPM to plan and implement response actions under the NCP. EPA, the USCG, another federal agency, or a state . . . may be the lead agency for a response action.''[11] The NCP also states that ''Federal agencies listed in § 300.175 have duties established by statute, executive order, or Presidential directive which may apply to federal response actions following, or in prevention of, the discharge of oil or release of a hazardous substance, pollutant, or contaminant.''[12] The Corps, a branch of the U.S. Department of Defense, is among the agencies listed.[13] In the case of the FUSRAP program, Congress specifically designated the Corps as the ''lead agency'' in passing the 1999 Appropriations Act.[14]

As the Corps acknowledges in its letter, the permit waiver in section 121(e)(1) has been rarely addressed in the courts. In support of its position, the Corps does cite *McClellan Ecological Seepage Situation (MESS) v. Cheney,* a case which held that a Resource Conservation and Recovery Act (RCRA) permit was not required when activities which might otherwise require a RCRA permit took place at a site only as part of a CERCLA removal or remedial action.[15] In *McClellan,* MESS, a citizens' group, filed suit against the Secretary of Defense, with regard to cleanup actions being taken at McClellan Air Force Base, under RCRA and certain state laws. MESS claimed, *inter alia,* that McClellan was required to obtain a RCRA permit for the management of certain hazardous wastes on the base. The court held that an RCRA permit was not required, because the remedial activities were taken pursuant to CERCLA. The court relied on section 121(e)(1), stating, ''Section 121(e) expressly provides that the activity does not have to be separately permitted.''[16]

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[10] 55 Fed. Reg. 8666, 8689 (1990) (''National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule) (emphasis added). This change echoed EPA's intentions stated in the proposed rule: ''EPA proposes to state that on-site permits are not required for response actions taken by EPA, *other federal agencies,* States, or private parties pursuant to CERCLA sections 104, 106, or 122.'' 53 Fed. Reg. 51,394, 51,406 (1988) (''National Oil and Hazardous Substances Pollution Contingency Plan; Proposed Rule) (emphasis added).

[11] 40 C.F.R. § 300.5 (emphasis added). The definition goes on to state, ''The federal agency maintains its lead agency responsibilities whether the remedy is selected by the federal agency for non-NPL sites or by EPA and the federal agency or by EPA alone under CERCLA section 120.''

[12] 40 C.F.R. § 300.170.

[13] *See* 40 C.F.R. § 300.175(b)(4)(i).

[14] Pub. L. No. 105-245, Title I.

[15] 763 F. Supp. 431 (E.D. Cal. 1989). This holding was later vacated on the basis of subject matter jurisdiction. *See McClellan Ecological Seepage Situation (MESS) v. Perry,* 47 F.3d 325 (9th Cir. 1995).

[16] 763 F. Supp. 431, 435. The court went on to note in dicta that where there has been treatment that requires a RCRA permit that is not associated with a remedial or removal action under CERCLA, such a permit would be required. *Id.*

The Corps also cites *United States v. City of Denver* to uphold this interpretation of section 121(e)(1).[17] In that case, the court held that CERCLA preempted a zoning ordinance that was in actual conflict with EPA's remedial order. The court stated, ''[T]o hold that Congress intended that non-uniform and potentially conflicting zoning laws could override CERCLA remedies would fly in the face of Congress's [sic] goal of effecting prompt cleanups of the literally thousands of hazardous waste sites across the country.''[18]

In passing the 1998 and 1999 Appropriations Acts, Congress gave no indication that it intended to suspend the waiver provision in section 121(e)(1) of CERCLA in the context of the Corps' FUSRAP activities. The 1999 Act does say: ''Provided further, That, except as stated herein, these provisions do not alter, curtail or limit the authorities, functions or responsibilities of other agencies under the Atomic Energy Act (42 U.S.C. 2011 *et seq.*). . . .'' In its letter, DOE points to this language to support its argument that the Appropriations Act does not create any authority for it to regulate the Corps. In doing so, DOE interprets the term ''provisions'' as referring to the provisions of the Appropriations Act and not the provisions of CERCLA. The NRC Staff agrees with DOE on this point. While the language appears to indicate that the transfer of the program to the Corps does not alter the extent of DOE and perhaps NRC authority under the AEA, there is no specific indication that the language is intended to direct NRC to regulate the Corps' administration of the FUSRAP program. In particular, there is no evidence that in including this phrase, Congress intended to limit the application of the section 121(e)(1) permit waiver to the Corps' FUSRAP activities. In fact, nowhere in the reports for either the 1998 or 1999 Acts or in the text of the laws themselves did Congress give any hint that it intended NRC to regulate the Corps in its administration of the FUSRAP program. Instead, the inclusion of the specific reference to CERCLA suggests that Congress intended NRC to continue to refrain from regulating activities under the FUSRAP program even after DOE's role was reduced or discontinued.

As DOE states in its letter, the Corps has ''consistently expressed the view that its authorities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)'' are sufficient for the Corps' administration of the FUSRAP program. By the time the 1999 Appropriations Act was passed, the Corps' administration of the FUSRAP program under CERCLA was a matter of

[17] 100 F.3d 1509 (10th Cir. 1996).

[18] *Id.* at 1513. The Corps cited *Ohio v. USEPA,* 997 F.2d 1520 (D.C. Cir. 1993) in support of its section 121(e)(1) position. NRC would note that the case upholds a number of provisions in EPA's 1990 revision of the NCP, including section 121(e)(1). However, the court's discussion centers on EPA's definition of the term ''onsite,'' and does not discuss the exemption provision, as a whole, in detail.

public record[19] and NRC had not taken any steps to require the Corps to obtain a license from NRC. If Congress had intended NRC to regulate the Corps' activities at FUSRAP sites, it is likely that it would have specifically directed NRC to do so in passing the 1999 Appropriations Act.

We note, however, that the waiver in section 121(e)(1) does not apply to offsite activities. To the extent that NRC and U.S. Department of Transportation (DOT) requirements apply to the transportation, transfer, and disposal of Atomic Energy Act material taken off of FUSRAP sites, the Corps has committed to following applicable requirements, including those for transfer under the AEA, shipment under the Hazardous Materials Transportation Act, 49 U.S.C. § 5101, and NRC manifest requirements (e.g., 10 C.F.R. § 20.2006).[20]

NRC Authority Under UMTRCA

Many FUSRAP sites contain material over which NRC would have no regulatory jurisdiction regardless of whether the Corps is the lead agency in implementing the program and regardless of whether response actions by the Corps under the program are subject to CERCLA. In particular, of the twenty-one sites at which remediation has not yet been completed, twelve sites contain residual material resulting from activities that were not licensed by NRC at the time the Uranium Mill Tailings Act of 1978 (UMTRCA) became effective or at any time thereafter. As defined by the UMTRCA, NRC does not have authority to regulate cleanup of covered residual material resulting from an activity that was not so licensed.

The language of section 83 of the Atomic Energy Act (42 U.S.C. 2113(a)), was added to that Act by UMTRCA. Section 83a requires NRC to impose certain terms and conditions relating to cleanup with respect to any ''license issued or renewed after the effective date'' of section 83 for covered activities, and also imposes such terms or conditions on any such ''license in effect on the date of enactment'' of the section. No such responsibility was imposed upon NRC with respect to activities that were not under NRC license before the date of the enactment of section 83, if they were not licensed thereafter.

Prior to the enactment of UMTRCA, neither the AEC nor the NRC had statutory jurisdiction over residual material resulting from the processing of ore for source material. This position was taken by the AEC after careful legal analysis, and was subsequently adopted by the NRC when it succeeded to the

[19] See, e.g., Letter from Albert J. Genetti, Jr., U.S. Army Deputy Commander, U.S. Army Corps of Engineers, to Mr. Thomas B. Cochran and Ms. Barbara A. Finamore, Natural Resources Defense Council, May 20, 1998.

[20] While the Corps will be following NRC's requirements in this area, it is unlikely that any specific NRC license requirements would apply to shipments from FUSRAP sites. However, the Staff will request that the Corps contact NRC if it plans to ship material that does not meet one of the exemptions for a specific license in NRC regulations. *See, e.g.,* 10 C.F.R. § 71.10.

AEC's regulatory functions. Though NRC exercised some control over such material in connection with licensed processing of ore for source material, it did not exercise jurisdiction at inactive sites where no license was in effect. UMTRCA was enacted because the Congress recognized that NRC did not have jurisdiction over radioactive residuals resulting from the extraction of uranium or thorium from ore processed for its source material content at inactive sites. This is evidenced by the floor remarks regarding the amended version of H.R. 13650, the bill that was enacted as UMTRCA. Senator Hart explained:

> 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 operations cease and the operating license expires. It is that authority to regulate tailings after milling operations cease, that we propose be given to the NRC.[21]

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 NRC Staff notes that many of the remaining sites (i.e., sites containing materials other than mill tailings) also raise some significant jurisdictional questions in their own right. For instance, a few of the sites may still be in legal possession of DOE even though the Corps is conducting cleanup at the site under FUSRAP. While the issue of possession appears to be a matter of continuing discussion between the Corps and DOE, it is highly unlikely that NRC would have authority to require a license for cleanup activities conducted at a site that continues to be a DOE-owned or -controlled site. In addition, the concentration of radioactive material at some of the remaining sites may not be sufficient to trigger NRC license requirements. While NRC does not have information sufficient to reach a final conclusion for specific sites, it is the NRC Staff's understanding that some of these sites may contain only ''unimportant quantities'' of source material as defined under 10 C.F.R. § 40.13(a). If this is the case, the amount of material at these sites would not be sufficient to implicate NRC license requirements. Given the limitations of NRC jurisdiction under UMTRCA, the potential DOE ownership issues, and the possibility that several sites may contain ''unimportant quantities'' of source material, it is likely that the number of FUSRAP sites over which NRC may have jurisdiction would be very small even absent the CERCLA permit waiver.

[21] 124 Cong. Rec. S18,748 (Oct. 13, 1978).

The Corps' Authority Under the Appropriations Act

In its response, the Corps states that the AEA also exempts FUSRAP activity from NRC licensing because Congress intended the Corps to fill the shoes of DOE, an agency exempt from NRC regulatory requirements under most circumstances. DOE disagrees with this characterization, claiming that, for the most part, it has no role in the FUSRAP program at this time (regulatory, contractual, or otherwise). As such, in DOE's view, the Corps cannot rely on any exemption in the AEA to avoid regulation by NRC. Nevertheless, DOE acknowledges that the transfer to the Corps did not completely eliminate the Department's involvement with FUSRAP. While the issues have yet to be resolved, DOE may have responsibility for inventory reporting of government-owned FUSRAP sites to the General Services Administration and may be required to conduct postcleanup monitoring at some sites after the Corps' cleanup activities cease.

DOE and the Corps are working on an MOU to address their disagreements regarding the nature of the transfer of the FUSRAP program and their respective responsibilities under the program. Until the disagreement has been resolved, either by the agencies or by further direction from Congress, the NRC Staff need not reach a conclusion on the matter. Nevertheless, in view of the clear applicability of CERCLA § 121(e)(1) to the Corps' activity at FUSRAP sites, the Staff does not believe that it would be appropriate to require the Corps to obtain an NRC license for its activity at FUSRAP sites.

IV. CONCLUSION

In sum, Congress has given NRC no clear directive to oversee USACE's ongoing effort under CERCLA to complete the FUSRAP cleanup project. Indeed, Congress has provided NRC no money and no personnel to undertake an oversight role. In addition, Congress has made it clear that the Corps is to undertake FUSRAP cleanup pursuant to CERCLA which waives permit requirements for onsite activities. In these circumstances, we are disinclined to read our statutory authority expansively, and to commit scarce NRC resources, to establish and maintain a regulatory program in an area where, under congressional direction, a sister federal agency already is at work and has committed itself to following appropriate safety and environmental standards.

Accordingly, I deny the petition insofar as it requests NRC to impose licensing and other regulatory requirements on the Corps for that agency's handling of radioactive material at FUSRAP sites. Both the permit waiver provision of CERCLA and the ambiguity regarding DOE's role in the program lead me to the conclusion that NRC should not inject itself into the FUSRAP program at this time. Absent specific direction from Congress to the contrary,

NRC will continue to refrain from regulating the Corps in its cleanup activities at FUSRAP sites.

As provided by 10 C.F.R. § 2.206, a copy of this Decision will be filed with the Secretary of the Commission for the Commission's review. The Decision will become the final action of the Commission 25 days after issuance, unless the Commission, on its own motion, institutes review of the Decision within that time.

FOR THE NUCLEAR
REGULATORY COMMISSION

Carl J. Paperiello, Director
Office of Nuclear Material Safety
and Safeguards

Dated at Rockville, Maryland,
this 26th day of March 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 40-8968-ML**

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101,
Albuquerque, NM 87120) **April 6, 1999**

The Commission denies Intervenors' petition for interlocutory review of the Presiding Officer's Memorandum and Order (Questions Concerning Radioactive Air Emissions) (LBP-99-15, 49 NRC 261), issued on March 18, 1999.

RULES OF PRACTICE: INTERLOCUTORY REVIEW

In determining whether to grant a petition for interlocutory review, the Commission considers whether the Presiding Officer's action either (1) threatens the party adversely affected with immediate and serious irreparable harm that could not be remedied by a later appeal or (2) affects the basic structure of the proceeding in a pervasive or unusual manner. *See* 10 C.F.R. § 2.786(g)(1) and (2).

PRESIDING OFFICER: AUTHORITY TO QUESTION PARTIES

The Commission's rules grant the Presiding Officer discretion to seek additional information. *See* 10 C.F.R. § 2.1233(a).

MEMORANDUM AND ORDER

On March 26, 1999, Intervernors Eastern Navajo Diné Against Uranium Mining (''ENDAUM'') and Southwest Research and Information Center (''SRIC'') filed a petition with the Commission for interlocutory review of the Presiding Officer's Memorandum and Order (Questions Concerning Radioactive Air Emissions) (LBP-99-15, 49 NRC 261), issued on March 18, 1999, and reaffirmed on March 23 in response to a motion for reconsideration. In particular, the Presiding Officer's order posed a series of questions to the parties related to the radioactive air emissions from the project. The Intervenors seek reversal of the March 18 order because, in their view, the Presiding Officer has inappropriately provided Hydro Resources, Inc. (HRI), and the NRC Staff with a second opportunity to address issues that these parties had failed to address earlier. Intervenors argue that the Presiding Officer is not conducting this case impartially but has shown bias toward the NRC Staff and HRI.

In determining whether to grant a petition for interlocutory review, the Commission considers whether the Presiding Officer's action either (1) threatens the party adversely affected with immediate and serious irreparable harm that could not be remedied by a later appeal or (2) affects the basic structure of the proceeding in a pervasive or unusual manner. 10 C.F.R. § 2.786(g)(1) and (2); *see Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-94-15, 40 NRC 319 (1994); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-94-2, 39 NRC 91, 93 (1994). Intervenors seek review and reversal pursuant to the second standard. The Commission, however, does not agree with Intervenors that the Presiding Officer's order has altered the basic structure of the proceeding in a pervasive or unusual manner. We recently denied a similar petition for interlocutory review in this proceeding, *see* CLI-99-7, 49 NRC 230 (1999), and do so again here.

As we stated in CLI-99-7, the propriety of the Presiding Officer's inquiry turns on fact-specific questions. We see no reason to interfere in the proceeding at this time, especially where such interference is likely to cause delay while we obtain appellate briefs and undertake the detailed inquiry necessary to resolve Intervenors' bias complaint. However, our denial of interlocutory review does not reflect any position on the substance of the bias question. Intervenors may raise their bias concerns on appeal if, in the end, they do not prevail before the Presiding Officer on the merits of a particular issue and can show prejudice from information that entered the record improperly or unfairly as a result of the Presiding Officer's questions.

Contrary to Intervenors' view, our refusal at this time to review the propriety of the Presiding Officer's supplemental inquiries does not undercut our commitment to resolve this licensing proceeding as expeditiously as possible. The

Presiding Officer appears on course to decide all issues before him promptly. Our rules give him discretion to seek additional information. *See* 10 C.F.R. § 2.1233(a). For the Commission now to decide on a question-by-question basis whether the Presiding Officer properly exercised that discretion would delay rather than expedite the proceeding.

Intervenors also sought a stay of the Presiding Officer's March 18 and March 23 orders pending disposition of the petition for review. In view of our denial of the petition, the stay request is moot.

For the foregoing reasons, the petition is denied.

IT IS SO ORDERED.

For the Commission[1]

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 6th day of April 1999.

[1] Commissioner Dicus was not available for the affirmation of this Order. Had she been present, she would have affirmed the Order.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 11005070**
(License No. XSNM-03060)

TRANSNUCLEAR, INC.
(Export of 93.3% Enriched Uranium) **April 8, 1999**

ORDER

The Nuclear Control Institute (NCI) has requested leave to intervene and a hearing on an application of Transnuclear, Inc. (Transnuclear), filed on October 29, 1998, for a license to export highly enriched uranium (HEU) to Canada. After reviewing the pleadings[1] submitted by both parties and the Executive Branch views on the merits of the application, we have determined that more information is required to fully address the merits of this case.

We request that the participants, including the Executive Branch, address the questions set out as an Appendix to this Order. The NRC must receive responses by April 22, 1999. Submissions should be served on other participants in accordance with 10 C.F.R. § 110.89.

[1] On February 22, 1999, Transnuclear filed a motion for leave to file a brief in response to NCI's February 12, 1999 reply brief. Section 110.83 of 10 C.F.R. provides for an applicant in an export licensing proceeding to file an answer to a hearing request or intervention petition, and for a reply to that answer, but makes no provision for further pleadings. Because NCI does not oppose Transnuclear's additional brief, and in the interest of fully informing the Commission on this matter, Transnuclear's motion is granted. NCI filed a motion for leave to file a rejoinder to Transnuclear's supplemental reply, dated March 1, 1999. Because Transnuclear raised no objection, and in the interest of informing the Commission, NCI's motion is likewise granted.

It is so ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 8th day of April 1999.

APPENDIX

I. The MAPLE reactors

1. What is the status of DOE's funding of the U.S. (Argonne National Laboratory) (ANL) program to develop alternative LEU targets for Canada?

2. Please describe additional steps taken since the November 5, 1998 meeting between AN and MDS Nordion to further the objectives of the Reduced Enrichment for Research and Test Reactors (RERTR) program. Transnuclear's March 1, 1999 pleading, and the March 5, 1999 Executive Branch views reference a January 12, 1999 meeting between DOE representatives and MDS Nordion. What further agreements, if any, were reached, as a result of that, or any subsequent, meeting?

3. When will the first LEU targets be ready and scheduled for testing at the MAPLE reactors? Is it possible that existing HEU target designs can be modified for use with LEU? Is it possible the LEU targets being developed for use in Indonesia could be used in Canada? When will the Indonesian targets be available for commercial use, in the Indonesian reactor, and in other reactors?

4. Where will the first irradiated Indonesian and Canadian LEU test targets be processed? How many irradiation and processing test campaigns may be required for economic and FDA licensing feasibility determinations?

II. Conversion of the MAPLE Reactors to LEU Targets if Startup Occurs with HEU Targets

1. When will sufficient information be available to enable MDS Nordion to assess the economic feasibility of using LEU targets?

2. Under what circumstances would it make ''business sense'' for MDS Nordion to convert to LEU targets? If HEU targets are available from the United States, Russia, or other sources now or in the future, is there any incentive to assume the extra costs involved in converting to LEU targets?

3. Please discuss the feasibility of converting the MAPLE reactors to LEU targets if initial startup is implemented with HEU targets. Include the duration of possible shutdowns and the effect on the supply of medical isotopes to the U.S. In addition, discuss whether existing waste processing and storage facilities will be adequate if LEU targets are used. If not, how will the issue of additional waste processing and/or storage facilities be addressed?

III. NRU Reactor

1. What is the projected shutdown date for the NRU reactor?

2. Will the NRU reactor be shut down immediately following (or shortly thereafter) the date on which the MAPLE reactors become operational, or will it continue to operate until its projected shutdown date?

IV. U.S. Production Capability for Mo-99

1. When will the facilities at Sandia/Los Alamos National Laboratory be ready to produce medical isotopes? Please discuss how this project has progressed since publication of the Record of Decision (*see* 60 Fed. Reg. 48,921 (Sept. 17, 1996)).

2. What percentage of the U.S. medical isotope supply will this facility supply when it is fully operational? In an emergency (e.g., nonavailability of medical radioisotopes from Canada) can the Sandia/LANL production be expanded? If so, what percentage of the U.S. supply could it provide, and for how long?

3. Why will this facility use HEU targets?

4. Is there a schedule in place for conversion to LEU targets at this facility? If not, why not?

V. General Questions

1. What is the status of the use of LEU targets (or plans for conversion to LEU targets) at other producers of medical isotopes for the world market?
2. Approximately how large is the economic advantage of using HEU as opposed to LEU targets, as a general matter?

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, 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) **April 15, 1999**

The Commission affirms the Board's decision, LBP-99-3, 49 NRC 40 (1999), to grant the late-filed intervention petition of the Southern Utah Wilderness Alliance (SUWA). In doing so, the Commission upholds the Board's findings that SUWA has established its representational standing to intervene and has proffered at least one litigable contention.

RULES OF PRACTICE: STANDING TO INTERVENE

Under section 189a of the Atomic Energy Act, the Commission must grant a hearing upon the request of any person ''whose interest may be affected by the proceeding.'' 42 U.S.C. § 2239(a). Accordingly, NRC regulations require a petition for intervention to ''set forth with particularity the interest of the petitioner in the proceeding, how that interest may be affected by the results of the proceeding, . . . and the specific aspect or aspects of the subject matter of the proceeding as to which [the] petitioner wishes to intervene.'' 10 C.F.R. § 2.714(a)(2). In evaluating whether a petitioner's asserted interest provides an appropriate basis for intervention, the Commission has long looked for guidance to judicial concepts of standing.

RULES OF PRACTICE: STANDING (REPRESENTATIONAL)

Where an organization asserts a right to represent the interests of its members, ''judicial concepts of standing'' require a showing that: (1) its members would otherwise have standing to sue in their own right; (2) the interests that the organization seeks to protect are germane to its purpose; and (3) neither the claim asserted nor the relief requested requires an individual member to participate in the organization's lawsuit. Longstanding NRC practice also requires an organization to demonstrate that at least one of its members has authorized it to represent the member's interests.

RULES OF PRACTICE: STANDING (REPRESENTATIONAL)

To determine whether an organization's individual members have standing, a petitioner must allege (1) a particularized injury (2) that is fairly traceable to the challenged action and (3) is likely to be redressed by a favorable decision.

RULES OF PRACTICE: STANDING TO INTERVENE; APPELLATE REVIEW (DEFERENCE TO PRESIDING OFFICER)

The Commission has historically accorded ''substantial deference'' to Board determinations for or against standing, except where the Board has clearly misapplied the facts or law.

RULES OF PRACTICE: STANDING TO INTERVENE (INJURY IN FACT)

Intervenors who fail to provide specific information regarding either the geographic proximity *or* timing of their visits will only complicate matters for themselves. In many instances, a lack of specificity will be sufficient to reject claims of standing.

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

NRC regulations require that an admissible contention consist of: (1) a specific statement of the issue to be raised or controverted; (2) a brief explanation of the bases for the contention; (3) a concise statement of the alleged facts or expert opinion supporting the contention on which the petitioner intends to rely in proving the contention at any hearing; and (4) sufficient information to show that a genuine dispute exists on a material issue of law or fact. *See* 10 C.F.R. § 2.714(b)(2). A failure to comply with any of these requirements is grounds for dismissing the contention.

MEMORANDUM AND ORDER

I. INTRODUCTION

This proceeding arises from the application of Private Fuel Storage, L.L.C. (''Applicant'' or ''PFS'') for a license to store spent nuclear fuel at an Independent Spent Fuel Storage Installation (ISFSI) on the Skull Valley Goshute Indian Reservation in Skull Valley, Utah. In this decision, we review an Atomic Safety and Licensing Board Memorandum and Order, LBP-99-3, 49 NRC 40 (1999), that granted the late-filed intervention petition of the Southern Utah Wilderness Alliance (SUWA). The Board found that (1) a balancing of the late-filing criteria in 10 C.F.R. § 2.714(a)(1) supports entertaining the petition and the accompanying contentions; (2) SUWA has established its representational standing to intervene; and (3) SUWA has proffered one litigable contention. Pursuant to 10 C.F.R. § 2.714a, the Applicant, PFS, has appealed the Board's ruling on the grounds that SUWA has neither submitted an admissible contention nor established standing to intervene in this proceeding. We affirm the Board's decision.

II. BACKGROUND

On July 31, 1997, the agency published in the *Federal Register* a notice of opportunity for hearing on PFS's license application. *See* 62 Fed. Reg. 41,099. On April 22, 1998, the Board resolved several petitions for intervention stemming from this notice and set the case for hearing. LBP-98-7, 47 NRC 142 (1998). We considered appellate challenges to some aspects of the Board's rulings on standing to intervene, but we ultimately approved the Board's rulings. CLI-98-13, 48 NRC 26 (1998).

On August 28, 1998, PFS submitted a license amendment application making several changes in the transportation scheme set out in the original license application. In particular, the license amendment application outlines a revised proposal to construct a rail spur (i.e., the ''Low Junction'' rail spur) off the existing Union Pacific rail mainline that would be used to transport flatbed rail cars holding spent fuel shipping casks to the PFS facility approximately 30 miles to the south. The Board denied late-filed contentions related to this license amendment submitted by Intervenors State of Utah, the Confederate Tribes of the Goshute Reservation, and Ohngo Gaudadeh Devia. LBP-98-29, 48 NRC 286 (1998).

In a November 18, 1998 hearing request, SUWA sought to intervene in the proceeding, either as of right or as a discretionary intervenor, to challenge the August license amendment. In its petition, SUWA describes itself as a nonprofit

organization dedicated to identifying and protecting the ''wilderness character'' of roadless areas under the jurisdiction of the United States Department of the Interior's Bureau of Land Management (BLM) until such time as Congress has an opportunity to designate those areas as wilderness under the Wilderness Act of 1964, 16 U.S.C. §§ 1131-1136, and the Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. §§ 1701-1784. In separate replies, Applicant PFS and the NRC Staff asserted that the SUWA petition should be denied. They argued that (1) the SUWA hearing request did not merit admission under the section 2.714(a)(1) late-filing standards; (2) SUWA had failed to establish its standing as of right; (3) SUWA had not made a case for permitting discretionary intervention; and (4) SUWA had failed to provide an admissible contention. On December 8, 1998, SUWA filed a reply to the PFS and Staff responses. On December 11, 1998, the Board convened a videoconference to hear arguments from SUWA, the State, PFS, the Skull Valley Band, and the Staff concerning the SUWA petition and its contentions. *See* Private Fuel Storage, L.L.C. Prehearing Conference (hereinafter ''Prehearing Conference Tr.'') (Dec. 11, 1998).

In its February 3, 1999 Memorandum and Order, the Board concluded that SUWA had met the five criteria of 10 C.F.R. § 2.714(a)(1) for admitting of late-filed intervention petitions and contentions. LBP-99-3, 49 NRC at 46-49. In addition, the Board found that SUWA had successfully established its standing to intervene. Of the various hurdles that must be met for an organization to establish standing,[1] the only issue before the Board was whether one or more of SUWA's members would otherwise have standing to sue in his or her own right. With regard to the standing of the individual SUWA member in question (Dr. Jim Catlin), only the issues of injury in fact and redressability were in dispute. *Id.* at 50.

The Board found that the injury claimed by Dr. Catlin ''would constitute a sufficiently direct and concrete injury to an intervenor's legitimate interests under NEPA to provide standing to contest that action.'' *Id.* at 51. The Staff and PFS emphasized that Dr. Catlin had not specified the number of times he had visited the area in the past and the number of times he planned to visit in the future but merely indicated that he had visited ''frequently'' in the past and planned to do so frequently in the future. According to PFS and the NRC Staff, Dr. Caitlin's contacts with the land proposed for the rail spur were insufficiently particularized and, as such, fail to establish personal injury. *See* Prehearing Conference Tr. at 1066-67, 1078-79. In ruling against PFS and the Staff on this issue, the Board concluded that Dr. Catlin's ''adoption of the term 'frequently' in this context demonstrates that his bond with the area is sufficiently concrete to establish his standing and, consequently, that of his representative SUWA.'' LBP-99-3,

[1] *See* CLI-98-13, 48 NRC at 30-31.

49 NRC at 52. The Board also found that SUWA had met the redressability requirement, concluding that if, as a result of NEPA consideration urged by SUWA, the ''PFS proposal is implemented in a way that is not inconsistent with SUWA's asserted interest in the land, then SUWA has won all it can expect from this proceeding and its potential injury has been redressed.'' *Id.*

The Board also reviewed the two contentions that SUWA had raised in its November 18, 1998 petition. First, SUWA claimed that the license application amendment failed to adequately consider the impacts of the rail spur on the wilderness character of the area in question. Second, SUWA asserted that the amendment failed to develop and analyze a meaningful range of alternatives to the rail spur. The Board rejected the first contention. However, the Board found the second contention and its supporting basis ''sufficient to establish a genuine dispute adequate to warrant further inquiry.'' *Id.* at 53.

On February 16, 1999, PFS appealed the Board's decision and urged the Commission to reverse the Board's Order and deny SUWA's petition to intervene in its entirety for failure to proffer an admissible contention and for lack of standing. SUWA has filed a brief opposing PFS's appeal and the NRC Staff has filed a brief supporting it.

III. ANALYSIS

On appeal, PFS first urges the Commission to find that SUWA has no standing in this proceeding because its member, Dr. Catlin, failed to demonstrate sufficient past and future contacts with the area in question. *See* Applicant's Appeal Brief at 12-15 (Feb. 16, 1999). PFS also argues that SUWA's contention on alternatives to the proposed rail spur is inadmissible because the contention did not, as initially filed, suggest an alternative of its own and because the alternatives raised by SUWA in a reply before the Board came too late to meet the five-part test for late-filed contentions. *Id.* at 5-10.

A. Standing

Under section 189a of the Atomic Energy Act, the Commission must grant a hearing upon the request of any person ''whose interest may be affected by the proceeding.'' 42 U.S.C. § 2239(a). Accordingly, NRC regulations require a petition for intervention to ''set forth with particularity the interest of the petitioner in the proceeding, how that interest may be affected by the results of the proceeding, . . . and the specific aspect or aspects of the subject matter of the proceeding as to which [the] petitioner wishes to intervene.'' 10 C.F.R. § 2.714(a)(2). In evaluating whether a petitioner's asserted interest provides an appropriate basis for intervention, the Commission has long looked for guidance

to judicial concepts of standing. *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976). *Accord Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195 (1998); *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

Where an organization asserts a right to represent the interests of its members ''judicial concepts of standing'' require a showing that: (1) its members would otherwise have standing to sue in their own right; (2) the interests that the organization seeks to protect are germane to its purpose; and (3) neither the claim asserted nor the relief requested requires an individual member to participate in the organization's lawsuit. *See Hunt v. Washington State Apple Advertising Commission,* 432 U.S. 333, 343 (1977). Longstanding NRC practice also requires an organization to demonstrate that at least one of its members has authorized it to represent the member's interests. *See Georgia Tech Research Reactor,* 42 NRC at 115. Of the four requirements that an organization must meet to establish standing, the only one at issue here is whether any of SUWA's members would otherwise have standing to sue in their own right, an issue similar to the tribal standing question we addressed earlier in this proceeding. *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 30-31 (1998).

To determine whether an organization's individual members have standing, a petitioner must allege (1) a particularized injury, (2) that is fairly traceable to the challenged action, and (3) is likely to be redressed by a favorable decision. *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 5-6 (1998); *see also Steel Co. v. Citizens for a Better Environment,* 118 S. Ct. 1003, 1016-17 (1998). On appeal, the only issue before the Commission is whether Dr. Catlin has demonstrated a particularized injury here.

As discussed above, SUWA relied on the declarations of Dr. Catlin, to support the organization's argument for standing. In his second declaration filed before the Board, Dr. Catlin specifically indicates that:

> I have visited these areas, including the exact tract of land within the North Cedar Mountains area that will be traversed by the proposed rail spur, and have developed an ongoing and deep bond with the land and its wilderness character which I will continue to cultivate in the future. I frequently enjoyed and will, in the future with some frequency, enjoy hiking, camping, birdwatching, study, contemplation, solitude, photography, and other activities in and around the North Cedar Mountains roadless area, including the exact tract of land — the bench of the North Cedar Mountains — over which the proposed rail spur will traverse.

SUWA Reply, Second Declaration of Jim Catlin for Petitioner [SUWA] at 4-5 (Dec. 8, 1998). In its appeal brief, the Applicant argues that SUWA lacks standing because Dr. Catlin has failed to demonstrate, as a matter of law,

sufficient contact with the area that would be affected by the PFS proposal. Specifically, the Applicant believes that Dr. Catlin's use of the word ''frequently'' does not provide specific information regarding ''the time or duration of his contact with this area.'' Applicant's Appeal Brief at 12. In its decision, the Board indicated that Dr. Catlin's imprecision in describing the number of contacts was not a substantial concern because of his ''actual physical contact'' with the area in question. LBP-99-3, 49 NRC at 52 n.7.

We historically have accorded ''substantial deference'' to Board determinations for or against standing, except where the Board has clearly misapplied the facts or law. *See International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-98-6, 47 NRC 116, 118 (1998); *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 (1996); *Georgia Tech Research Reactor,* 42 NRC at 116; *Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 47-48 (1994). PFS's arguments do not persuade us that we need to override the Board's judgments on SUWA's standing. We agree with the Board that, in this case, Dr. Catlin has demonstrated that he maintains contacts with the site that are sufficient to establish standing. While mere interest in an area alone does not establish standing for an individual,[2] we note that Dr. Catlin is no casual bystander or generalist interested in environmental issues. He appears to have a significant and genuine personal attachment to the affected area, as demonstrated by his work in developing a reinventory of BLM lands in the area for the Utah Wilderness Coalition. SUWA Petition to Intervene, Declaration of Jim Catlin for Petitioner [SUWA] at 1-4 (Nov. 18, 1998).[3]

Most importantly, however, he has demonstrated actual contact with the area based on his ''frequent'' physical presence on the very parcel of land that would be altered by the proposed action. While his declaration does not specify the exact number of times he has visited in the past or plans to visit in the future, it was reasonable for the Board to conclude that his visits to the site are numerous enough to demonstrate that his ''bond with the area is sufficiently concrete to establish his standing.'' LBP-99-3, 49 NRC at 52. As we held in our prior standing decision in this proceeding (CLI-98-13), ''standing does not depend on the precise number of . . . visits,'' but turns on ''the likelihood of an ongoing connection and presence.'' 48 NRC at 32. Dr. Catlin appears to meet this test.

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[2] *See, e.g., Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 95 n.10 (1993).

[3] We are not swayed by the decision cited by the Applicant. *See Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-79-10, 9 NRC 439, 456-57 (1979). While the facts in that case may hold some passing similarities to the controversy at hand, it provides little in the way of useful guidance for this case. In that case, the contacts in question involved fishing activities ''about once a month within 40 or 50 miles of the plant.'' *Id.* at 457. In the case at hand, Dr. Catlin's visits involve use of the very site where the rail line would be constructed.

We hasten to add, however, that a speculative contact will not pass muster. *See, e.g., Lujan v. Defenders of Wildlife,* 504 U.S. 555, 563-64 (1992). In particular, as the Supreme Court indicated in *Lujan,* mere intentions to visit ''some day'' are not sufficient to establish standing. *Id.* at 564. However, in this case, Dr. Catlin's declaration taken as a whole demonstrates that he has more than just ''some day'' intentions to visit the area that would be affected by the rail spur. He lives in the State of Utah, is director of the Wild Utah Project, and works with the Utah Wilderness Coalition putting to use his expertise in geographical information systems (GIS) to conduct land studies of the North Cedar Mountain area. *See* Dr. Catlin's First Declaration, *supra,* at 1-5. Given Dr. Catlin's overall involvement with issues related to the area and given his sworn declaration indicating he has used the site in the past and will do so in the future, we see no reason to doubt his intent to revisit this area and, as such, see no need to look behind the meaning of the word ''frequently'' as used in his declaration.[4]

This is not to say, as the NRC Staff suggests, that future intervenors will be able to use the word ''frequently'' as a talisman to ward off all challenges to their claims of standing. To the contrary, as this very case demonstrates, intervenors who fail to provide specific information regarding either the geographic proximity *or* timing of their visits will only complicate matters for themselves. In many instances, a lack of specificity will be sufficient to reject claims of standing. However, given the facts in this particular case, we cannot say that the Board erred in finding that Dr. Catlin had offered enough specific information to demonstrate the necessary injury in fact.

B. Admissibility of SUWA Contention B (Alternatives)

NRC regulations require that an admissible contention consist of: (1) a specific statement of the issue to be raised or controverted; (2) a brief explanation of the bases for the contention; (3) a concise statement of the alleged facts or expert opinion supporting the contention on which the petitioner intends to rely in proving the contention at any hearing; and (4) sufficient information to show that a genuine dispute exists on a material issue of law or fact. *See* 10 C.F.R. § 2.714(b)(2). *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248-49 (1996); *Georgia Tech Research Reactor,* 42 NRC at 117-18. A failure to comply with any of these requirements is grounds for dismissing the contention. *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

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[4] *See, e.g., Sierra Club v. Simkins Industries, Inc.,* 847 F.2d 1109, 1112 n.3 (4th Cir. 1988) (an affidavit from the member of the Sierra Club which indicated that the member ''regularly'' hiked along the river was sufficiently specific to confer standing), *cert. denied,* 491 U.S. 904 (1989).

The contention in question involves the range of alternatives to the Low Corridor rail spur and reads as follows:

> The License Application Amendment fails to develop and analyze a meaningful range of alternatives to the Low Corridor Rail Spur and the associated fire buffer zone that will preserve the wilderness character and the potential wilderness designation of a tract of roadless Bureau of Land Management (BLM) land — the North Cedar Mountains — which it crosses.

SUWA Contentions at 5 (Nov. 18, 1998). PFS believes that this contention is inadmissible because (1) it does not show a material dispute in that it ignores material submitted in the application, and (2) it fails to propose at least a ''colorable alternative'' to those put forth by the Applicant. *See* Applicant's Appeal Brief at 6.

PFS is correct in pointing out that the application did consider a range of alternatives. *Id.* at 10 n.15. However, those alternatives addressed only general transportation options (e.g., trucking vs. railroad) and did not reflect consideration of alternative configurations to the proposed Low Corridor rail spur alignment. In the light of the fact that the rail spur has now become PFS's preferred option, we agree with the Board that a failure to consider alternative configurations to the specific alignment in question is at least worthy of further consideration on the merits.

In opposing the contention, PFS suggests that an intervenor must offer alternatives of its own in order to raise an admissible contention related to the adequacy of an applicant's alternatives. *See id.* at 7, citing *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-355, 4 NRC 397, 412 (1976). We frankly are puzzled by PFS's heavy reliance on the *Catawba* decision. *Catawba* merely states that ''further examination may be called for [when] an intervenor suggests a 'colorable alternative.' '' *Catawba,* 4 NRC at 412. The case established no rigid rule requiring intervenors to propose their own alternatives as a prerequisite to a NEPA claim resting on a failure to consider alternatives. The facts in *Catawba* were starkly different from ours. There, the Appeal Board considered, and understandably rejected, an ''eleventh hour suggestion,'' advanced during the ''last week of a reopened hearing,'' that the NRC had failed to consider the possibility of power purchases as an alternative to building the Catawba nuclear power plant. Here, by contrast, SUWA offers its ''alternatives'' contention prior to a hearing and at its earliest opportunity.

We recognize that in NEPA cases where no additional conceivable alternatives are apparent, the Commission sensibly could insist that a prospective intervenor offer its own alternatives in order to show that a genuine dispute over alternatives exists. But as a general matter NEPA places responsibility to consider alternatives on the applicant and ultimately on the NRC itself. SUWA's grievance here is not that PFS's environmental analysis fails to examine general

transportation alternatives (e.g., trucks rather than railroads), but that it leaves unaddressed ready alternatives to the actual proposal at hand, the construction of a rail spur over a specific tract of land. We agree with the Board that SUWA can litigate the question whether, in the circumstances of this case, NEPA requires PFS and the NRC to consider alternative rail routes that might prove more environmentally benign than PFS's chosen route.

SUWA's reply before the Board did propose a specific alternative alignment for the Low Junction rail line. *See* SUWA Reply Brief at 15 (Dec. 8, 1998); Second Declaration of Jim Catlin at 3 (Dec. 8, 1998) (attached to SUWA Reply Brief). While PFS labels this additional information as ''a late-filed supplement without justification'' (Applicant's Appeal Brief at 8), we view it as an elaboration of an already-admissible contention. The reply's suggested alternative simply reinforced SUWA's basic thesis that PFS had not considered alignments for the spur other than the one proposed in PFS's license amendment. PFS and the NRC Staff view SUWA's proposed rail route as unworkable because it would traverse land owned by Utah, and Utah strongly opposes the PFS project. *See* Staff's Appeal Brief at 19-21; Applicant's Appeal Brief at 9-10. But that argument merely raises questions about the practical feasibility of the SUWA proposal.[5] It does not abrogate the Applicant's, and the NRC's, NEPA obligation to perform an analysis of alternatives. We see no basis for second-guessing the Board's decision to permit further consideration of SUWA's ''alternatives'' contention.

III. CONCLUSION AND ORDER

For the reasons stated in this Decision, the Commission hereby *affirms* LBP-99-3.

It is so ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 15th day of April 1999.

[5] Our decision to allow further examination of this issue is reinforced by a March 19, 1999 letter to the Office of the Secretary from PFS's counsel which indicates that a corridor of approximately 500 feet may exist between the State-owned land and SUWA's proposed wilderness area. We commend PFS's counsel for bringing this matter to the Commission's attention as it identifies an additional possibility that may warrant consideration by the parties and the Board.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket Nos. 50-269-LR**
50-270-LR
50-287-LR

DUKE ENERGY CORPORATION
(Oconee Nuclear Station,
Units 1, 2, and 3) **April 15, 1999**

The Commission reviews and affirms an Atomic Safety and Licensing Board Memorandum and Order, LBP-98-33, 48 NRC 381 (1998), that denied a petition for leave to intervene and request for hearing. The Commission agrees that the Petitioners failed to submit an admissible contention.

RULES OF PRACTICE: CONTENTIONS

To gain admission as a party, a petitioner for intervention must proffer at least one admissible contention for litigation. 10 C.F.R. § 2.714(b). A contention must specify the particular issue of law or fact the petitioner is raising, and contain: (1) a brief explanation of the bases of the contention; and (2) a concise statement of the alleged facts or expert opinion that support the contention and upon which the petitioner will rely in proving the contention at the hearing. The contention should refer to those specific documents or other sources of which the petitioner is aware and upon which he intends to rely in establishing the validity of the contention.

RULES OF PRACTICE: CONTENTIONS

A contention must show that a genuine dispute exists with the applicant on a material issue of law or fact. The dispute at issue is material if its resolution would make a difference in the outcome of the licensing proceeding.

RULES OF PRACTICE: CONTENTIONS

The 1989 revisions to the contention rule insist upon some factual basis for an admitted contention. The intervenor must be able to identify some facts at the time it proposes a contention to indicate that a dispute exists between it and the applicant on a material issue. These requirements are intended to preclude a contention from being admitted where an intervenor has no facts to support its position and instead contemplates using discovery or cross-examination as a fishing expedition that might produce relevant supporting facts.

RULES OF PRACTICE: CONTENTIONS

To satisfy the Commission's contention rule, petitioners must do more than rest on the mere existence of RAIs as a basis for their contention. RAIs generally indicate nothing more than that the Staff requested further information and analysis from the licensee. The NRC's issuance of RAIs does not alone establish deficiencies in the application, or that the NRC Staff will go to find any of the applicant's clarifications, justifications, or other responses to be unsatisfactory.

RULES OF PRACTICE: CONTENTIONS

The extent to which an RAI might help support a contention must be considered on a case-by-case basis, but the Commission expects that in almost all instances a petitioner must go beyond merely quoting an RAI to justify admission of a contention into the proceeding.

RULES OF PRACTICE: CONTENTIONS

To show a genuine dispute with the applicant, petitioners must use the RAI to make the issue of concern their own. This means they must develop a fact-based argument that actually and specifically challenges the application. If an RAI does nothing more than request further information, it is not unreasonable to expect a petitioner to provide additional information corroborating the existence of an actual safety problem.

RULES OF PRACTICE: GENERIC ISSUES (10 C.F.R. § 51.53(c)(3)(i))

An applicant's environmental report need not contain an analysis of issues identified as Category 1 issues in Appendix B to Part 51, Subpart A, because the Commission already has addressed those issues in a generic fashion. Category 1 issues include the radiological impacts of spent fuel and high-level waste disposal, low-level waste storage and disposal, mixed waste storage and disposal, and onsite spent fuel. The Commission's generic determinations governing onsite waste disposal preclude the petitioners from attempting to introduce such waste issues into an adjudication.

RULES OF PRACTICE: GENERIC ISSUES (10 C.F.R. § 51.23(a))

The Commission has chosen to address high-level waste disposal generically rather than unnecessarily revisit the same waste disposal questions, license-by-license, when reviewing individual applications. High-level waste storage and disposal is a national problem of essentially the same degree of complexity and uncertainty for every renewal application and it would not be useful to have a repetitive reconsideration of the matter.

RULES OF PRACTICE: GENERIC ISSUES (PENDING RULEMAKING)

It has long been agency policy that licensing boards should not accept in individual license proceedings contentions that are (or are about to become) the subject of general rulemaking by the Commission.

MEMORANDUM AND ORDER

I. INTRODUCTION

In this Decision we review an Atomic Safety and Licensing Board Memorandum and Order, LBP-98-33, 48 NRC 381 (1998), that denied a petition for leave to intervene and request for hearing filed by the Chattooga River Watershed Coalition and Messrs. Norman ''Buzz'' Williams, William ''Butch'' Clay, and William Steven ''W.S.'' Lesan (collectively referred to as the ''Petitioners''). The Petitioners seek to challenge an application by Duke Energy Corporation (''Duke Energy'') to renew for an additional 20-year period the operating licenses for its three Oconee Nuclear Station units. The Licensing Board found that the Petitioners have standing to challenge the proposed license renewal, but

that they had not submitted an admissible contention. The Board accordingly denied their request for hearing.

Pursuant to 10 C.F.R. § 2.714a, the Petitioners have appealed the Board's ruling. Duke Energy and the NRC Staff support the Board's decision. We affirm the decision, for the reasons given by the Board itself and for the reasons we give below.

II. BACKGROUND

On July 6, 1998, Duke Energy filed a license renewal application for the Oconee Nuclear Station, Units 1, 2, and 3. On August 11, 1998, the NRC Staff published a notice in the *Federal Register* stating that the application had been found complete and acceptable for docketing and giving notice of an opportunity for a hearing on the application. *See* 63 Fed. Reg. 42,885 (1998). In a short letter dated September 8, 1998, the Petitioners requested leave to intervene. The Commission soon thereafter referred the intervention petition to the Licensing Board and called on the Board to follow a schedule that would accommodate a final ''Commission decision on the pending application in about 2½ years from the date that the application was received.'' CLI-98-17, 48 NRC 123, 126 (1998). The Commission suggested various milestones for Board action, including a Board decision on intervention petitions within 90 days of the Commission's referral order (issued on September 15). *Id.* at 127.[1]

Upon receipt of the case, the Board gave the Petitioners the opportunity to amend their petition to ''address any shortcomings in their initial pleading'' and to supplement it with their proffered contentions. *See* Unpublished Board Memorandum and Order, dated Sept. 18, 1998. The order set as deadlines September 30, for the Petitioners to amend their original pleading, and October 19, for filing all contentions. *Id.* The Petitioners responded on September 27, requesting an additional 30 days in which to file an amended petition. On September 30, they filed a letter stating that they had ''neither adequate notice nor funds available to retain counsel,'' and that they objected to the ''expedited nature of these proceedings,'' which they said left them only a ''slim window of opportunity to gain expertise on . . . certain issues'' before petitions to intervene were due to be filed. The Board denied their request for a full 30-day extension but, noting that the Petitioners were acting *pro se,* allowed them until

[1] Previously, in anticipation of an imminent series of license renewal and license transfer proceedings, the Commission had issued a *Statement of Policy on Conduct of Adjudicatory Proceedings,* CLI-98-12, 48 NRC 18 (1998), which suggested a number of mechanisms, including the milestones device, to assure a fair, timely, and efficient hearing process. *See also Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 339-40 (1998) (explaining ''the need to deal with license renewal in a fair and efficient way'') (petition for judicial review pending).

October 30 to amend their intervention petition and to submit their contentions. *See* Unpublished Board Order, dated Oct. 1, 1998. The Board further provided the Petitioners guidance on the need to establish standing to intervene, and also advised them to ''strictly adhere'' to ''the requirements of 10 C.F.R. § 2.714(b)(2) in framing their contentions.'' *Id.*

The Petitioners timely filed an amended petition with four proposed contentions on October 30. *See* Petitioners' First Supplemental Filing (Oct. 30, 1998) (''Amended Petition''). In it, they set forth the purposes of the Chatooga River Watershed Coalition (''Coalition'') and the arguments in support of their standing to intervene, both as individual Petitioners and as members of the Coalition. Messrs. Williams, Clay, and Lesan stated that they reside and work within 20 miles of the Oconee Nuclear Station, and that they are members of the Coalition, which seeks to protect and restore the Chattooga River Watershed ecosystem. Mr. Williams stated that he is the Executive Director of the Coalition and serves as its official representative.

The Petitioners' four contentions alleged that Duke Energy's license renewal application for Oconee: (1) is incomplete, and thus should be withdrawn or summarily dismissed; (2) does not meet the ''aging management and other safety-related requirements mandated by law and NRC regulations, and therefore should be withdrawn and/or summarily dismissed''; (3) does not meet NEPA requirements; and (4) fails to address (a) the status and capacity of the spent fuel storage facility, (b) the transportation of radioactive waste to other locations if and when storage capacity is exceeded, and (c) the availability of other High Level Waste storage sites in the event that the proposed Yucca Mountain, Nevada site does not prove to be a viable repository.

The Petitioners also requested a stay of the license renewal proceeding, to allow them time to review all Requests for Additional Information (RAIs) that the NRC Staff might submit to Duke Energy and to review the Applicant's responses to these potential RAIs. Specifically, the Petitioners requested that they be permitted to file additional contentions until ''at least 90 days'' after Duke Energy has responded to all Staff RAIs. *See* Amended Petition at 5.

Neither the NRC Staff nor Duke Energy contested the Petitioners' standing. They argued, however, that none of the Petitioners' contentions met the agency's requirements for an admissible contention. The Licensing Board agreed. In LBP-98-33, the Board found that the Petitioners had standing to intervene (48 NRC at 384-86), but denied their intervention petition for failure to state an admissible contention (*id.* at 386-92).

The Board rejected the Petitioners' claim that mere pendency of NRC Staff inquiries to Duke Energy, or ''RAIs,'' establishes admissible contentions. ''Petitioners . . . have not shown,'' stated the Board, ''how the presence of these RAIs evidence credible safety significance, how the Oconee application is materially incomplete because of the RAI matters, or how the application

fails to provide sufficient information to frame contentions.'' *Id.* at 387-88. The Board also rejected the Petitioners' spent fuel and waste claims, on the ground that these issues were the subject of prior or ongoing generic rulemakings and therefore were not appropriate subjects for an adjudication. *Id.* at 391-92. Finally, the Board refused to stay proceedings pending disposition of the NRC Staff RAIs. *Id.* at 393-94. The Board reasoned that ''speculation that the RAIs may reveal later potential problems'' does not amount to ''irreparable injury,'' does not suggest a ''valid contention,'' and does not override the public interest in the ''timely completion'' of license renewal proceedings. *Id.* at 393.

On appeal before the Commission, the Petitioners argue that their Contentions Nos. 1, 2, and 4 should have been admitted. They do not appeal the Board's rejection of their Contention 3, which involved NEPA claims. The NRC Staff and Duke Power support the Board's decision. We affirm.

III. ANALYSIS

For the second time in recent months, we are called upon to consider the admissibility of contentions in the license renewal setting. *See Calvert Cliffs,* 48 NRC at 348-50. Before addressing the Petitioners' particular arguments on appeal, we again review our requirements and standards for admitting contentions into our proceedings.

To gain admission as a party, a petitioner for intervention must proffer at least one admissible contention for litigation.[2] 10 C.F.R. § 2.714(b). A contention must specify the particular issue of law or fact the petitioner is raising, and contain: (1) a brief explanation of the bases of the contention; and (2) a concise statement of the alleged facts or expert opinion that support the contention and upon which the petitioner will rely in proving the contention at the hearing. The contention should refer to those specific documents or other sources of which the petitioner is aware and upon which he ''intends to rely in establishing the validity of [the] contention.'' *See* 10 C.F.R. § 2.714(b)(2); 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) (''Final Rule, Contentions''). A contention also must show that a ''genuine dispute'' exists with the Applicant on a ''material'' issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii). The dispute at issue is ''material'' if its resolution would ''make a difference in

[2] A prospective intervenor also must establish a sufficient ''interest'' in the licensing proceeding, or in other words, ''standing'' to intervene. *See* 10 C.F.R. § 2.714(a)(2). No party here contests Petitioners' standing. Although noting that it was ''not necessary for a determination in this case,'' the Licensing Board's discussion on standing indicated that a ''50-mile presumption'' — a presumption of standing for those residing within 50 miles of the reactor that sometimes has been applied in NRC reactor licensing cases — applies in the license renewal context. *See* 48 NRC at 385 n.1. Because the Petitioners' standing is not an issue on this appeal, the Commission finds it unnecessary to consider the validity of the Board's view on the 50-mile presumption question.

the outcome of the licensing proceeding.'' Final Rule, Contentions, 54 Fed. Reg. at 33,172.

Our strict contention rule serves multiple interests. First, it focuses the hearing process on real disputes susceptible of resolution in an adjudication. For example, a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies. *See North Atlantic Energy Services Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 217 n.8 (1999); *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974). Second, the rule's requirement of detailed pleadings puts other parties in the proceeding on notice of the Petitioners' specific grievances and thus gives them a good idea of the claims they will be either supporting or opposing. Finally, the rule helps to ensure that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions.

In 1989 the Commission toughened its contention rule in a conscious effort to raise the threshold bar for an admissible contention and ensure that only intervenors with genuine and particularized concerns participate in NRC hearings. *See* Final Rule, Contentions, 54 Fed. Reg. at 33,168. By raising the admission standards for contentions, the Commission intended to obviate serious hearing delays caused in the past by poorly defined or supported contentions. At the time, hearings often were ''delayed by months and even years of prehearing conferences, negotiations, and rulings on motions for summary disposition.'' *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 n.7 (1996) (citing *Carolina Power and Light Co.* (Shearon Harris Nuclear Power Plant), LBP-85-5, 21 NRC 410 (1985), where 500 contentions were submitted, 60 were admitted, and only 10 were actually litigated after a period of 2 ½ years of negotiations).

Prior to the contention rule revisions, licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation. Indeed, in practice, intervenors could meet the rule's requirements merely ''by copying contentions from another proceeding involving another reactor.'' Proposed Rule, Contentions, 51 Fed. Reg. 24,365, 24,366 (July 3, 1986). Admitted intervenors often had negligible knowledge of nuclear power issues and, in fact, no direct case to present, but instead attempted to unearth a case through cross-examination. *See* Cotter, Nuclear Licensing: Innovation Through Evolution in Administrative Hearings, 34 Admin. L. Rev. 497, 505, 508 (1982). Congress therefore called upon the Commission to make ''fundamental changes'' in its public hearing process to ensure that ''hearings serve the purpose for which they are intended: to adjudicate genuine, substantive safety and environmental issues placed in contention by qualified intervenors.'' H.R. Rep. No. 97-177, at 151 (1981).

The 1989 revisions to the contention rule thus insist upon ''some factual basis'' for an admitted contention. 54 Fed. Reg. at 33,171. The intervenor must ''be able to identify some facts at the time it proposes a contention to indicate that a dispute exists between it and the applicant on a material issue.'' *Id.* These requirements are intended to ''preclude a contention from being admitted where an intervenor has no facts to support its position and [instead] contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts.'' *Id.* Although in quasi-formal adjudications like license renewal an intervenor may still use the discovery process to develop his case and help prove an admitted contention, contentions shall not be admitted if at the outset they are not described with reasonable specificity or are not supported by ''some alleged fact or facts'' demonstrating a genuine material dispute. *Id.* at 33,170.

This is not to say that our contention rule should be turned into a ''fortress to deny intervention.'' *Peach Bottom,* 8 AEC at 21. The Commission and its boards regularly continue to admit for litigation and hearing contentions that are material and supported by reasonably specific factual and legal allegations. *See, e.g., Seabrook,* 49 NRC at 219-21; *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, *aff'd,* CLI-98-13, 48 NRC 26 (1998).

We turn now to the Petitioners' arguments that their Contentions 1, 2, and 4 are admissible in this case.

A. Contention 1

Contention 1 alleges that ''[a]s a matter of law and fact,'' Duke Energy's license renewal application for the Oconee Nuclear Station, Units 1, 2, and 3 ''is incomplete, and should be withdrawn and/or summarily dismissed.'' *See* Petitioners' Appeal Brief at 2 (Jan. 14, 1999). In support of their contention, the Petitioners submitted two bases before the Licensing Board. As their first basis, the Petitioners explained that the license application incorporates by reference several generic Babcock and Wilcox Owners Group topical reports applicable to the Oconee reactor coolant system, and also incorporates by reference a 1996 Duke Energy report to the NRC on the reactor building (containment). The Petitioners go on to conclude that because the NRC Staff has not completed its review of these generic reports, the license application must be deemed incomplete. The Licensing Board correctly rejected this basis as a ground for the contention, noting that all the Petitioners ''ha[d] done is search the record for instances of uncompleted Staff review of the Oconee application.'' 48 NRC at 386. The mere fact that the Staff review is ongoing says nothing about whether the application is deficient or will be found to satisfy all applicable requirements. Apparently, the Petitioners have accepted the Licensing Board's

rejection of this basis because they do not reiterate it in their appeal brief's discussion of Contention 1.

On appeal, the Petitioners rely solely on the NRC Staff's issuance of Requests for Additional Information (RAIs) to the Applicant. The Petitioners' contention is said to include ''each of the [RAIs] filed *or forthcoming*'' by the NRC Staff to the Applicant. *See* Amended Petition at 3 (emphasis added). They argue on appeal:

> [T]he numerous Requests for Additional Information (RAIs) submitted by Nuclear Regulatory Commission staff (NRC) to Duke regarding the subject application are prima facie evidence . . . that the application is incomplete. The simple and clear logic supporting this contention is that if the application were complete, then the NRC staff would not need to solicit follow-up information.

Appeal Brief at 2. We cannot agree.

As the Commission recently made clear, ''RAIs are a standard and ongoing part of NRC licensing reviews.'' *Calvert Cliffs,* 48 NRC at 349. They are a routine means for our Staff to request clarification or further discussion of particular items in the application. What would be unusual in a license renewal case is if by now no RAIs had been issued, not that some have been. Even the *Federal Register* notice for this proceeding indicated that the ''docketing of the renewal application does not preclude requesting additional information as the review proceeds, nor does it predict whether the Commission will grant or deny the application.'' 63 Fed. Reg. 42,885, 42,886 (Aug. 11, 1998). The NRC does not ''violate[ ] any clear legal duty by proceeding first to docket [an application] and thereafter to request additional information.'' *Concerned Citizens of Rhode Island v. NRC,* 430 F. Supp. 627, 634 (D. R.I. 1977). *See also* 10 C.F.R. § 2.102(a) (Staff during its review may request applicant to supply additional information). In short, ''the NRC Staff's mere posing of questions does not suggest that the application [is] incomplete.'' *Calvert Cliffs,* 48 NRC at 349.

To satisfy the Commission's contention rule, then, Petitioners must do more than ''rest on [the] mere existence'' of RAIs as a basis for their contention. *Id.* at 350. RAIs generally ''indicate[ ] nothing more than that the Staff requested further information and analysis from the Licensee.'' *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 147 (1993). The NRC's issuance of RAIs does not alone establish deficiencies in the application, or that the NRC Staff will go on to find any of the Applicant's clarifications, justifications, or other responses to be unsatisfactory.

Here, to support Contention 1, the Amended Petition simply referred to all RAIs ''filed or forthcoming''; the contention is bereft of supporting detail. *See* Amended Petition at 3. This is a far cry from the reasonable specificity our contention rule demands. A contention alleging that an application is deficient must identify ''each failure and the supporting reasons for the petitioner's belief.''

10 C.F.R. § 2.714(b)(2)(iii). ''The Commission expects parties to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point.'' *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989). All the Petitioners did here was attach to their Amended Petition an NRC memo discussing the status of particular RAIs the Staff had issued. The Petitioners point to no specific safety deficiency identified in the NRC memo. The memo simply reflects areas where the NRC Staff has made inquiries and Duke Energy's agreement ''to consider . . . additional clarification.''

The Petitioners themselves provided no analysis, discussion, or information of their own on any of the issues raised in the RAIs — which, we note, cover a wide variety of disparate subject matters, such as door locking mechanisms and the Oconee coatings program. At bottom, the RAIs show only an ongoing Staff dialogue with Duke Energy, not any ultimate Staff determinations. Apart from a broad reference to these follow-up questions posed by the Staff, the Petitioners did not posit any reason or support of their own — no alleged facts and no expert opinions — to indicate that the application is materially deficient. Petitioners seeking to litigate contentions must do more than attach a list of RAIs and declare an application ''incomplete.'' It is their job to review the application and to identify *what* deficiencies exist and to explain *why* the deficiencies raise material safety concerns.

We find, therefore, that Contention 1 does not meet the requirements for an admissible contention. It lacks specificity, presents no underlying support other than a general reference to assorted RAIs issued by the Staff, and cannot be viewed as showing a genuine dispute with the Applicant on a material issue. Indeed, the Petitioners effectively concede as much in their appeal brief. Their overarching complaint throughout this proceeding has been the time limits our regulations impose upon those seeking a hearing. The Petitioners want the Commission to grant them ''until at least 90 days'' after Duke has responded to the last RAI in which to file contentions. This time extension would, the Petitioners explain, enable them to review all the RAIs and responses ''and then, *if warranted,* set forth contentions.'' Appeal Brief at 3 (emphasis added). They do not believe that the renewal application provided adequate material for them ''to determine grounds to frame contentions, if *warranted.*'' *Id.* at 2-3 (emphasis added).

The Petitioners, it appears, are still in the process of determining whether contentions even are ''warranted.'' This is not so much a case, then, of Petitioners who, after reviewing all relevant licensing documents, have isolated specific issues they dispute and wish to litigate. It is more a case of Petitioners who simply desire more time and more NRC Staff information to determine whether they even have a genuine material dispute for litigation.

The Petitioners' demand that initiation of the NRC hearing process await completion of NRC Staff reviews would turn our adjudicatory process on its head. Under our practice, a petitioner has ''an ironclad obligation'' to examine the application, and other publicly available documents, with sufficient care to uncover any information that could serve as the foundation for a contention. *See Rancho Seco,* 37 NRC at 147; Final Rule, Contentions, 54 Fed. Reg. at 33,170. Petitioners must articulate at the outset the specific issues they wish to litigate as a prerequisite to gaining formal admission as parties. *See, e.g., Business and Professional People for the Public Interest v. AEC,* 502 F.2d 424, 428 (D.C. Cir. 1974). ''[I]t is the license application, not the NRC Staff review, that is at issue in our adjudications.'' *Calvert Cliffs,* 48 NRC at 350. It is reasonable to expect a person or organization seeking to participate in a proceeding to study the portions of the application addressing the issues of concern and identify exactly what these concerns are.

The Petitioners have not done so, and instead have come forward only with what amounts to generalized suspicions, hoping to substantiate them later as the NRC Staff conducts its own safety review. But the 1989 revisions to our contention rule effectively work to bar ill-defined ''anticipatory'' contentions like the Petitioners'. *See Union of Concerned Scientists v. NRC,* 920 F.2d 50, 53 (D.C. Cir. 1990); Final Rule, Contentions, 54 Fed. Reg. at 33,171. Our revised rules do not permit ''vague, unparticularized contentions,'' or ''notice pleading, with details to be filled in later.'' *See Seabrook,* 49 NRC at 219. Petitioners do not have the right to wait and ''have the [NRC] Staff studies as a sort of pre-complaint discovery tool.'' *Union of Concerned Scientists,* 920 F.2d at 56. Moreover, ''much of what those [NRC] reports will bring to light will . . . not be new issues but new evidence on issues that [already] were apparent at the time of application,'' had the application been carefully reviewed. *See id.* at 55.

On the other hand, if genuinely new and material safety or environmental issues later emerge from RAIs or other NRC Staff documents, our contention rule does not prevent their litigation. *See* 10 C.F.R. §§ 2.714(a), (b)(2)(iii). In fact, the Commission today affirmed a Licensing Board decision granting late intervention under our rules. *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318 (1999). We believe that our procedural rules thus strike a fair balance between ensuring that interested persons can raise significant environmental and safety issues and providing for expeditious hearings.

The Commission acknowledges that our rules require individuals concerned about a licensing action to work within a limited time frame to review the license application and any available related licensing documents and to submit their intervention petition and contentions. Admittedly, this can pose a significant burden, especially for *pro se* petitioners who are likely to have less available time and resources. But it has long been a ''basic principle that a person who

invokes the right to participate in an NRC proceeding also voluntarily accepts the obligations attendant upon such participation.'' *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1048 (1983). ''A second fundamental principle applicable here is that there is a substantial public interest in efficient and expeditious administrative proceedings. Although this interest is undoubtedly subordinate to the public's interests in health, safety, and the environment, it is an interest which the Commission incorporates'' into the NRC's procedural rules. *Id.* (citations omitted). ''The NRC Staff,'' of course, ''will consider and resolve all safety questions regardless of whether any hearing takes place.'' *Calvert Cliffs,* 48 NRC at 350.

In sum, we agree with the Licensing Board that Contention 1 is inadmissible, and we deny the Petitioners' request to ''reschedule'' this proceeding until all ''the RAIs have been resolved.'' *See* Appeal Brief at 2. As the Commission quite recently stated, if we ''allow[ed] Petitioners to await completion of the RAI process before framing specific contentions, the hearing process frequently would take months or years even to begin, and expedited proceedings, such as the Commission contemplated for license renewal, would prove impossible.'' *Calvert Cliffs,* 48 NRC at 350.

B. Contention 2

Contention 2 alleges that ''[a]s a matter of law and fact,'' Duke Energy's license renewal application ''does not meet the aging management and other safety-related requirements mandated by law and NRC regulations, and therefore should be withdrawn and/or summarily dismissed.'' As with Contention 1, however, on appeal the Petitioners' only basis for this contention is NRC Staff RAIs. For the reasons given above, Staff RAIs generally do not suffice to show that Petitioners *themselves* have sufficient knowledge and concern to trigger our adjudicatory apparatus.

We first note that the Petitioners have dropped most of the bases originally relied upon in their Amended Petition for Contention 2. For instance, one of the arguments featured in their Amended Petition suggested that the Applicant failed to include a program for the ''sample inspection of small bore Reactor Coolant System piping.'' *See* Amended Petition at 4. As the Board pointed out, however, the Petitioners apparently had misread the application, which in fact *had* provided a discussion of this program. *See* 48 NRC at 388-89; NRC Response to Petitioners' First Supplemental Filing, at 12-13 (Nov. 16, 1998). Instead of directly challenging the adequacy of the Applicant's program, the Petitioners merely — and incorrectly — assumed that the application had not addressed the issue. The Petitioners originally also relied on the claim that the Staff had yet to complete their review of all the generic topical reports incorporated by reference in the application. *See* Amended Petition at 4. But,

again, as we stated in regard to Contention 1, the Staff's ongoing review of the application does not provide a basis for a contention. The Petitioners could have reviewed the particular topical reports themselves to see if there were any information or finding in them that they wished to controvert or that called Duke Energy's application into question.

Having dropped the above arguments, on appeal the Petitioners turn solely to the NRC Staff RAIs. On this point, their Amended Petition contained only the simple declaration that an ''[a]dditional basis for this Contention shall also be set forth in each of the RAIs that *will be* filed by the NRC staff.'' *See* Amended Petition at 4 (emphasis added). As we already have held (*see* discussion above), such vague, open-ended, and prospective references to RAIs cannot support a litigable contention, which requires a reasonably specific explanation of an actual safety-related deficiency.

Several weeks after filing their original intervention petition, the Petitioners made an effort to introduce specificity into their contention by submitting to the Board additional information on particular RAIs. They entitled their new pleading (filed on December 9, 1998), ''New Information for the ASLB to Consider.'' At the time, the Board had given all the parties an opportunity to comment on an issue involving Contention 4, which addresses high-level waste. The Petitioners not only commented on the waste issue, but also took the occasion to cite and quote several RAIs which they claimed ''directly name the matters of law and fact that are discussed in the Petitioners' Contentions.'' *See* New Information Supplement at 2. These RAIs, the Petitioners explained, had not been available when they filed their Amended Petition.

The NRC Staff argues in its appeal brief that if these RAIs ''are considered [ ] new information,'' the Petitioners should have addressed the agency standards for late-filed contentions, and their failure to do so ''amounts to an untimely, unauthorized supplement to their contentions that should not be considered.'' *See* Staff Appeal Brief at 16 n.2. We fully agree. In virtually identical circumstances in *Calvert Cliffs,* where the petitioners attempted to introduce new, RAI-driven claims well after the deadline for contentions, we refused to permit the claims in the absence of a showing of good cause for lateness. *See* 48 NRC at 347-48. Here, too, the record is barren of any effort by the Petitioners to justify the lateness of their submission.

Moreover, even were we to overlook the fatal lateness of the Petitioners' December 9 filing, the filing adds no persuasive substantive support to the Petitioners' contention and therefore cannot serve as the basis for a hearing. The Petitioners' basic premise is that follow-up inquiries by the Staff during its review of the application represents ''prima facie'' evidence that the application is materially in error or deficient. The Petitioners believe, therefore, that ''each of the RAIs'' filed by the NRC Staff supplies a basis for a contention. *See* Amended Petition at 4. Although the Petitioners did not attach a copy of the

RAIs they referenced, they quoted selected language from them, arguing that these RAIs demonstrate a ''fundamental void'' in the application. *See* Appeal Brief at 3.

Read in context and in their entirety, the particular RAIs noted by the Petitioners do not by themselves present any genuine material dispute or litigable issue. They represent nothing more than what RAIs by definition are — requests for further information. Far from showing a definitive Staff conclusion that a program proposed in the application is deficient or flawed, many of the cited RAIs suggest that the Staff may be inclined to accept a particular program or schedule as proposed in the application, as long as Duke Energy better explains its underlying reasons and procedures. *See, e.g.,* RAI 4.3.9-2. Other cited RAIs simply request that Duke Energy further describe or explain specific technical issues, such as the engineering analysis, to aid the Staff in completing its evaluation and assessment of the particular item under review. *See, e.g.,* RAI 3.5.3-2. In all instances, though, the RAIs show issues that are still under review and as yet inconclusive; in every case, whatever the issue, the Staff has accorded Duke Energy the opportunity to expand upon or otherwise justify the approach taken in the application.

The Petitioners' extensive reliance on RAIs, and a similar approach taken in another recent license renewal case, *Calvert Cliffs,* causes us to elaborate, briefly, our understanding of the use of RAIs in adjudications. We said in *Calvert Cliffs* that RAIs are not always ''irrelevant to the adjudicatory process.'' 48 NRC at 350 (citation omitted). They can, for instance, provide a jumping-off point for the petitioners to focus upon particular parts of the application and thereby develop potential issues of concern. The extent to which an RAI might help support a contention must be considered on a case-by-case basis, but the Commission expects that in almost all instances a petitioner must go beyond merely quoting an RAI to justify admission of a contention into the proceeding.

To show a genuine dispute with the Applicant, Petitioners must use the RAI to make the issue of concern their own. This means they must develop a fact-based argument that actually and specifically challenges the application. Where, for example, as in this case, the NRC Staff issues an RAI that questions a particular inspection schedule — directing the Applicant to further describe and support it — a genuine and material dispute for litigation does not arise from a petitioner's mere mention of the RAI. The petitioner's contention must indicate *why* the petitioner believes the particular inspection schedule makes the license renewal application unacceptable, not just that the NRC Staff has

requested a better explanation or description of it.[3] As the Licensing Board has aptly stated, a contention ''that fails directly to controvert the license application . . . is subject to dismissal.'' *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998). Moreover, if the RAI in question does nothing more than request further information, it is not unreasonable to expect a petitioner to provide additional information corroborating the existence of an actual safety problem. Documents, expert opinion, or at least a fact-based argument are necessary. The Petitioners here have provided none of this.

It is surely legitimate for the Commission to screen out contentions of doubtful worth and to avoid starting down the path toward a hearing at the behest of Petitioners who themselves have no particular expertise — or expert assistance — and no particularized grievance, but are hoping something will turn up later as a result of NRC Staff work. Our contention rule would soon be rendered insignificant if any petitioner with standing had only to cite an RAI to gain entitlement to an adjudicatory hearing.

The Petitioners in this case effectively concede they have no independent knowledge or expertise to bring to the adjudicatory process, but intend to rely solely upon the ''Staff's technical and scientific assessment of the application,'' which they understand is ongoing and as yet inconclusive. *See* Appeal Brief at 2-3. Because they were unable before filing their petition to see how the NRC Staff RAIs will be ultimately resolved, they are unsure if contentions are even ''warranted.'' Distilled, the Petitioners' pleadings reveal only one clearly defined dispute — not with the contents of the application, but with the very structure of the Commission's adjudicatory process — which requires Petitioners to come forward now, rather than later, with contentions. But generic changes in our adjudicatory rules can be accomplished only through the rulemaking process, not through individual adjudications. The Board was correct in refusing to allow the Petitioners to litigate generalized grievances.

[3] Several of the specific RAIs the Petitioners have cited here involve one-time inspection programs for different plant systems. These RAIs question why the Applicant proposes to complete these inspections only by the end of the initial license term. For example, one RAI states the following: ''Provide a justification for not completing the inspection activities at the time of application. Along with your justification, describe the methodology, identify any applicable acceptance criteria, identify planned corrective actions, and provide a schedule for implementation'' (RAI-4.3.9-2). Apart from merely quoting this language from the RAI, the Petitioners present no health or safety argument for why the inspection already should have been completed, which presumably is their concern. Although they claim that their earlier Amended Petition was ''totally misinterpreted'' by the Board, the plain reading of their Amended Petition suggests that they originally believed these types of one-time inspections should be conducted *later,* not sooner. In their Amended Petition, the Petitioners argued that if the one-time inspection were conducted ''well in advance of the expiration date for the Oconee Nuclear Station's current operating license . . . . then at the beginning of the nuclear station's extended term there could be ten years of 'wear and tear' . . . that would be unaccounted for.'' Amended Petition at 4. Now on appeal, they simply declare, without more, that it is ''unacceptable to delay these inspections.'' Appeal Brief at 4. Regardless, though, of whether the Petitioners have changed their position on these one-time inspections, they present no argument or rationale for why the schedule should be one way or the other.

C. Contention 4

Contention 4 is phrased as follows: ''The Petitioners submit that the specific issue of the storage of spent fuel and the other radioactive substances on the site of the Oconee Nuclear Station must be addressed in these proceedings. In addition, the status and capacity of the current spent fuel storage facility must be disclosed and addressed. The real and potential availability and viability of other High Level Waste storage sites must be disclosed and addressed.'' *See* Appeal Brief at 4. The basis for the contention is the failure of Duke Energy's environmental report to address the onsite storage, transportation, and ultimate disposal of the Oconee facility's spent fuel.

We begin by noting generally that agencies are free either to determine issues on a case-by-case basis through adjudications or, when appropriate, to resolve matters generically through the rulemaking process. Otherwise, the agency would be required ''continually to relitigate issues that may be established fairly and efficiently in a single rulemaking proceeding.'' *See Heckler v. Campbell,* 461 U.S. 458, 467 (1983). *Accord Kelley v. Selin,* 42 F.3d 1501, 1511 (6th Cir.), *cert. denied,* 515 U.S. 1159 (1995). In the area of waste storage, the Commission largely has chosen to proceed generically. *See generally id.* at 1512-14, 1519-20; *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 204-05, 211-13 (1998). Thus, where the Commission can determine that particular analyses or findings are applicable to all nuclear power plants with common plant characteristics, the Commission frequently has chosen to codify these findings in environmental protection regulations.

Here, the Petitioners' concerns in Contention 4 are, with one exception, already addressed generically by Commission regulation, and Duke Energy therefore did not have to provide a plant-specific discussion of these items in its environmental report. For instance, 10 C.F.R. § 51.53(c)(3)(i) explicitly states that an applicant's site-specific environmental report for operating license renewals need not contain an analysis of any issues identified as ''Category 1'' issues in Appendix B to Part 51, Subpart A, because the Commission already has addressed those issues in a generic fashion. Category 1 issues include the radiological impacts of spent fuel and high-level waste disposal, low-level waste storage and disposal, mixed waste storage and disposal, and onsite spent fuel. *See* Table B-1, Part 51, Subpart A, Appendix B. The Commission's generic determinations governing onsite waste storage preclude the Petitioners from attempting to introduce such waste issues into this adjudication.

The Commission expressly has decided to address the environmental and radiological effects of onsite spent fuel storage generically in the context of license renewal. *See, e.g.,* ''Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,'' 61 Fed. Reg. 66,537, 66,538 (Dec. 18, 1996). Our rules state:

> [I]f necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations.

10 C.F.R. § 51.23(a). Our rules also state that ''[t]he expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on site with small environmental effects through dry or pool storage at all plants if a permanent repository is not available.'' *See* Table B-1, Part 51, Subpart A, Appendix B. An applicant's environmental report therefore ''need not discuss any aspect of the storage of spent fuel for the facility within the scope of [these] generic determinations.[4] 10 C.F.R. § 51.53(c)(2). *See also* NUREG-1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants.''

We turn next to the Petitioners' claim that the environmental report should have addressed the ''real and potential availability and viability of other High Level Waste storage sites.'' Again, the Commission has chosen to address this matter generically by rule. *See* 10 C.F.R. §§ 51.53(c)(2); 51.23(a) (''the Commission believes . . . that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor''). On appeal, the Petitioners attack this finding, stating that it ''appears suspect'' because the candidate site of Yucca Mountain has yet to be licensed; the Department of Energy's target date for the repository has been missed; the capacity of the repository may be insufficient; and there have been safety-related incidents involving dry cask spent fuel storage. *See* Appeal Brief at 5.

Petitioners' effort to attack the Commission's ''waste confidence'' determination is unpersuasive. First, Petitioners raise their waste confidence claim for the first time on appeal. That alone defeats the argument at a procedural level. *See, e.g., Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-97-13, 46 NRC 195, 221 (1997). Substantively, the Petitioners' claims, even read in the most generous light, do not come close to showing why this proceeding presents such special or different circumstances that it warrants disregarding or waiving the application of our generic spent fuel storage and high-level waste disposal rules. *See* 10 C.F.R. § 2.758. At bottom, the Petitioners voice concerns only about uncertainties in high-level waste disposal, uncertainties that the Commission has

[4] On a related point, the Commission handles as a separate licensing matter any applications for an onsite ISFSI. ISFSI licenses are granted under 10 C.F.R. Part 72. The Commission, for example, in 1990 granted Duke Energy a 20-year license to store spent fuel in an ISFSI at the Oconee facility. 55 Fed. Reg. 4035 (Feb. 6, 1990). The Commission provided an opportunity for a hearing on this license. 53 Fed. Reg. 26,122 (July 11, 1988). A request for an expansion of the spent fuel pool also would entail an opportunity for hearing. *See* 10 C.F.R. § 2.1107.

always acknowledged, but has decided will be overcome in the next several decades.

The Commission sensibly has chosen to address high-level waste disposal generically rather than unnecessarily to revisit the same waste disposal questions, license-by-license, when reviewing individual applications. High-level waste storage and disposal, we have said, ''is a national problem of essentially the same degree of complexity and uncertainty for every renewal application and it would not be useful to have a repetitive reconsideration of the matter.'' 61 Fed. Reg. 66,537, 66,538 (Dec. 11, 1996). The Petitioners have presented no reason for the Commission to depart from its generic waste storage determinations in this proceeding and instead litigate the question in an individual case. If Petitioners are dissatisfied with our generic approach to the problem, their remedy lies in the rulemaking process, not in this adjudication.

Lastly, pointing to 10 C.F.R. § 51.53(c)(3)(ii)(M), the Petitioners claim that Duke Energy's environmental report should have addressed the impacts of transporting high-level waste to a high-level waste repository site. This is a matter not governed by a *current* Commission rule. But the Licensing Board correctly found that the transportation of spent fuel rods to an offsite repository is not an appropriate subject for a contention because it is the subject of a *pending* rulemaking. It has long been agency policy that Licensing Boards ''should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission.'' *See Potomac Electric Power Co.* (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85 (1974); *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-813, 22 NRC 59, 86 (1985); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 179 (1998).

In a Staff Requirements Memorandum (SRM), dated January 13, 1998, the Commission directed the NRC Staff to proceed with a rulemaking to amend 10 C.F.R. § 51.53(c)(3)(ii)(M) to categorize the impacts of transporting high-level waste as a generically addressed Category 1 issue. The Commission explicitly stated that current license renewal applicants should not address these transportation issues unless waiting for the rulemaking to be final would delay the license renewal proceeding. As the Licensing Board in this case indicated, a final rule on this question is expected no later than September 1999, and therefore this rulemaking is not expected to delay the anticipated December 2000 completion of the license renewal proceeding. *See* 48 NRC at 392.

On appeal, the Petitioners merely argue that there is ''no guarantee that the proposal to change the HLW rule will proceed unimpeded.'' Appeal Brief at 5-6. We note, however, that there have been no delays to date in the process and formal notice of the proposed rule already has been published. *See* 64 Fed. Reg. 9884 (Feb. 26, 1999). The Petitioners may, of course, raise any concerns

about the proposed rule by participating in this rulemaking. In any event, Duke Energy's license renewal application will not be granted without the resolution of this matter. Given current information, we agree with the Licensing Board that it would be ''counterproductive'' (and contrary to longstanding agency policy) to initiate litigation on an issue that by all accounts very soon will be resolved generically.

IV. CONCLUSION AND ORDER

For the reasons stated in this Decision, the Commission hereby *affirms* LBP-98-33 in its entirety.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 15th day of April 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 40-8948-MLA**

SHIELDALLOY METALLURGICAL CORPORATION
(Cambridge, Ohio Facility) **April 26, 1999**

The Commission affirms a Licensing Board order, LBP-99-12, 49 NRC 155 (1999), denying an intervention petition and hearing request for failure to demonstrate standing.

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY); ADMISSIBILITY OF CONTENTIONS; CONTENTIONS (APPEALABILITY OF DISMISSAL); CONTENTIONS (SPECIFICITY AND BASIS); CONTENTIONS (REQUIREMENTS FOR INTERVENTION); INTERVENTION (STANDING); STANDING TO INTERVENE

EVIDENCE: DUTY TO PROVIDE

The Commission differs from Article III courts in that we do not permit ''notice pleadings.'' *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 219 (1999). Rather, we insist on detailed descriptions of the petitioner's positions on issues going to both standing and the merits. 10 C.F.R. § 2.1205(e) (petitioner ''must describe in detail'' these positions). *Cf.* 10 C.F.R. §§ 2.1211(b) (requiring governmental participants in Subpart L proceedings to state their areas of concern ''with reasonable

specificity''), 2.714(a)(2) (requiring petitioners in Subpart G proceedings to set forth their positions ''with particularity'').

RULES OF PRACTICE: INTERVENTION PETITIONS (AFFIDAVIT); AFFIDAVITS; RESPONSIBILITIES OF COUNSEL; INTERVENTION (STANDING); STANDING TO INTERVENE; STANDARDS OF PRACTICE

EVIDENCE: DUTY TO PROVIDE

''In order to establish the factual predicates for these various elements [of standing], when legal representation is present, it *generally* is necessary for the individual to set forth any factual claims in a sworn affidavit.'' LBP-99-12, 49 NRC at 158 (emphasis added), *citing Atlas Corp.* (Moab, Utah Facility), LBP-97-9, 45 NRC 414, 427 n.4, *aff'd,* CLI-97-8, 46 NRC 21 (1997). The Commission's Subpart L procedures governing this proceeding do not now contain, nor have they ever contained, such a requirement. Although our Subpart G procedural rules once contained such a requirement (*see* 10 C.F.R. § 2.714(a) (1977)), we rescinded that provision more than 20 years ago. *See* 43 Fed. Reg. 17,798, 17,799 (Apr. 26, 1978). *See also Washington Public Power Supply System* (WPPSS Nuclear Project No. 1), LBP-83-59, 18 NRC 667, 669 (1983).

RULES OF PRACTICE: INTERVENTION PETITIONS (AFFIDAVITS); AFFIDAVITS

EVIDENCE: DUTY TO PROVIDE

The Commission does not interpret the Presiding Officer's order as stating that an affidavit was *absolutely* required, for indeed it is not.

RULES OF PRACTICE: RESPONSIBILITIES OF COUNSEL; REPRESENTATION (BY ATTORNEY); STANDARDS OF PRACTICE

Petitioners represented by counsel are generally held to a higher standard than *pro se* litigants. *See, e.g., Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 546 (1980), and cited cases.

RULES OF PRACTICE: INTERVENTION (STANDING); STANDING TO INTERVENE

EVIDENCE: DUTY TO PROVIDE

Section 2.1205(e) of our procedural regulations requires petitioners seeking a hearing to provide a detailed description as to why they have standing. Petitioners' dual assertions that two of their number own land within a mile of the SMC facility and that their property contains radioactive slag from the SMC facility may well be true, but the assertions are cursory at best, do not constitute the requisite detailed description, and are unsupported by evidence — affidavit or otherwise — that would help to provide the requisite detail. Nor do petitioners even allege that they are required to do anything at all with the slag and soil, or state how much greater their costs would be compared with the expense of returning the slag and soil to the Cambridge facility grounds. These omissions render their economic injury argument woefully deficient.

RULES OF PRACTICE: SCOPE AND TYPE OF PROCEEDING

Because Petitioners' dual economic assertions do not go to the question whether the proffered amendment should be granted, they fall outside the scope of this proceeding.

RULES OF PRACTICE: INTERVENTION (STANDING); STANDING TO INTERVENE (INJURY IN FACT)

EVIDENCE: DUTY TO PROVIDE

Petitioners to intervene are required under our rules of practice to provide some form of substantiating evidence for their factual assertions regarding standing. Petitioners' failure to offer such support for its claims of non-economic injury (despite their having been served with a copy of the relevant Environmental Report) rendered those claims deficient and absolved the Presiding Officer of any need to discuss them in detail.

RULES OF PRACTICE: INTERVENTION (STANDING); STANDING TO INTERVENE (INJURY IN FACT)

Because Petitioners never assert that they actually use the geographical areas that they claim to be associated with their purported aesthetic, recreational, and environmental/conservation interests, they fail to show that they would be ''personally and individually'' injured, as required under the Supreme Court's decision in *Lujan v. Defenders of Wildlife,* 504 U.S. 555, 560 n.1, 561-62 (1992).

See also United States v. AVX Corp., 962 F.2d 108, 118 (1st Cir. 1992) (''a plaintiff, to secure standing, must show that he or she uses the specific property in question'' (citation and internal quotation marks omitted)). *Compare Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 31-32 (1998) (sworn affidavits showing regular and frequent visits to a home near the facility are sufficient to establish standing).

RULES OF PRACTICE: STANDING TO INTERVENE (INJURY IN FACT); INTERVENTION (STANDING); SCOPE AND TYPE OF PROCEEDING

Because Petitioners' claim of economic injury falls outside the scope of this proceeding and thus cannot be redressed herein, any evidence they would present on redressability of economic injury is irrelevant.

RULES OF PRACTICE: INFORMAL PROCEEDINGS; DISCOVERY

Subpart L proceedings offer no right to discovery. *See* 10 C.F.R. § 2.1231(d).

RULES OF PRACTICE: INTERVENTION (STANDING); STANDING TO INTERVENE (REDRESSABILITY)

It is well established in both federal and Commission case law that redressability is an essential element of standing. *See, e.g., Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185 (1998); *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995); *Bennett v. Spear,* 520 U.S. 154, 162, 167 (1997).

RULES OF PRACTICE: NOTICE OF APPEARANCE; INTERVENTION (STANDING); STANDING TO INTERVENE (INJURY IN FACT)

It is the Commission's general rule that, to establish individual standing, persons seeking to intervene must identify themselves. *See generally Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377, 389-400 (1979). The general need for such identification should be obvious. If the Commission does not know who the petitioners are, it is usually difficult or impossible for the licensee to effectively question, and for us to ultimately determine, whether petitioners as individuals have ''personally'' suffered or will suffer a ''distinct and palpable'' harm that constitutes

injury in fact — a determination required for a finding of standing. *Dellums v. NRC,* 863 F.2d 968, 971 (D.C. Cir. 1988). *See generally* Atomic Energy Act, § 189a, 42 U.S.C. § 2239(a); 10 C.F.R. § 2.1205(e)(1), (2).

RULES OF PRACTICE: CONFIDENTIAL INFORMATION (PROTECTION FROM DISCLOSURE)

Although this agency has never gone so far as to admit an anonymous party into a proceeding, we have repeatedly shown in other contexts our willingness to make the necessary accommodations to protect the privacy of individuals who show us that such protection is appropriate — something Citizens have not done. *See International Uranium (USA) Corp.* (White Mesa Uranium Mill), LBP-97-14, 46 NRC 55, 57 n.3 (1997) (noting that fear for the safety of the people whom an organization purports to represent could justify the omission of those people's names from a petition opposing the licensing action at issue in an NRC proceeding), *aff'd,* CLI-98-6, 47 NRC 116 (1998); *Louisiana Power and Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 17 n.8 (1985) (using protective orders and expurgated copies of affidavits to protect affiants' anonymity); *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-775, 19 NRC 1361, 1367 n.18 (1984) (''in camera filings and requests for protective orders are available in appropriate circumstances to protect the legitimate interests of a party or other person''), *aff'd sub nom. Deukmejian v. NRC,* 751 F.2d 1287 (D.C. Cir. 1984), *reh'g granted and opin. vacated,* 760 F.2d 1320 (D.C. Cir. 1985), *Commission decision reaff'd on reh'g sub nom. San Luis Obispo Mothers for Peace v. NRC,* 789 F.2d 26 (D.C. Cir.) (*en banc*), *cert. denied,* 479 U.S. 923 (1986).

MEMORANDUM AND ORDER

Four citizens of Guernsey County, Ohio (''Citizens''), have sought intervention and a hearing to contest a request by Shieldalloy Metallurgical Corporation (''SMC'') to amend the 10 C.F.R. Part 40 source materials license for its Cambridge, Ohio facility. On February 23, 1999, the Nuclear Regulatory Commission's Presiding Officer issued a Memorandum and Order, LBP-99-12, 49 NRC 155, denying Citizens' intervention petition and hearing request for failure to demonstrate standing. On March 5, Citizens appealed LBP-99-12 to the Commission pursuant to 10 C.F.R. § 2.1205(o). Both SMC and the NRC Staff oppose Citizens' appeal. We deny the appeal, affirm LBP-99-12, and terminate the proceeding.

BACKGROUND

This proceeding stems from SMC's application to amend its Source Material License No. SMB-1507 which currently authorizes SMC to possess radioactive slag (currently totaling about 7 million cubic feet) that resulted from alloy production processes previously conducted at SMC's Cambridge facility. If approved, the license amendment would allow SMC to take possession of an additional 81,000 cubic feet of slag and associated soil that was gathered from offsite residential properties in 1997[1] and is currently owned and held by another company in roll-off boxes (containers) at a temporary staging area which that company rents from SMC within the Cambridge facility grounds. The amendment would also permit SMC to move this offsite slag/soil from the containers to a nearby slag pile that is also within the SMC facility.[2]

Citizens ask this agency to deny the application on the grounds that it would (1) violate various state statutory and regulatory provisions, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601-9657, and NRC requirements in 10 C.F.R. Part 61; (2) increase the costs of proper disposal of offsite radioactive slag from the Cambridge facility that was not accounted for in the amendment; (3) increase the public health and safety risk from needless handling of radioactive material; and (4) adversely affect Citizens' aesthetic, recreational, environmental/conservational, and economic interests, including visual blight and contaminated runoff into nearby streams.

Regarding their fourth ground, Citizens argue that (a) their aesthetic values will be adversely affected by looking from state or township roads upon additional slag/soil commingled with the solid wastes in the slag pile; (b) their recreational interests will be adversely affected by this commingling adjacent to open fields, wetlands, and Chapman's Run that drain into nearby Will's Creek; (c) their environmental/conservational interests will be adversely affected by the commingling being in violation of federal and Ohio laws enacted to protect the public health, safety, welfare and environmental resources; and (d) their economic interests (also addressed in the second ground) are adversely affected by the amendment's failure to permit two of the four Petitioners to place the slag now on their property onto the SMC slag pile, thereby requiring them to dispose of their slag elsewhere at a substantially greater cost.

The Presiding Officer concluded that the only specific factual assertion Citizens made in support of their various claims of injury was that two of the Petitioners own real property (within a mile of the SMC facility) known

[1] Apparently, some of the slag from the plant was sold or given away for offsite use as fill material, primarily in the 1980s. Environmental Report, July 24, 1998, at 1, *attached to* NRC Staff's Response, dated Jan. 11, 1999.

[2] On February 16, the NRC Staff granted the license amendment application. The Staff also concluded that the existing license already authorized movement of the material from its onsite containers to the slag pile. Letter of John W. N. Hickey to James Valenti, dated Feb. 16, 1999, at 1.

to contain radioactive slag from the SMC facility — a fact relevant only to two Petitioners' claim of economic injury. The Presiding Officer concluded that this claim of economic injury was unsupported by the requisite sworn statement affirming the factual assertions upon which the claim rests, lacked the requisite concreteness to establish an injury in fact, and was unlikely to yield a favorable decision that would redress the alleged injurious effects to the interest in question. Regarding the redressability of the injuries, the Presiding Officer further ruled that, because his authority extended only to determining whether to permit the material now on site to be moved from the containers to the slag pile, he lacked the authority to grant Citizens the relief they sought — removal of slag and soil from their property — to redress their alleged economic injury.[3] Finally, regarding the remaining allegations of aesthetic, recreational, and environmental/conservational injury, the Presiding Officer ruled that the petition contained no verified claim to these injuries from any individual who had indicated an intent to become a party to this proceeding. Based on these rulings, the Presiding Officer dismissed the intervention petition and terminated the proceeding.

On appeal, Citizens proffer five grounds for reversing the Board's order denying them standing, all of which are opposed by the Staff and SMC. As we have recently reiterated, any individual seeking standing to participate in a Commission adjudication must establish that (1) he or she will suffer a distinct and palpable ''injury in fact'' within the zone of interests arguably protected by the statutes governing the proceeding, (2) the injury is fairly traceable to the challenged action, and (3) the injury is likely to be redressed by a decision in the petitioning individual's favor. *See Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195 (1998).

ANALYSIS

1. Adequate Level of Specificity

Citizens argue that the Presiding Officer erred in concluding that they must *establish* the factual predicates for the various elements of a request for hearing. According to Citizens, their request for hearing need only *allege* that they will suffer a distinct and palpable injury, fairly traceable to the proposed action that is likely to be redressed by a favorable decision.

Citizens' argument reflects a basic misunderstanding of the Commission's rules of practice. We differ from Article III courts in that we do not permit

[3] The Presiding Officer raised, but did not rule on, the questions whether this purported economic interest falls within applicable zone of interests arguably protected by the statutes governing the proceeding and whether any of the areas of concern specified in the petition are germane to the subject matter of this proceeding.

the kind of ''notice pleadings'' to which Citizens allude. *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 219 (1999). Rather, we insist on detailed descriptions of the Petitioner's positions on issues going to both standing and the merits. 10 C.F.R. § 2.1205(e) (Petitioner ''must describe in detail'' these positions). *Cf.* 10 C.F.R. §§ 2.1211(b) (requiring governmental participants in Subpart L proceedings to state their areas of concern ''with reasonable specificity''), 2.714(a)(2) (requiring petitioners in Subpart G proceedings to set forth their positions ''with particularity'').

2. Higher Standard; Economic Injury

Citizens assert that the Presiding Officer improperly held them to a higher standard merely because they were represented by counsel. Specifically, they challenge the Presiding Officer's ruling that petitioners who are represented by counsel must generally set forth any factual claims in a sworn affidavit. Citizens do not deny that their request for hearing was unverified by affidavit. Rather, they allege that an affidavit verifying the factual basis of their request for hearing is not a necessary element of the request.

This line of argument is flawed in several respects. Citizens misconstrue the overall thrust of the Presiding Officer's ruling. Although the Presiding Officer does refer to ''the requisite sworn statement'' (LBP-99-12, 49 NRC at 159), this reference follows a correct statement on the immediately preceding page that, ''in order to establish the factual predicates for these various elements [of standing], when legal representation is present, it *generally* is necessary for the individual to set forth any factual claims in a sworn affidavit.''[4] We construe the Presiding Officer's perhaps-inartful later reference to ''the requisite sworn statement'' as merely a shorthand reference to his earlier accurate description of the law. Consequently, we do not interpret his order as stating that an affidavit was *absolutely* required, for indeed it is not.

We also agree with the Presiding Officer that petitioners represented by counsel are generally held to a higher standard than *pro se* litigants. *See, e.g., Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 546 (1980), and cited cases.

More to the point, however, section 2.1205(e) of our procedural regulations requires petitioners seeking a hearing to provide a detailed description as to why they have standing. We agree with the Presiding Officer that Citizens have made

[4] LBP-99-12, 49 NRC at 158 (emphasis added), *citing Atlas Corp.* (Moab, Utah Facility), LBP-97-9, 45 NRC 414, 427 n.4, *aff'd,* CLI-97-8, 46 NRC 21 (1997). The Commission's Subpart L procedures governing this proceeding do not now contain, nor have they ever contained, such a requirement. Although our Subpart G procedural rules once contained such a requirement (*see* 10 C.F.R. § 2.714(a) (1977)), we rescinded that provision more than 20 years ago. *See* 43 Fed. Reg. 17,798, 17,799 (Apr. 26, 1978). *See also Washington Public Power Supply System* (WPPSS Nuclear Project No. 1), LBP-83-59, 18 NRC 667, 669 (1983).

no such showing. Citizens' dual assertions that two Petitioners own land within a mile of the SMC facility and that their property contains radioactive slag from the SMC facility may well be true, but they are cursory at best, do not constitute the requisite detailed description, and are unsupported by evidence — affidavit or otherwise — that would help to provide the requisite detail. Nor do Citizens even allege that they are required to do anything at all with the slag and soil, or state how much greater their costs would be compared with the expense of returning the slag and soil to the Cambridge facility grounds. These omissions render Citizens' economic injury argument woefully deficient.

Finally, because Citizens' dual economic assertions do not go to the question whether the proffered amendment should be granted, they fall outside the scope of this proceeding. As the Presiding Officer correctly indicated, the scope of this case extends *only* to the issue whether the Commission should permit both the transfer of responsibility for material *now on site* and the movement of that material from the onsite containers to the onsite slag pile. *See* ''Notice of Consideration of Amendment Request for Shieldalloy Metallurgical Corp.,'' 63 Fed. Reg. 64,976 (Nov. 24, 1998). By their own admission, Citizens' radioactive slag is located off site and is ''unaccounted for in the license amendment request.'' Citizens' Hearing Request, dated Dec. 21, 1998, at 1. Consequently, Citizens' claims of economic injury fall outside the scope of this proceeding, their specific claims of both causation of economic harm and redressability of economic injury fail, and their overarching claim to economic standing must be rejected.[5]

3. Non-Economic Injuries

Citizens assert that the Presiding Officer erred in addressing only the specific factual assertions (regarding economic injury to the two owners of real estate near the SMC facility) and ignoring the remaining claims of injury (i.e., those non-economic injuries to Citizens' health-and-safety, aesthetic, recreational, and environmental/conservation interests). The Presiding Officer did not ignore the

[5] In any event, the grant or denial of the instant amendment in no way precludes Citizens from reaching an agreement with SMC for the latter to take their slag and soil. It currently appears that Citizens have no contractual grounds for insisting that SMC take their slag and soil. *See* SMC's Reply Brief, dated Feb. 22, 1999, at 5. However, there is nothing in SMC's license or the instant license amendment that would preclude Citizens and SMC from entering into such a contract. Indeed, the Staff's Safety Evaluation Report specifically states that

> This action [i.e., the grant of the license amendment] does not preclude return of additional material to the site at some future time. In fact, we have increased the amount authorized for transfer to Shieldalloy from approximately 1% . . . to 3% (or 10,000 cubic yards). . . . Shieldalloy could request that even greater amounts of material be permitted to return to the site, but would have to submit another amendment request to do so.

Safety Evaluation Report at 3, *attached to* the NRC Staff's Feb. 16, 1999 letter granting the amendment, *supra* note 2. Given that the current material totals only 3000 cubic meters, plenty of volume appears still to be available, within the parameters of the instant license amendment, to accommodate Citizens' own slag and soil, assuming Citizens were to reach an agreement with SMC. *Id.* at 4.

remaining claims of injury. He expressly noted that they lacked evidentiary support (LBP-99-12, 49 NRC at 159 n.2) — a conclusion with which Citizens have not taken issue and with which we agree. As discussed above, petitioners to intervene are required under our rules of practice to provide some form of substantiating evidence for their factual assertions regarding standing. Citizens' failure to offer such support for its claims of non-economic injury (despite their having been served with a copy of the relevant Environmental Report, *supra* note 1) rendered those claims deficient and absolved the Presiding Officer of any need to discuss them in detail.

In addition to failing to offer any supporting evidence, Citizens never assert that they actually use the geographical areas which they claim to be associated with their purported aesthetic, recreational, and environmental/conservation interests. *See* Citizens' Reply Brief, dated Feb. 5, 1999, at 13. In this respect, Citizens fail to show that they would be ''personally and individually'' injured, as required under the Supreme Court's decision in *Lujan v. Defenders of Wildlife,* 504 U.S. 555, 560 n.1, 561-62 (1992). *See also United States v. AVX Corp.,* 962 F.2d 108, 118 (1st Cir. 1992) (''a plaintiff, to secure standing, must show that he or she uses the specific property in question'' (citation and internal quotation marks omitted)). *Compare Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 31-32 (1998) (sworn affidavits showing regular and frequent visits to a home near the facility are sufficient to establish standing).

4. Redressability of Injuries

Citizens argue that the Presiding Officer erred in concluding that denial of the license amendment application would not redress the alleged economic injury. They claim that the Presiding Officer is reaching a conclusion on the merits of their request for hearing without giving them an opportunity to present evidence or to discover how denial of the application might redress all of their alleged injuries (not just the economic injury).

We disagree with both prongs of this argument. First, as explained above, the scope of this proceeding encompasses only radioactive material currently on site, not material located on the two Petitioners' own property. Consequently, as a matter of law, Citizens' claim of economic injury falls outside the scope of this proceeding and thus cannot be redressed herein. This conclusion of law renders irrelevant any evidence Citizens would present on redressability of economic injury.[6] Second, Citizens' complaint regarding a denial of opportunity

[6] Although Citizens may be correct that its claims of non-economic injury could theoretically be redressed through the denial of SMC's license amendment application, those claims are nevertheless flawed for the reasons set forth elsewhere in this Order.

for discovery ignores the fact that Subpart L proceedings such as this one offer no right to discovery. *See* 10 C.F.R. § 2.1231(d). Citizens' argument again reflects their failure to recognize that they had, but failed to take advantage of, their opportunity to present a minimal level of evidence supporting their claims of injury. Moreover, their claim that a decision on redressability constitutes a merits decision is legally unsupportable. It is well established in both federal and Commission case law that redressability is an essential element of standing. *See, e.g., Yankee Nuclear, supra*; *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995); *Bennett v. Spear,* 520 U.S. 154, 162, 167 (1997).

5. Need to Identify Clients

Citizens object to the Presiding Officer's instruction that their counsel, in any appeal he might file, must enter an appearance that includes a statement identifying his clients in terms much more specific than ''unnamed citizens,'' the only phrase used by counsel to identify his clients while the proceeding was pending before the Presiding Officer. Citizens apparently consider the instruction to be one of the grounds on which the Presiding Officer based his adverse ruling regarding Citizens' standing.

This argument is flawed in several respects. Initially, counsel's March 5 submittal of the required notice of appearance — which identified his clients by name — renders much of this argument moot. As to the remaining portion, we disagree with Citizens' apparent conclusion that the Presiding Officer in any way based his rejection of Citizens' standing on their counsel's prior failure to enter an appearance identifying his clients. The Presiding Officer's discussion of the entry of appearance and identification of clients is found not in the ''Analysis'' section of LBP-99-12 but rather in a footnote attached to the ''Conclusion'' section. Thus, it does not form a basis for the Presiding Officer's ruling on standing.

However, we would be remiss if we did not note that the Presiding Officer correctly enunciated the Commission's general rule that, to establish individual standing, the individuals seeking to intervene must identify themselves.[7] The

[7] *See generally Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377, 389-400 (1979) (a petitioning organization must disclose the name and address of at least one member with standing to intervene so as to afford the other litigants the means to verify that standing exists). Although this agency has never gone so far as to admit an anonymous party into a proceeding, we have repeatedly shown in other contexts our willingness to make the necessary accommodations to protect the privacy of individuals who show us that such protection is appropriate — something Citizens have not done. *See International Uranium (USA) Corp.* (White Mesa Uranium Mill), LBP-97-14, 46 NRC 55, 57 n.3 (1997) (noting that fear for the safety of the people whom an organization purports to represent could justify the omission of those people's names from a petition opposing the licensing action at issue in an NRC proceeding), *aff'd,* CLI-98-6, 47 NRC 116

(Continued)

general need for such identification should be obvious. If the Commission does not know who the Petitioners are, it is usually difficult or impossible for the Licensee to effectively question, and for us to ultimately determine, whether Petitioners as individuals have ''personally'' suffered or will suffer a ''distinct and palpable'' harm that constitutes injury in fact[8] — a determination required for a finding of standing.

CONCLUSION

For the reasons set forth above, Citizens' appeal is denied, LBP-99-12 is affirmed, and this proceeding is terminated.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 26th day of April 1999.

(1998); *Louisiana Power and Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 17 n.8 (1985) (using protective orders and expurgated copies of affidavits to protect affiants' anonymity); *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-775, 19 NRC 1361, 1367 n.18 (1984) (''in camera filings and requests for protective orders are available in appropriate circumstances to protect the legitimate interests of a party or other person''), *aff'd sub nom. Deukmejian v. NRC,* 751 F.2d 1287 (D.C. Cir. 1984), *reh'g granted and opin. vacated,* 760 F.2d 1320 (D.C. Cir. 1985), *Commission decision reaff'd on reh'g sub nom. San Luis Obispo Mothers for Peace v. NRC,* 789 F.2d 26 (D.C. Cir.) (*en banc*), *cert. denied,* 479 U.S. 923 (1986).

[8] *Dellums v. NRC,* 863 F.2d 968, 971 (D.C. Cir. 1988). *See generally* Atomic Energy Act, § 189a, 42 U.S.C. § 2239(a) (requiring that a person's ''interest . . . be affected by the proceeding''); 10 C.F.R. § 2.1205(e)(1), (2) (requiring a detailed showing of the petitioner's interest and how it would be affected by the result of the proceeding).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 40-8681-MLA-4**

INTERNATIONAL URANIUM (USA) CORPORATION
(Receipt of Material from Tonawanda, New York) **April 26, 1999**

In this materials license amendment proceeding, the Commission grants the State of Utah's petition for review of a decision by the Presiding Officer, LBP-99-5, 49 NRC 107 (1999), upholding a license amendment granted to the International Uranium (USA) Corporation.

ORDER

In this Subpart L proceeding, the State of Utah has petitioned the Commission for review of a decision by the presiding officer, LBP-99-5, 49 NRC 107 (1999), upholding a license amendment granted to the International Uranium (USA) Corporation. Utah maintains that the license amendment improperly permits IUSA to operate a waste disposal facility. The NRC Staff opposes Commission review, but IUSA does not. IUSA states that Commission review would ''eliminate uncertainty'' and ''end the waste of resources involved in repeated litigation.'' We agree. Thus, in accordance with the considerations set forth in 10 C.F.R. § 2.786(b)(4), the Commission has decided to grant the petition and will review LBP-99-5 in its entirety. *See* 10 C.F.R. § 2.1253.

The Commission sets the following briefing schedule:

(1) The State of Utah shall file its brief within 21 days of the date of this Order. The brief shall be no longer than 25 pages.

(2) The NRC Staff and IUSA shall file their responsive briefs within 21 days after receipt of the State of Utah's brief. Their briefs shall be no longer than 25 pages.

(3) The State of Utah may file a reply brief within 14 days of receiving the briefs of the NRC Staff and IUSA. The reply brief shall be no longer than 15 pages.

All briefs shall be filed and served in a manner that ensures their receipt on their due date. Electronic or facsimile submissions are acceptable, but shall be followed by hard copies within a reasonable time. Briefs in excess of 10 pages must contain a table of contents, with page references, and a table of cases (alphabetically arranged), statutes, regulations, and other authorities cited. Page limitations on briefs are exclusive of pages containing a table of contents, and of any addendum containing statutes, rules, regulations, etc.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 26th day of April 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. IA 97-068**

AHARON BEN-HAIM, Ph.D. **April 26, 1999**

The Commission denies petitions for review filed by both the Staff and Dr. Ben-Haim.

RULES OF PRACTICE: PETITIONS FOR REVIEW

LICENSING BOARDS: SCOPE OF REVIEW

To obtain Commission review, a petitioner must show the existence of a *substantial* question regarding one or more of the following five considerations, as set forth in 10 C.F.R. § 2.786(b)(4):

> (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 prejudicial procedural error; or
> (v) Any other consideration which the Commission may deem to be in the public interest.

RULES OF PRACTICE: PETITIONS FOR REVIEW

LICENSING BOARDS: SCOPE OF REVIEW

The Commission denies the Staff's petition for review on the ground that the Staff has not persuaded us that the issues it raises are sufficiently ''substantial'' to justify our granting a discretionary review of the Licensing Board's order. 10 C.F.R. § 2.786(b)(4). *See generally Emerick S. McDaniel* (Denial of Application for Reactor Operator License), CLI-96-11, 44 NRC 229, 230 (1996) (denying reactor operator candidate's petition for review for failure to present substantial issues); *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-9, 44 NRC 112, 113 (1996) (denying intervenors' petition for review for failure to present substantial issues).

RULES OF PRACTICE: PETITIONS FOR REVIEW (DEFERENCE)

ADJUDICATORY PROCEEDINGS: APPELLATE REVIEW

ADJUDICATORY HEARINGS: EVIDENCE

EVIDENCE: CREDIBILITY (DEMEANOR OF WITNESS)

Given that the Board's ruling regarding the length of the suspension period was based in part on Dr. Ben-Haim's demeanor at the hearing, the ruling is subject to deference on appeal. *See Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), ALAB-772, 19 NRC 1193, 1218 (1984) (where the credibility of evidence turns on the demeanor of a witness, an appellate board will give the judgment of the trial board, which saw and heard the testimony, particularly great deference), *rev'd in part on other grounds,* CLI-85-2, 21 NRC 282 (1985), and cited authority.

RULES OF PRACTICE: PRECEDENTIAL EFFECT OF BOARD DECISIONS

Board orders have no precedential effect. *See Sequoyah Fuels Corp.,* CLI-95-2, 41 NRC 179, 190 (1995).

MEMORANDUM AND ORDER

This proceeding stems from an August 27, 1997 enforcement order of the NRC Staff against Aharon Ben-Haim, Ph.D. In that order, the Staff found that Dr. Ben-Haim had deliberately caused the Newark Medical Associates (''NMA,''

a company for which Dr. Ben-Haim was consulting) to be in violation of several Commission requirements. The Staff therefore found Dr. Ben-Haim in violation of 10 C.F.R. § 30.10 (the ''deliberate misconduct'' rule) and prohibited him from participating in any NRC-licensed activities for a 5-year period beginning July 31, 1997. 62 Fed. Reg. 47,224 (Sept. 8, 1997).

On February 8, 1999, the Atomic Safety and Licensing Board issued an Initial Decision (LBP-99-4, 49 NRC 55) affirming the NRC Staff's findings of violation but reducing from 5 to 3 years the prohibition period. The Board based this reduction on its conclusion that the Staff had not considered, either adequately or at all, five factors: Dr. Ben-Haim's age (65 at the onset of the suspension), his admission of error and his apology as set forth in a post-hearing pleading, the absence of safety consequences from the violations, the violations' duration, and the fact that Dr. Ben-Haim's violation was influenced by Dr. Elamir (NMA's owner). The Board also considered the fact that the Staff's settlement with Dr. Elamir (involving the same set of facts) had imposed on him only a 3-year prohibition period.

On February 24th, the Staff filed a timely petition for Commission review of LBP-99-4, challenging the Board's reduction of the prohibition period. Dr. Ben-Haim did not contest the Staff's petition. However, he did submit his own untimely Petition for Review on March 14th, justifying his tardiness on the grounds that he had belatedly received the Board's order and that he had been incapacitated with the flu. Staff has objected to Dr. Ben-Haim's petition. We deny both petitions.

Discussion

I. THE STAFF'S PETITION FOR REVIEW

The Staff recognizes that, to obtain Commission review, it must show the existence of a *substantial* question regarding one or more of the following five 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 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). Applying the standards of section 2.786(b)(4)(iii), (iv), and (v), the Staff argues that the Board erred in considering the six factors set forth *supra.*

Although the Staff presents colorable arguments (especially its assertion regarding the inappropriateness of the Board comparing a suspension period resulting from a settlement with one resulting from a hearing), the Staff has not persuaded us that the issues themselves are sufficiently ''substantial'' to justify our granting a discretionary review of LBP-99-4.[1] The Board's conclusion regarding a 3-year suspension does not, on its face, appear unreasonable and, given that it was based in part on Dr. Ben-Haim's demeanor at the hearing (*see* 49 NRC at 100), it is subject to deference on appeal.[2] In any event, because the Board's order has no precedential effect, any arguably incorrect rulings by this Board will have no adverse effect on the Staff in future enforcement proceedings. *See Sequoyah Fuels Corp.,* CLI-95-2, 41 NRC 179, 190 (1995) (''Licensing Board decisions . . . have no precedential effect beyond the immediate proceeding in which they were issued''). Under these circumstances, we do not consider it an appropriate use of the Commission's resources to set this case for briefing and to engage in a full review of the ''penalty'' portion of LBP-99-4.

II. DR. BEN-HAIM'S PETITION FOR REVIEW

Dr. Ben-Haim in his petition objects principally to the Board's finding that he had ''deliberately'' caused the Licensee NMA to be in violation of several of the Commission's requirements. He insists that his errors stemmed from an inadequate understanding of the regulations rather than from a conscious attempt to circumvent them. The remainder of his petition consists of either challenges to specific findings of fact or reiterations of his good intentions.

Dr. Ben-Haim does not attempt to satisfy the requirements of section 2.786(b)(4), *supra,* and our review of his pleading reveals no arguments that rise to the level of substantiality necessary for us to grant discretionary review. The Board's finding appears to be supported by the record, including Dr. Ben-Haim's own admissions, leaving us doubtful that any purpose would be served by plenary briefing and decision on the issues Dr. Ben-Haim raises.

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[1] 10 C.F.R. § 2.786(b)(4). *See generally Emerick S. McDaniel* (Denial of Application for Reactor Operator License), CLI-96-11, 44 NRC 229, 230 (1996) (denying reactor operator candidate's petition for review for failure to present substantial issues); *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-9, 44 NRC 112, 113 (1996) (denying intervenors' petition for review for failure to present substantial issues).

[2] *See Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), ALAB-772, 19 NRC 1193, 1218 (1984) (where the credibility of evidence turns on the demeanor of a witness, an appellate board will give the judgment of the trial board, which saw and heard the testimony, particularly great deference), *rev'd in part on other grounds,* CLI-85-2, 21 NRC 282 (1985), and cited authority.

Conclusion

The Commission denies the Staff's and Dr. Ben-Haim's petitions for review.
IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 26th day of April 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 11005070**
(License No. XSNM-03060)

TRANSNUCLEAR, INC.
(Export of 93.3% Enriched Uranium) **April 26, 1999**

EXPORT LICENSING PROCEEDING: STANDING TO INTERVENE

The Commission has applied judicial standing tests to its export licensing proceedings.

EXPORT LICENSING PROCEEDING: STANDING TO INTERVENE

An organization's institutional interest in providing information to the public and the generalized interest of its membership in minimizing danger from proliferation are insufficient to confer standing as a matter of right under section 189a of the Atomic Energy Act of 1954, as amended.

EXPORT LICENSING PROCEEDING: HEARING REQUEST

A discretionary hearing is not warranted where such a hearing would impose unnecessary burdens on participants and would not provide the Commission with additional information needed to make its statutory determinations under the AEA.

EXPORT LICENSING PROCEEDING: HEARING REQUEST

The Commission may, in its discretion, direct further public proceedings if it determines that these proceedings, such as a public meeting, would be in the public interest even though petitioner has not established a right to intervene under section 189a of the AEA.

MEMORANDUM AND ORDER

On October 29, 1998, Transnuclear, Inc., filed an application with the Commission seeking authorization to export over a 5-year period 130.65 kilograms of high-enriched uranium in the form of fabricated UO_2 targets. These targets will be used for the production by MDS Nordion of medical isotopes in the Maple 1 and 2 reactors currently under construction by Atomic Energy of Canada Limited's Chalk River Nuclear Laboratories. On December 30, 1998, the Nuclear Control Institute (NCI) filed a petition for leave to intervene and a request for hearing on the application. NCI is a nonprofit, educational corporation which disseminates information to the public concerning the proliferation, safety, and environmental risks associated with the use of weapons-useable nuclear materials, equipment, and technology.

On March 5, 1999, the Department of State provided the Commission with Executive Branch views on the merits of the application. The Executive Branch concluded that the application satisfied the applicable export licensing criteria and requested that the Commission issue the license. After receiving these views and evaluating the pleadings filed in this proceeding, and without ruling on the intervention petition and hearing request, we posed written questions to the participants. CLI-99-9, 49 NRC 314 (1999).

In this Order we address the intervention petition and hearing request. We have concluded that Petitioner NCI lacks standing to intervene in this proceeding as a matter of right. The Commission has previously held that NCI does not meet the judicial standing tests that we apply in export licensing proceedings. *Transnuclear, Inc.* (Export of 93.3% Enriched Uranium), CLI-98-10, 47 NRC 333, 336 (1998), *citing Transnuclear, Inc.* (Export of 93.15% Enriched Uranium), CLI-94-1, 39 NRC 1, 4-6 (1994). In those decisions, the Commission held that NCI's institutional interest in providing information to the public and the generalized interest of its membership in minimizing danger from proliferation are insufficient to confer standing under section 189a of the Atomic Energy Act. NCI itself has conceded that it is unable to meet the

Commission's criteria for intervention as of right.[1] Therefore, we deny NCI's petition for intervention and request for a hearing under section 189a.

The Commission has further considered whether to order a discretionary hearing in this proceeding. In view of the numerous pleadings filed by the parties, and the additional submissions filed in response to CLI-99-9, we find that a hearing utilizing the procedures set forth in 10 C.F.R. Part 110, Subparts H and I, is not necessary to provide the Commission with the information it needs to make its statutory findings. Furthermore, a discretionary hearing would impose unnecessary burdens on the participants. Consequently, we hold that a discretionary hearing is not warranted in this case. The Commission has concluded, however, that a public meeting, which would provide an opportunity for the Applicant and other interested participants to summarize their positions and respond to any follow-up questions the Commission might have on responses to CLI 99-9, would assist the Commission in reaching a decision in this matter. To that end, we invite the Applicant, Transnuclear, Inc., NCI, and the Executive Branch to attend a Commission meeting on Wednesday, June 16, 1999, from 9:00 a.m. to 11:30 a.m. in the Commissioners' Meeting Room at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland.

The Commission requests presentations from Transnuclear, Inc., NCI, and the Executive Branch expressing their respective views on the application and whether the statutory requirements for issuance of this export license have been met. In addition, the Commission requests that a knowledgeable official from the Argonne National Laboratory be present at the meeting, as a part of the Executive Branch contingent, to answer any questions the Commission may pose. Presentations will be made in the order listed, and each participant shall be allotted 30 minutes. No other presentations will be permitted; however, the Commission will accept, prior to June 16, 1999, written submissions from any individual or group not listed above. Only the Commission may pose questions to the presenters during the meeting. The Secretary of the Commission will notify the participants if the Commission desires that particular issues be addressed in the presentations.

[1] *See* Reply of Petitioner Nuclear Control Institute to the Opposition of Transnuclear, Inc. and Atomic Energy of Canada, Ltd. to the Petition for Leave to Intervene and Request for a Hearing, Feb. 12, 1999, at 3.

We request that each participant provide the name(s) of its presenter(s) to the Secretary of the Commission by Friday, June 11, 1999.

It is so ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 26th day of April 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 50-443-LT**

NORTH ATLANTIC ENERGY SERVICE CORPORPATION, et al.
(Seabrook Station, Unit 1) **April 26, 1999**

Because the sole intervenor has withdrawn its petition for intervention, the Commission terminates this proceeding.

RULES OF PRACTICE: DISMISSAL OF PROCEEDING; WITHDRAWAL OF INTERVENOR

ADJUDICATORY PROCEEDINGS: DISMISSAL

Under Commission case law, the withdrawal of all intervenors brings a licensing proceeding to a close. *Florida Power and Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-91-13, 34 NRC 185, 188 n.1 (1991); *Public Service Co. of Colorado* (Fort St. Vrain Independent Spent Fuel Storage Installation), *attached to Turkey Point, supra,* 34 NRC 190 (1990).

MEMORANDUM AND ORDER

The Montaup Electric Company (''Montaup'') seeks to transfer its ownership interest in Seabrook Station, Unit 1, to the Little Bay Power Corporation (''Little

Bay''). On Montaup's behalf, the North Atlantic Energy Service Corporation (Seabrook's operator), submitted the transfer application to the Commission for approval. Such approval is required pursuant to section 184 of the Atomic Energy Act, 42 U.S.C. § 2234. Two co-owners — New England Power Company (''NEP'') and United Illuminating Company (''United'') — filed intervention petitions opposing the transfer application. In CLI-99-6, 49 NRC 201 (1999), we granted NEP's petition and denied United's petition.

The Applicants and NEP have settled their differences and, on April 15th, NEP filed a notice of withdrawal. Under Commission case law, the withdrawal of all intervenors brings a licensing proceeding to a close. *Florida Power and Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-91-13, 34 NRC 185, 188 n.1 (1991); *Public Service Co. of Colorado* (Fort St. Vrain Independent Spent Fuel Storage Installation), *attached to Turkey Point, supra,* 34 NRC 190 (1990). As the sole Intervenor has withdrawn, this proceeding is terminated.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 26th day of April 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 50-293-LT**

BOSTON EDISON COMPANY and
ENTERGY NUCLEAR GENERATION COMPANY
(Pilgrim Nuclear Power Station) **April 26, 1999**

Because all intervenors have withdrawn their petitions for intervention, the Commission terminates this proceeding.

RULES OF PRACTICE: DISMISSAL OF PROCEEDING; WITHDRAWAL OF INTERVENOR

ADJUDICATORY PROCEEDINGS: DISMISSAL

Under Commission case law, the withdrawal of all intervenors brings a proceeding to a close. *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-16, 49 NRC 370 (1999) and cited cases.

MEMORANDUM AND ORDER

On December 21, 1998, pursuant to section 184 of the Atomic Energy Act, 42 U.S.C. § 2234, Boston Edison Company (''BECo,'' the sole owner and operator of the Pilgrim Nuclear Power Station) and Entergy Nuclear Generation Company

(''Entergy Nuclear'') filed an application jointly seeking the Commission's authorization, pursuant to 10 C.F.R. § 50.80, to transfer from BECo to Entergy Nuclear both the Facility Operating and the Materials Licenses for Pilgrim. Under the Applicants' proposal, Entergy Nuclear would assume BECo's ongoing obligations for capital investment and operating expenses and also for any escalations in decommissioning obligations above the amount prefunded by BECo. The Applicants also seek conforming amendments to the two licenses, pursuant to 10 C.F.R. § 50.90.

On January 26, 1999, the Commission published a notice of this request in the *Federal Register,* announcing that affected persons could file intervention petitions and hearing requests. On February 16th, the Attorney General for the Commonwealth of Massachusetts (''the AG'') and Locals 369 and 387 of the AFL-CIO's Utility Workers Union of America (collectively ''the Unions'') filed timely hearing requests and intervention petitions in opposition to BECo's license transfer request. However, the Applicants and Petitioners subsequently settled their differences and, on April 7th and 16th, respectively, the Unions and the AG filed notices of withdrawal. Under Commission case law, the withdrawal of all intervenors brings a proceeding to a close. *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-16, 49 NRC 370 (1999) and cited cases.

As all Petitioners to intervene have withdrawn their petitions, this proceeding is terminated.

IT IS SO ORDERED.

For the Commission

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 26th day of April 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. Thomas S. Elleman
Thomas D. Murphy

In the Matter of **Docket No. 50-029-LA-R**
(ASLBP No. 99-754-01-LA-R)
(License Termination Plan)

YANKEE ATOMIC ELECTRIC COMPANY
(Yankee Nuclear Power Station) **April 22, 1999**

In a proceeding concerning the adequacy of the License Termination Plan (LTP) for the Yankee-Rowe Reactor, the Atomic Safety and Licensing Board denies a motion by the Licensee for reconsideration of the admission of one of four contentions admitted by the Board in its Prehearing Conference Order of March 17, 1999 (LBP-99-14, 49 NRC 238). The Board clarifies the scope of that contention.

REGULATIONS: PRESCRIBED DOSES

Where an LTP includes specified doses, and where those doses are advanced to meet a specific regulatory criterion, the doses cannot be regarded as a voluntary commitment and the method of calculation of those doses in the LTP is subject to challenge.

MEMORANDUM AND ORDER
(Denying Motion for Reconsideration of Contention 4)

This proceeding concerns the License Termination Plan (LTP) for the Yankee Nuclear Power Station (YNPS), in Rowe, Massachusetts, for which Yankee Atomic Electric Co. (YAEC or Licensee) is seeking approval. In our Prehearing Conference Order dated March 17, 1999, LBP-99-14, 49 NRC 238, we considered numerous proposed contentions proffered (in many cases, jointly) by the New England Coalition on Nuclear Pollution (NECNP) and the Citizens Awareness Network (CAN), and we accepted four of them (designated Contentions 1-4).

Pending before us is a motion filed by YAEC on March 29, 1999, seeking reconsideration of our allowance of Contention 4, which was a consolidation of contentions that had been submitted jointly by NECNP and CAN.[1] Timely responses opposing the Reconsideration Motion have been filed by NECNP, CAN, and the Franklin Regional Council of Governments (FRCOG, participating as an interested governmental entity pursuant to 10 C.F.R. § 2.715(c)).[2] A response in support of the motion (agreeing in toto with everything put forth by YAEC) was filed by the NRC Staff.[3] YAEC seeks to file a reply to the responses of NECNP and CAN,[4] and NECNP seeks to reply to YAEC's reply.[5] (Inasmuch as YAEC's reply includes references to criteria adopted in the decommissioning plan that is not otherwise before us, we *accept* both YAEC's reply and NECNP's reply to the reply.)[6] For reasons set forth, we are denying YAEC's motion, although clarifying to some degree the basis for our earlier Prehearing Conference Order ruling on this contention.

The contention under review reads as follows:

> *Contention 4.* Contrary to the requirements of 10 C.F.R. § 50.82, the methodology YAEC employs in the LTP for the selection of applicable scenarios for the calculation of its

[1] ''Objection to and Motion of Yankee Atomic Electric Company for Reconsideration of a Portion of Prehearing Conference Order,'' dated March 29, 1999 (hereinafter, ''Reconsideration Motion'').

[2] ''[NECNP's] Opposition to [YAEC's] Motion to [Reconsider] Part of Prehearing Conference Order,'' dated April 9, 1999; [CAN's] Reply to [YAEC's] Objection to and Motion for Reconsideration of a Portion of Prehearing Conference Order,'' dated April 9, 1999; [FRCOG] Opposition to Objection to and Motion for Reconsideration of Portion of Prehearing Conference Order Filed by [YAEC],'' dated April 8, 1999.

[3] ''NRC Staff Response to [YAEC's] Objection to and Motion for Reconsideration of a Portion of Prehearing Conference Order,'' dated April 9, 1999.

[4] YAEC's ''Motion for Leave to Reply (Reconsideration of a Portion of Prehearing Conference Order), dated April 12, 1999.

[5] NECNP's ''Motion for Leave to Reply to [YAEC's] Motion for Leave to Reply (Reconsideration of a Portion of Prehearing Order) and YAEC's Reply,'' dated April 12, 1999.

[6] In addition, YAEC on April 13, 1999, submitted an item that was intended to have been attached to its April 12 Reply motion but was inadvertently omitted, and on April 14, 1999, submitted an ''Erratum (Reconsideration of a Portion of Prehearing Conference Order).'' We *accept* both filings.

final release doses is not adequate to demonstrate that the LTP will assure the protection of the public health and safety.

YAEC in its Reconsideration Motion takes issue with this contention on essentially four grounds (although some of them tend to overlap each other). We deal with them *seriatim.*

First, and most important, it claims that, by imposing criteria for Total Effective Dose Equivalent (TEDE) release values set forth in the LTP (here, 15 mrem/yr; *see, e.g.,* LTP at 1-1, 1-2, 4-1), the contention, by exploring one aspect of the means by which the 15 mrem/yr is to be calculated, could subject YAEC to criteria that are not applicable to the site in question.

YAEC goes on to explain that, at least in its view, there are no TEDE dose requirements applicable to the site at all, inasmuch as the LTP is not subject to the requirements of 10 C.F.R. § 20.1402 (source of a TEDE requirement) but rather to the Site Decommissioning Management Plan (SDMP) Action Plan requirements (set forth at 57 Fed. Reg. 13,389 (Apr. 16, 1992)) applicable prior to the adoption by the Commission of the TEDE requirements. YAEC describes the SDMP site release criteria as dependent ''primarily'' on surface activity readings and an exposure rate pass value of 5 microroentgen/hr and as not requiring the determination of a TEDE to the average member of the critical group, or even that a critical group be defined (Reconsideration Motion at 2). YAEC adds that it ''voluntarily'' subjected itself to a TEDE requirement that it could drop from its LTP without violating any governing regulatory requirement.

The Intervenors counter this argument of YAEC on a number of grounds. Some are matters of policy that we are not able to resolve — such as whether the site should be subject to the SDMP criteria or, if so, whether the LTP must be finally approved by the Commission by August 20, 1999, for the SDMP criteria to be applicable. We only hold that the site is currently subject to the SDMP criteria, given the apparent previous submission and prior Commission approval of a decommissioning plan compatible with SDMP criteria (*see* 10 C.F.R. § 20.1401(b)(2)) and that we will judge the validity of Contention 4 in light both of the SDMP criteria and YAEC's utilization of the 15-millirem/yr dosage in the LTP. Nor need we consider NECNP's claim that the SDMP criteria are not entitled to regulatory force. Although the SDMP criteria clearly were not initially adopted as formal regulations, they (and their applicability to particular sites, such as the YNPS site) are referenced by current regulations and may thus be accorded weight on that score.

The Intervenors' next point is more telling. They claim that YAEC is relying on the TEDE figure in its LTP and, accordingly, to be a meaningful commitment, YAEC must calculate it correctly. That YAEC might amend its LTP to withdraw the TEDE commitment is irrelevant to the Intervenors, who claim that a modified LTP would still be subject to Commission approval.

As we perceive the argument, the Intervenors claim that the Licensee is bound by its TEDE dose commitment, even if voluntary, and in that circumstance the dose must be calculated properly. Otherwise, it is no more than a facade or an advertising gimmick, not worth the paper on which it may be printed. That the ''voluntary'' commitment may later be withdrawn or watered down is of no consequence, except to engender another Commission review of the LTP.

After consideration of the various arguments, we conclude the TEDE commitment in the LTP is something more than ''voluntary.'' The Licensee has itself acknowledged that the 15-mrem/yr TEDE requirement has been included in the approved YNPS Decommissioning Plan, which was inserted into the FSAR and then carried forward to the LTP.[7] Whether or not it was voluntarily initiated, it becomes binding when included as an FSAR condition.

Moreover, both the SDMP and the TEDE requirement in 10 C.F.R. § 20.1402 are subject to ALARA[8] requirements. The LTP utilizes the 15-mrem/yr requirement to fulfill its SDMP ALARA requirements. Thus, for example, the LTP states (at 4-1):

> The purpose of this section [Section 4] is to identify the remediation methods that may be used, describe the areas on site that may be subject to remediation, *and demonstrate that the site release criterion of 15 mrem/year is adequate to ensure that residual levels of radioactivity at YNPS will be As Low As is Reasonably Achievable (ALARA).* [Emphasis supplied.]

The LTP goes on to explain (at 4-4) that ''[t]his [ALARA] analysis will show that, in areas with dose levels already lower than 15 mrem/year for an *average member of the critical population group,* the benefits of further remediation are not proportionate to the total costs'' (emphasis supplied).

Thus, in summary, the LTP itself reflects that the TEDE value contained therein is not a purely ''voluntary'' commitment but rather has been submitted to reflect what already is included in the approved Decommissioning Plan and to fulfill the SDMP ALARA requirement.[9] Beyond that, this section of the LTP demonstrates the significance of the average population group and, *perforce,* its

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[7] ''Erratum (Reconsideration of a Portion of Prehearing Conference Order),'' submitted by YAEC on April 14, 1999, at 1.

[8] ALARA (acronym for ''as low as is reasonably achievable'') is defined as

> making every reasonable effort to maintain exposures to radiation as far below the dose limits in this part as is practical consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed materials in the public interest.

10 C.F.R. § 20.1003.

[9] In addition to the ALARA requirement, the SDMP criteria refer to ''an overall dose objective of 10 millirem per year.'' 57 Fed. Reg. at 13,390.

method of calculation (which, we reiterate, is what this contention challenges). Accordingly, this aspect of YAEC's challenge to Contention 4 is rejected.

YAEC's second ground for challenging Contention 4 is that, even assuming that the YNPS were not an SDMP plant but was subject to the criteria of 10 C.F.R. § 20.1402, the contention, if proved, would subject YAEC to proving the sufficiency of a dose criterion lower (15 mrem/yr) than the 25-mrem/yr limit specified in 10 C.F.R. § 20.1402. What YAEC neglects to mention, however, is that the 25-mrem/yr maximum dose specified in 10 C.F.R. § 20.1402 is itself subject to ALARA considerations, and that the 15 mrem/yr in the LTP was submitted as an ALARA figure. As noted above, the ALARA dose must be calculated correctly for it to be meaningful. In that connection, the Licensee is required to adopt a relevant exposure scenario and make site measurements of distributed exposure to an average individual in the reference scenario, irrespective of the specific annual dose to be met. Accordingly, this aspect of YAEC's challenge to Contention 4 is also rejected.

The third aspect of YAEC's challenge to Contention 4 is that it would substitute a particular defined individual (a gardener) for an average member of a particular group. YAEC characterizes a ''gardener'' as a ''member of the critical group who is atypically exposed.'' (Reconsideration Motion at 7.) Whether or not LBP-99-14 may be read that way, the Board did not intend to require any particular defined group, gardener or otherwise. Rather, the Board read the various presentations of the Intervenors as demonstrating that the critical group adopted by the Licensee did not necessarily reflect the likely average member of the critical group that would occupy the site.

The answer to the contention may well be that the average member of the critical group is not the resident utilized by YAEC but an individual engaged in a higher percentage of onsite activities, including gardening. As NECNP observes, ''[t]he scenario YAEC uses in the LTP may be reasonable for window-box gardeners and joggers in the city. It does not apply to potential site occupants who will, like so many New Englanders, try to get all of their vegetables from the 'patch' they began cultivating in April.'' (NECNP Response at 8.) The bases relied on in LBP-99-14 tended to support such a scenario. But the answer may also be that the group presented by the LTP accurately reflects potential site usage. The contention merely opens the door to evidence of what the most appropriate critical group will be. Accordingly, this portion of YAEC's objection to the contention is based on a misunderstanding of the intent of the contention and is accordingly rejected.

YAEC's final challenge is that the contention is hopelessly vague, giving no guidelines as to what YAEC would have to prove. CAN's April 9, 1999 filing with respect to the Reconsideration Motion (at 10-12) demonstrates that all the contention seeks to establish is a ''reasonable and typical scenario for the region'' in order to determine TEDE values. CAN would have us accept an

average farmer, or gardener, and has provided information supporting that result. As explained above, the Intervenors have established only that an appropriate controversy is to be adjudicated by the Board. YAEC will be required to show that the LTP uses the appropriate scenario to calculate the final release doses for the decommissioning of the YNPS.

* * *

For all of the above reasons, YAEC's motion for reconsideration of the portion of LBP-99-14 that admitted NECNP/CAN Contention 4 is hereby *denied.*

IT IS SO ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Charles Bechhoefer, Chairman
ADMINISTRATIVE JUDGE

Dr. Thomas S. Elleman (by CB)
ADMINISTRATIVE JUDGE

Thomas D. Murphy
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 22, 1999

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the Matter of

ENTERGY GULF STATES, INC., and ENTERGY OPERATIONS, INC.	**Docket No. 50-458 (License No. NPF-47)**
(River Bend Station, Unit 1)	
FIRSTENERGY NUCLEAR OPERATING COMPANY	**Docket No. 50-440 (License No. NPF-58)**
(Perry Nuclear Power Plant, Unit 1)	**April 18, 1999**

By letters dated September 25, 1998, and November 9, 1998, David A. Lochbaum, acting on behalf of the Union of Concerned Scientists (UCS), submitted two petitions pursuant to section 2.206 of Title 10 of the *Code of Federal Regulations* (10 C.F.R. § 2.206).

In the petition of September 25, 1998, UCS requested that the U.S. Nuclear Regulatory Commission (NRC) order the River Bend Station (River Bend), operated by Entergy Operations, Inc. (the Licensee), to be immediately shut down and its operating license suspended or modified until the facility's design and licensing bases were properly updated to permit operation with failed fuel assemblies or until all failed fuel assemblies were removed from the reactor core. In the Petition of November 9, 1998, UCS filed a similar request that the NRC order the Perry Nuclear Power Plant, Unit 1 (Perry), operated by FirstEnergy Nuclear Operating Company (the Perry Licensee), to also be immediately shut down for the same reasons stated for River Bend. Attached to the two petitions was a copy of a UCS report entitled, ''Potential Nuclear Safety Hazard — Reactor Operation with Failed Fuel Cladding,'' dated April 2, 1998. UCS also requested a hearing in the Washington, D.C. area to present new plant-specific information

regarding the operation of River Bend and Perry, as well as to discuss the April 1998 UCS report.

The Director of the Office of Nuclear Reactor Regulation issued a Director's Decision on April 18, 1999, denying the specific actions requested in the September 25, 1998, and November 9, 1998 petitions. The Staff did not agree with the UCS's contention that preexisting fuel cladding defects and resultant fuel leakage necessarily violate a plant's licensing basis. The Director's Decision cited a number of references where the plants' licensing basis considered the effects of, or did not preclude, preexisting fuel cladding failures.

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

I. INTRODUCTION

By petitions submitted pursuant to 10 C.F.R. § 2.206 on September 25, 1998, and November 9, 1998, respectively, Mr. David A. Lochbaum, on behalf of the Union of Concerned Scientists (UCS or Petitioner), requested that the U.S. Nuclear Regulatory Commission (NRC) take immediate action with regard to the River Bend Station (River Bend) and the Perry Nuclear Power Plant (Perry).

In the petitions, the Petitioner requested that the NRC take immediate enforcement action by suspending the operating license for River Bend and Perry until all leaking fuel rods were removed from the reactor core or until the facilities' design and licensing bases were updated to permit operation with leaking fuel assemblies. Accompanying the petitions was the UCS report ''Potential Nuclear Safety Hazard — Reactor Operation with Failed Fuel Cladding,'' dated April 2, 1998. Entergy Operations, Inc. (the River Bend Licensee), provided the NRC with its response to its petition in a letter dated February 11, 1999. FirstEnergy Nuclear Operating Company (the Perry Licensee) provided a response to its petition in a letter also dated February 11, 1999. On February 22, 1999, the NRC held an informal public hearing at which the Petitioner presented information related to the safety concerns in the petitions. The NRC Staff has determined that the information presented in the petitions and at the informal public hearing did not support the action requested by the Petitioner. The basis for my Decision in this matter follows.

II. BACKGROUND

In support of the requests presented in the petition dated September 25, 1998, the Petitioner raised concerns stemming from NRC Daily Event Report No. 34815, filed on September 21, 1998, in which Entergy Operations, Inc.,

reported a possible fuel cladding defect at River Bend. The Petitioner repeated the concerns raised in the UCS report of April 2, 1998, regarding nuclear plant operation with fuel cladding leakage. The UCS considers such operation to be potentially unsafe and to be in violation of federal regulations. In addition, the Petitioner cites instances in the licensing basis for River Bend that it believes prohibit operation of the facility with leaking fuel.

In the November 9, 1998 Petition, the Petitioner raised similar concerns originating from the NRC Weekly Information Report for the week ending October 30, 1998, in which fuel leaks detected at Perry on September 2, 1998, and on October 28, 1998, were discussed. The Petitioner also repeated the concerns raised in the UCS report of April 2, 1998. The matters raised in support of the Petitioner's requests are discussed herein.

III. DISCUSSION

The September 25, 1998 Petition presents safety concerns for River Bend along with the associated generic concerns addressed in the UCS report of April 2, 1998. The plant-specific concerns are based on portions of the River Bend Updated Safety Analysis Report (USAR) cited in the petition. The November 9, 1998 Petition presents safety concerns for Perry arising essentially from the associated generic concerns addressed in the UCS report of April 2, 1998. The Perry petition does not reference plant-specific licensing basis documentation.

Since the generic concerns presented in the UCS report bear upon the plant-specific concerns cited in the two petitions, the Staff's evaluation first considers the UCS report and follows with a discussion of the plant-specific concerns.

A. Generic Safety Concerns

In the UCS report of April 2, 1998, UCS expresses the opinion that existing design and licensing requirements for nuclear power plants preclude their operation with known fuel cladding leakage. The UCS position is based on the assessment of updated final safety analysis reports (UFSARs) of four plants, vendor documentation, standard technical specifications, and pertinent NRC correspondence. The report states that the following regulatory and safety concerns exist for plants operating with leaking fuel:

> Section 50.59 of 10 C.F.R., ''Changes, tests and experiments,'' is violated because operation with fuel cladding leakage constitutes an unapproved change to the licensing basis for a plant. The report states that such operation is an unresolved safety question because the criteria of 10 C.F.R. § 50.59(a)(2) are satisfied (e.g., probability and consequences of an accident may be increased by operating with leaking fuel).

Section 50.71 of 10 C.F.R., ''Maintenance of records, making of reports,'' is violated because the licensing basis as documented in the technical specifications and the analyses contained in the UFSAR for the facility do not accommodate operation with leaking fuel.

Safety analyses for postulated accidents assume intact fuel cladding before the event; therefore, plants with known fuel leakage could have accidents with more severe consequences than predicted as a result of fuel damage. The report further states that no information was available showing that operation with leaking fuel has been previously evaluated.

Section 50.34a of 10 C.F.R., ''Design objectives for equipment to control releases of radioactive material in effluents — nuclear power reactors,'' and other regulations related to the as low as is reasonably achievable (ALARA) principle for radioactive materials release are violated since plant workers are exposed to a greater risk than necessary because of higher coolant activity levels attributable to leaking fuel.

In addition to requesting that the NRC take steps to prohibit nuclear power plants from operating with fuel cladding damage, the report specifically requests that plants be shut down upon detection of fuel leakage, and that safety evaluations be included in plant licensing bases that consider the effects of operating with leaking fuel to justify operation under such circumstances.

Before addressing the regulatory concerns raised in the April 1998 UCS report, the following discussion provides background and bases for current NRC guidance and practices with regard to fuel defects.

1. Defense-in-Depth and ALARA Considerations

In order to protect public health and safety from the consequences of potential uncontrolled releases of radioactive fission products resulting from the operation of nuclear power plants, plants are designed with multiple barriers to fission-product release. This traditional ''defense-in-depth'' philosophy is key to ensuring that radiological doses from normal operation and postulated accidents will be acceptably low, as outlined in 10 C.F.R. Part 100, ''Reactor Site Criteria.'' Fuel cladding is integral to the defense-in-depth approach to plant safety, serving as the first barrier to fission-product release.

The premise of the defense-in-depth philosophy with regard to the potential for fission-product release is that plant safety does not rely on a single barrier for protection. In this way, a limited amount of leakage from each of the barriers — the fuel cladding, the reactor coolant system pressure boundary, and the containment — is a design consideration and some leakage from each barrier, within prescribed limits, is acceptable during operation. These limits, defined within the technical specifications, are established as a key component of a plant's design and licensing basis. The leakage associated with fuel cladding

defects is accounted for in plant safety analyses, as discussed later in this evaluation under ''Safety Analysis Assumptions.''

Therefore, to meet its defense-in-depth objectives, fuel is not required to be leak-free. A limited amount of fuel cladding leakage is acceptable during operation since (1) in the event of an accident, other fission-product barriers besides the fuel cladding (i.e., the reactor coolant system pressure boundary and the containment) help prevent uncontrolled releases, (2) limits for reactor coolant system activity, as prescribed in the technical specifications, limit the level of fuel leakage that is permitted so that the release guidelines of 10 C.F.R. Part 100, ''Reactor Site Criteria,'' will not be exceeded during accidents, and (3) plant design features and operating procedures anticipate leaking fuel and provide means to deal with the effects.

Sources of activity in reactor coolant are fission products released from fuel, corrosion products activated in the reactor during operation, and fission products released from impurities in fuel cladding, tritium produced from the irradiation of water, lithium, and boron. Although reactor operators should strive to maintain low levels of coolant activity from all of these sources, the Staff has long recognized that reactor coolant activity cannot be entirely eliminated and that some fission products from leaking fuel could be present (*see* Standard Review Plan (SRP), NUREG-0800, § 4.2, ''Fuel System Design''). Thus, plant design considerations, such as reactor coolant cleanup systems, shielding, and radwaste controls, have been devised to minimize risk to plant workers from exposure to radiation from reactor coolant. Plants also implement procedures to respond to leaking fuel when leakage is discovered, as was demonstrated by the example of the follow-up actions taken by the River Bend and Perry operators to limit the production of fission products in the vicinity of the leaking fuel rods.

By containing fuel and fission products, cladding also helps maintain radioactive releases to as low a level as is reasonably achievable. As previously stated, the technical specifications contain limits for the maximum level of coolant activity so that the dose guidelines in 10 C.F.R. Part 100 are not exceeded during accidents. These are the maximum levels of activity assumed to exist in the reactor coolant from normal operating activities. The limits on reactor coolant system specific activity are also used for establishing standardization in radiation shielding and procedures for protecting plant personnel from radiation (*see* section B3.4.16 of NUREG-1431, ''Standard Technical Specifications, Westinghouse Plants''). Thus, they are consistent with NRC regulations requiring licensees to follow an ALARA approach to radiation protection.

The connection between technical specification limits for coolant activity and ALARA requirements is key to demonstrating that limited fuel leakage during operation is consistent with safe plant operation. The ALARA requirement is given in 10 C.F.R. §§ 50.34a and 50.36a. The Statement of Considerations for these NRC regulations (35 Fed. Reg. 18,385 (Dec. 3, 1970)) contains a

discussion of the ''reasonableness'' aspect of the ALARA approach. When the Statement of Considerations was written, the Commission believed that releases of radioactivity in plant effluents were generally within the range of ''as low as practicable.'' The Commission also stated, therein, that ''as a result of advances in reactor technology, further reduction of those releases can be achieved.'' Advances in fuel integrity, design of waste treatment systems, and appropriate procedures were cited as areas in which the plants had taken steps to meet the reasonableness standard. It is important to note that the Commission did not require leak-free fuel as a means to satisfy ALARA requirements. In addition to the physical barriers to the release cited above, other factors, such as radwaste cleanup and plant procedures, provide confidence that fission-product release from the fuel can be controlled so as to prevent undue risks.

Later in the same Statement of Considerations, the Commission acknowledged the need to allow flexibility of plant operation. ''Operating flexibility is necessary to take into account some variation in the small quantities of radioactivity, as a result of expected operational occurrences, which may temporarily result in levels of radioactive effluents in excess of the low levels normally released'' but still within regulatory limits. The Commission recognized that a balance should be maintained between limiting exposure to the public and plant operational requirements. Therefore, the NRC regulations allow the possibility of increased reactor coolant activity levels that might result from limited fuel cladding leaks, but require the use of plant equipment to maintain control over radioactive materials in gaseous and liquid effluents produced during normal reactor operations, including expected operational occurrences. The Commission went as far as to define ''as low as practicable'' (the phrase later replaced with ''as low as is reasonably achievable'' in 40 Fed. Reg. 19,440 (May 5, 1975)) in terms of the state of technology, the economics of improvements in relation to benefits to public health and safety that could be derived by improved technology and methods of controlling radioactive materials, and ''in relation to the utilization of atomic energy in the public interest.'' This definition appears in section 50.34a itself, mandating that the Commission maintain the balance between safety and plant operational requirements.

By publishing 10 C.F.R. Part 50, Appendix I, ''Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low As Is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents,'' the Commission took steps to provide more definitive guidance for licensees to meet the ''as low as practicable'' requirement. Appendix I was published as guidance that presented an acceptable method of establishing compliance with the ''as low as practicable'' requirement of 10 C.F.R. §§ 50.34a and 50.36a. In the Statement of Considerations for Appendix I (40 Fed. Reg. 19,439 (May 5, 1975)), the Commission characterized the guidance as the ''quantitative expression of the meaning of the requirement that

radioactive material in effluents released to unrestricted areas from light-water nuclear power reactors be kept 'as low as practicable.' '' The technical basis for Appendix I contained assumptions for a small fraction of leaking fuel rods, as is stated in the Atomic Energy Commission's report of July 1973, WASH-1258, ''Final Environmental Statement Concerning Proposed Rule Making Action: Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low as Practicable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents.''

2. Associated Regulations and Guidance

Fuel integrity is explicitly addressed in NRC regulations in several instances, and plant licensing bases specifically discuss fuel performance limits. To implement NRC regulations, the Staff developed a number of guidance documents for licensees to use in developing their licensing basis. This section outlines the regulatory framework on fuel integrity during normal plant operation and discusses instances in which the Staff has considered the safety implications of fuel integrity.

a. Regulatory Requirements

The General Design Criteria (GDC) of 10 C.F.R. Part 50, Appendix A, ''General Design Criteria for Nuclear Power Plants,'' contain references to fuel design criteria. When fuel performance is used as a criterion for a safety function, system, or component, the phrase ''specified acceptable fuel design limits'' (SAFDLs) appears in the following GDC:

GDC 10, ''Reactor Design'';
GDC 12, ''Suppression of Reactor Power Oscillations'';
GDC 17, ''Electric Power Systems'';
GDC 20, ''Protection System Functions'';
GDC 25, ''Protection System Requirements for Reactivity Control Malfunctions'';
GDC 26, ''Reactivity Control System Redundancy and Capability'';
GDC 33, ''Reactor Coolant Makeup'';
GDC 34, ''Residual Heat Removal.''

GDC 10, 17, 20, and 26 use this wording in conjunction with anticipated operational occurrences and conditions of normal operation. For example, GDC 10 requires ''appropriate margin to assure that specified acceptable fuel design limits are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences.'' As discussed later in this section, SAFDLs for a plant are described in plant documentation, typically the

UFSAR or the FSAR, and are met by operating within technical specifications limits.

NRC regulations also specify that certain conditions beyond steady-state operation be included in evaluations of the normal operating regime for a plant. These are called anticipated operational occurrences (AOOs) and are sometimes referred to as ''anticipated operating transients.'' In Appendix A to 10 C.F.R. Part 50, the Staff defines AOOs as ''those conditions of normal operation which are expected to occur one or more times during the life of the nuclear power unit.'' GDC 29, ''Protection Against Anticipated Operational Occurrences,'' gives a general requirement for protection system and reactivity control system performance during AOOs, but does not mention fuel integrity. Examples of AOOs are the loss of all reactor coolant pumps, turbine trip events, and loss of control power. Such occurrences are distinct from events termed ''accidents,'' such as a loss-of-coolant accident (LOCA) or a main steamline break. The references to fuel integrity requirements related to accidents and those regarding emergency core cooling system (ECCS) performance are beyond conditions of normal operation.

The UCS report relates other regulations beyond the GDC to fuel integrity during normal operation as follows:

> 10 C.F.R. § 50.34a, ''Design objectives for equipment to control releases of radioactive material in effluents — nuclear power reactors'';
> 10 C.F.R. § 50.36, ''Technical specifications'';
> 10 C.F.R. § 50.59, ''Changes, tests and experiments'';
> 10 C.F.R. § 50.71, ''Maintenance of records, making of reports'';
> Appendix I to 10 C.F.R. Part 50, ''Numerical Guides for Design Objectives and Limiting Conditions for Operation To Meet the Criterion 'As Low As Is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents.''

Although 10 C.F.R. § 50.36a, ''Technical specifications on effluents from nuclear power reactors,'' was not directly referenced in the report, by citing 10 C.F.R. § 50.36, the Staff inferred that section 50.36a is linked to fuel integrity when considering the discussion on the UCS report.

b. NRC Staff Guidance Documents

To implement NRC regulations, several NRC Staff guidance documents are used, including the following:

> Regulatory Guide 1.3, ''Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Boiling Water Reactors'';

Regulatory Guide 1.4, ''Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Pressurized Water Reactors'';
Regulatory Guide 1.77, ''Assumptions Used for Evaluating a Control Rod Ejection Accident for Pressurized Water Reactors'';
Regulatory Guide 1.112, ''Calculation of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Light-Water-Cooled Power Reactors'';
SRP § 4.2, ''Fuel System Design'';
SRP § 4.4, ''Thermal and Hydraulic Design.''

Along with the regulations, licensees use the guidance documents listed above to form the licensing basis for fuel integrity at their plant. The licensing basis for a nuclear power plant, as defined in 10 C.F.R. Part 54, ''Requirements for Renewal of Operating Licenses for Nuclear Power Reactors,'' is ''the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis . . . that are docketed and in effect.'' The definition continues by listing elements of the licensing basis, such as technical specifications, the FSAR, and licensee commitments documented in NRC safety evaluations. Several components form the plant's licensing basis for fuel performance: (1) NRC regulations that specifically refer to fuel integrity; (2) technical specification limits on coolant activity; (3) fuel rod performance specifications and analysis assumptions defined in the plant's FSAR and referenced topical reports; and (4) commitments to NRC regulatory guidance and to generic communications addressing fuel performance.

Acceptance criteria in the SRP sections, which may be adopted by licensees to implement the regulations, are based on meeting the requirements of GDC 10 with appropriate margin to ensure that SAFDLs are not exceeded during normal operation, including AOOs. Specifically, SRP § 4.2 has as an objective of the safety review ''to provide assurance that the fuel system is not damaged as a result of normal operation and anticipated operational occurrences.'' The reviewer should ensure that fuel does not leak as a result of specific causes during normal operation and AOOs, and that leaking fuel is accounted for in the dose analyses for postulated design-basis accidents. Further, fuel rod failure is defined in SRP § 4.2 as ''the loss of fuel rod hermiticity,'' meaning fuel rod leakage. However, in SRP § 4.2, the Staff also states that ''it is not possible to avoid all fuel rod failures and that cleanup systems are installed to handle a small number of leaking rods.'' Such leaks typically occur as a result of manufacturing flaws or loose parts wear. Therefore, on the basis of this review guidance, the Staff accepts the possibility that fuel may leak during normal operation.

In the case of the Calvert Cliffs Nuclear Plant, a plant cited as an example in the UCS report, the plant's licensing basis contains a commitment to adhere

to the guidance in the SRP. The following four objectives for fuel design given in SRP § 4.2 may be used as fuel design objectives within a plant's licensing basis as is done in the Calvert Cliffs FSAR:

> Fuel is not damaged as a result of normal operation and AOOs.
>
> Fuel damage is never so severe as to prevent control rod insertion when required.
>
> The number of fuel rod failures is not underestimated for postulated accidents.
>
> Coolability is always maintained.

SRP § 4.4 has as an objective that the thermal and hydraulic design of the core should provide acceptable margins of safety from conditions that would lead to fuel damage during normal reactor operation, including anticipated operational transients. It gives two examples of acceptable approaches to meet the acceptance criteria: one based on a 95% probability at a 95% confidence level that the hottest rod in the core does not exceed prescribed thermal limits during normal operation, including AOOs, and the other using a limiting value for thermal limits so that at least 99.9% of the fuel rods are not expected to exceed thermal limits during normal operation, including AOOs. These criteria are limits that strive to maintain a very low likelihood of fuel damage during operation; however, they do not preclude the possibility that some fuel defects could occur.

A plant's licensing basis contains fuel performance criteria that are specified for normal operation, including AOOs, and analyses are conducted to ensure that these criteria will not be exceeded. The criteria are related to the SAFDLs mentioned in the GDC and are normally presented in terms of prescribed thermal limits, which can be calculated and are reliable predictors of the onset of fuel damage. For boiling-water reactors (BWRs), critical heat flux or the critical power ratio is used as the predictor of fuel damage onset, and for pressurized-water reactors (PWRs), the criterion is the departure from nucleate boiling (DNB), or the DNB ratio (DNBR).

An example of fuel design limits given in plant documentation is found in the FSAR for Calvert Cliffs Units 1 and 2. Section 3.6 of the FSAR presents fuel design and analysis bases. Fuel rod cladding is designed to stress and strain limits, considering the operating temperature, the cladding material, the expected property changes as a result of irradiation, and the predicted life span of the fuel. Extensive fuel mechanical analyses are detailed, along with pertinent fuel test data, which help to confirm the analysis results. The calculations are used to demonstrate that the criteria are satisfied for limiting cases under limiting assumptions. Chapter 14 of the Calvert Cliffs FSAR gives the fuel behavior acceptance criteria for each category of design-basis event analyzed. For AOOs, the minimum DNBR is chosen to provide at least a 95% probability with a 95% confidence level that DNB will not be experienced along the fuel rod with

that DNBR (i.e., the SRP § 4.4 criteria). This limit ensures that there is a low probability of fuel rod damage as a result of overheated cladding. The fuel temperature SAFDL is set so that no significant fuel melting will occur during steady-state operation or during a transient. Compliance with the limit offers assurance that the fuel rod will not be damaged as a result of material property changes and increases in fuel pellet volume, which could be associated with fuel melting. Again, as with the limits discussed in SRP § 4.4, these limits are set to prevent fuel damage, but the possibility of fuel leakage is recognized.

The key to plant licensing bases regarding fuel integrity is the technical specification limiting the concentration of activity allowed in reactor coolant during plant operation. These limits are based on maintaining a margin to the dose guidelines in 10 C.F.R. Part 100 for steam generator tube rupture (SGTR) accidents in PWRs and main steamline break (MSLB) accidents in BWRs. The specific activity limits of the reactor coolant system are stated in terms of dose equivalent iodine-131, which is attributable solely to fuel leaks. That is distinct from gross coolant activity, which is the aggregate activity from all sources, including fuel leaks and corrosion product activation. The technical basis for these limits can be traced to the guidance given in Appendix I, which is, in turn, based on assumptions that fuel leaks would exist during operation. Technical specifications for reactor core safety limits, including the reactor protection system setpoints, are set so that the SAFDLs are not exceeded during normal operation or AOOs. The technical specifications for protection system action are intended to prevent fuel damage, but the specifications for coolant activity levels recognize that some small amount of fuel leakage is allowable during operation. The technical specifications concerning coolant activity are based on meeting the dose acceptance criteria in the SRP for the limiting design-basis accident (usually SGTR or MSLB for PWRs and MSLB for BWRs). These limits are used as assumptions in design-basis accident dose analyses to show compliance with dose acceptance criteria for the control room operators and the public. By maintaining the levels of coolant activity within these limits during normal operation, the continued validity of the design-basis analyses is maintained.

The Staff has addressed fuel performance problems in several generic communications to licensees. Prominent among these were NRC Information Notice (IN) 93-82, ''Recent Fuel and Core Performance Problems in Operating Reactors,'' and Generic Letter (GL) 90-02, ''Alternative Requirements for Fuel Assemblies in Design Features Section of Technical Specifications.'' In IN 93-82, the Staff discussed fuel leaks occurring during normal operation from a specific cause — fretting wear in PWR fuel, which was partly attributed to mixed fuel core designs. The Staff alerted licensees to the introduction of modified fuel designs that require added attention to ensure that the core design basis is not violated. This information notice is an example of Staff action to use operating information gathered from fuel leaks at a few plants to avoid similar problems

at other reactors, thus reducing the potential for more widespread fuel leakage. In GL 90-02, the Staff provided licensees with added flexibility to take actions to reduce fission-product releases during operation by removing defective fuel rods during refueling outages.

The Staff has previously considered the safety implications of operation with fuel leakage on a generic basis. Generic Safety Issue (GSI) B-22, ''LWR [Light Water Reactor] Fuel,'' which is related to fuel leakage, is discussed in NUREG-0933, ''A Prioritization of Generic Safety Issues,'' Supplement 22, March 1998. In GSI B-22, the Staff considered the ability to accurately predict fuel performance under normal and accident conditions. The GSI review was conducted to determine if predictions of fuel behavior under normal operating and accident conditions were sufficient to demonstrate that regulatory requirements were being met. In its evaluation of the issue, the Staff concluded that releases during normal operation would be increased because of fuel defects, but would not be increased beyond regulatory limits. The Staff also stated that, ''additional requirements would not decrease the number of fuel defects significantly.'' Furthermore, the Staff concluded that the release from fuel damaged during design-basis accidents and severe accidents would be much larger than the release attributed to preexisting fuel defects, and the magnitude of the release would not be significantly affected by preexisting fuel defects. Thus, the consequence from leaking fuel was determined to be very small. The Staff concluded that because fuel manufacturers have taken an active role to improve fuel performance, fuel leaks are now rare, and the significance of the issue has diminished. Therefore, the issue was dropped from further consideration.

In the resolution of GSI B-22, the Staff concluded that the influence of additional restrictions to operation with fuel leaks on core damage frequency and public consequence would be insignificant. Thus, operation with a limited number of fuel defects and leaks under normal operating conditions is not associated with an excessive level of risk, provided that the plant continues to operate within technical specifications limits for reactor coolant activity.

3. Evaluation of Generic Concerns

The Staff evaluated the generic concerns associated with fuel leakage identified previously by the Petitioner, as follows:

a. 10 C.F.R. § 50.59, ''Changes, tests and experiments''

A premise of the UCS report is that section 50.59 is violated because reactor operation with limited fuel leakage constitutes an unapproved change to the licensing basis for a plant. The report states that ''Federal regulations require

formal NRC approval prior to any nuclear plant operating with fuel cladding failures.'' The attachment to the report is an assessment of operation with fuel leaks as an unreviewed safety question on the basis of the criteria in section 50.59. The report states that such operation is an unreviewed safety question because operation with leaking fuel (1) increases the probability and consequences of an accident, (2) creates an accident different from any in the safety analysis for the plant, and (3) reduces safety margins.

The Staff does not agree that operation with leaking fuel necessarily constitutes a change to or violation of the licensing basis for a plant. A small amount of fuel leakage during operation is permitted by NRC Staff guidance implementing NRC regulations and is accounted for in plant licensing bases. A key component of the licensing basis regarding fuel performance is the technical specification limiting reactor coolant system activity. The fission-product release from the level of leaking fuel associated with the technical specification limit is included in the design-basis accident dose analyses described in the FSAR for a plant to show compliance with the dose acceptance criteria in the SRP. Therefore, operating with leaking fuel, within the coolant activity technical specification limits, does not constitute a change in the plant licensing basis, and 10 C.F.R. § 50.59 does not apply.

b. 10 C.F.R. § 50.71, ''Maintenance of records, making of reports''

The Petitioner states in the report that ''any plant operating with fuel cladding failures is violating its design and licensing bases requirements, a condition not allowed by Federal safety regulations.'' The Petitioner further states that when plants operate with leaking fuel, section 50.71 is violated since the licensing basis for a plant, as documented in the technical specifications and in the analyses contained in the FSAR, does not accommodate such operation.

This concern is closely linked to the previous discussion regarding section 50.59, in that FSARs for plants operating with leaking fuel should, in the view of the UCS, include safety analyses accounting for the effects of fuel leaks. As previously discussed, plant licensing bases do incorporate assumptions for limited levels of fuel leakage through technical specifications requirements and designs for plant reactor water cleanup systems. Plant FSARs, including the example discussed earlier in this evaluation, typically contain information on fuel leakage effects, and the safety analyses explicitly allow for coolant activity levels attributable to leaking fuel under normal operation. Thus, the Staff does not consider section 50.71 to be violated by operation with fuel leakage.

c. Safety Analysis Assumptions

The UCS report states that ''safety analyses assume that *all* three barriers [to radioactive material release] are intact prior to any accident.'' Therefore, according to the UCS, plants with known fuel leakage could have accidents with more severe consequences than predicted. The report also states the following: ''Pre-existing fuel cladding failures have not been considered in the safety analyses for this accident [LOCA], or any other accident.''

In the discussion that follows, the Staff explains that preexisting fuel cladding leaks are accounted for in plant licensing bases and that safety analyses do not assume that all the fission-product barriers are fully intact before an accident.

The analyses of limiting postulated design-basis releases do not assume that all the fission-product barriers are fully intact before an accident. For the loss-of-coolant accident, which typically yields the most limiting postulated releases, all three barriers are assumed to allow the release of some fission products. The methodology used to analyze this accident is given in Regulatory Guides 1.3 and 1.4, and SRP § 15.6.5, ''Loss-of-Coolant Accidents Resulting from Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary.''

For the containment and reactor coolant system (RCS) barriers, these assumptions are explicitly given. The containment is assumed to leak at the leak rate incorporated in the plant technical specifications when the containment is at positive pressure. The RCS inside the containment is assumed to completely fail as a fission-product barrier at the beginning of the accident. Systems outside the containment that interface with the RCS are also assumed to experience failures.

The assumption of preexisting leakage for the fuel cladding barrier, although not explicitly given, is inherent in the assumption of a conservative nonmechanistic release from the fuel. The entire iodine and noble gas inventory of the core is assumed to be released to the reactor coolant. A conservative fraction of this inventory is assumed to be released into the containment and subsequently released to the environment. Assuming that this release occurs instantaneously further enhances the conservatism of these analyses. This assumption disregards the fission-product containment function of the fuel cladding at the beginning of the accident.

Accidents, which may not be bounded by the radiological consequences of a LOCA, include the control rod drop accident for BWRs and MSLB outside of containment for PWRs. However, the conservatism of the source-term assumptions for these analyses parallels those for a LOCA. Some of the same assumptions used for radiological consequence evaluation of a LOCA are used for the analysis of MSLB outside of containment. Appendix A to SRP § 15.1.5, ''Radiological Consequences of Main Steam Line Failures Outside Containment of a PWR,'' contains an acceptance criterion that references Regulatory Guide 1.4. The radiological assumptions for the control rod drop analysis are similar

to those for a LOCA, as stated in Appendix A to SRP § 15.4.9, ''Radiological Consequences of Control Rod Drop Accident (BWR),'' and Regulatory Guide 1.77. For example, the guidelines assume that the nuclide inventory in the potentially breached fuel elements should be calculated and it should be assumed that all gaseous constituents in the fuel cladding gaps are released.

The radioactivity assumed for release from the LOCA is much greater than that associated with preexisting fuel leakage allowed by plant technical specifications. The Staff has compared releases from preexisting defects with the release resulting from fuel damage during an accident. In its consideration of GSI B-22, the Staff concluded that, ''the magnitude of a release from failed fuel during an accident is much larger than the release from a preexisting fuel defect'' and that ''the resultant consequence from failed fuel was determined to be very small'' (NUREG-0933). These assumptions are made despite the provisions of 10 C.F.R. § 50.46 requiring an ECCS that must be designed to prevent exceeding thermal limits that cause such gross fuel failure. In addition, for design-basis accidents in which fuel damage is not assumed, the preexisting fuel cladding defects are typically assumed to serve as release paths facilitating a spike in radioiodine concentration in the coolant.

Additional NRC fuel design requirements complement the conservative defense-in-depth assumptions as previously described to prevent an unanalyzed large release of fission products. To illustrate its concern about fuel leakage influences on accident progression, the UCS report describes a LOCA sequence and postulates that hydraulic loads on the fuel rods could lead to cladding failures, which would result in a large release of fission products into the coolant and prevent control rod insertion. Fuel design requirements and guidance specifically address the ability to insert control rods, and Staff review guidance recognizes that preexisting fuel cladding defects could have an effect on fuel performance during accidents. In GDC 27, ''Combined Reactivity Control Systems Capability,'' the Staff requires that reactivity control systems, including the control rod system, have the capability to control reactivity changes under postulated accident conditions in order to ensure core cooling. SRP § 4.2 includes the objective that ''fuel system damage is never so severe as to prevent control rod insertion when it is required.''

To ensure that the preceding objective is met, fuel designs consider external loads on fuel rods. This is discussed in the appendix to SRP § 4.2, ''Evaluation of Fuel Assembly Structural Response to Externally Applied Forces.'' The basis for much of the appendix to SRP § 4.2 is contained in NUREG/CR-1018, ''Review of LWR Fuel System Mechanical Response with Recommendations for Component Acceptance Criteria,'' prepared by EG&G Idaho in September 1979. This report states that ''Cyclic fatigue and material degradation may cause a failure [of a fuel system component] at any point in the transient [i.e., a LOCA].'' Thus, material degradation that could lead to fuel leakage during operation is considered in

accident analyses. Furthermore, design considerations, such as control guide tubes in PWRs and fuel channel boxes in BWRs, help separate control rods from the fuel. The separation provided protects control rods from material degradation of fuel that might occur in accidents, thus helping to prevent control rod obstruction. Such safety analysis assumptions as these (which assume preexisting failures of the fission-product barriers) provide confidence that the preexisting cladding defects allowed by technical specifications limits on coolant activity will not erode the safety margin assumed for accident analyses.

d. 10 C.F.R. § 50.34a, ''Design objectives for equipment to control releases of radioactive material in effluents — nuclear power reactors''

In its report, the UCS claims that section 50.34a and other regulations related to the ALARA principle for radioactive materials release are violated since plant workers are exposed to a greater risk than necessary because of higher coolant activity levels attributable to leaking fuel. The UCS report continues: ''Federal regulations require nuclear plant owners to keep the release of radioactive materials as low as reasonably achievable. Therefore, it is both an illegal activity and a serious health hazard for nuclear plants to continue operating with fuel cladding damage.'' The UCS report cites Appendix I to 10 C.F.R. Part 50 when contending that fuel releases pose an undue risk to plant workers. Appendix I contains the numerical dose guidelines for power reactor operation to meet the ALARA criterion. These dose values are a small fraction of the 10 C.F.R. Part 20 annual public dose limit of 100 millirem (i.e., 3 millirem from liquid effluents and 5 millirem from gaseous effluents).

The bases for the guidelines in Appendix I are given in WASH-1258, which acknowledges that radioactive material from a number of sources, including fission-product leakage to the coolant from defects in the fuel cladding, will be present in the primary coolant during normal operation. Further, in the ''Bases'' section on RCS specific activity in NUREG-1431, ''Standard Technical Specifications, Westinghouse Plants,'' April 1995, the limits on specific activity are linked to exposure control practices at plants. The section clearly states that the limits on RCS specific activity are used in the design of radiation shielding and plant personnel radiation protection practices.

In addition, occupational dose considerations were discussed in the resolution of GSI B-22. The Staff acknowledged that localized dose rates were expected to increase as a result of fuel defects, but effects are limited by requirements for plants to operate within their technical specifications for coolant activity and releases. In some cases, plants will often stay within allowable release limits and coolant activity levels by operating at reduced power until the next refueling outage allows the problem to be corrected.

On the basis of the preceding discussion, operation with a limited amount of leaking fuel is within a plant's licensing basis and, in itself, does not violate ALARA-related regulations. Operation involving leaking fuel, however, will likely require plant operators to take additional measures in order to ensure that ALARA requirements are being met, but these would need to be considered on a case-by-case basis.

4. UCS Report Recommendations

In the report, the UCS recommends that the NRC take steps to prohibit nuclear power plants from operating with fuel cladding damage until the safety concerns raised by the report are resolved. The following steps are specifically recommended: (1) requiring plant shutdown upon detection of fuel leakage, and (2) requiring that safety evaluations that consider the effects of operating with leaking fuel be included in plant licensing bases to justify operation under such circumstances. Further, the UCS recommends that UFSARs be revised to establish safe operating limits to accommodate operation with leaking fuel.

On the basis of the Staff's consideration of the stated safety concerns in the report, there is no technical or regulatory basis to require that plants operating with leaking fuel be shut down, provided they are operating within their technical specifications limits and in accordance with their licensing basis. The UCS report, in raising its concerns, does not offer any new information to demonstrate that the overall risk of operating with fuel defects presents an undue hazard to plant workers or the public.

Further, since the Staff does not consider plants operating with leaking fuel to be violating section 50.59 or 50.71, there is no basis for requiring plants to perform additional safety analyses to model the effects of fuel defects on accident progressions to update plant safety analysis documentation.

B. Plant-Specific Concerns — River Bend Station

On the basis of the reported fuel leakage at River Bend, the Petitioner states that the generic concerns contained in its report apply to River Bend. The September 25, 1998 Petition then presents a number of references to the River Bend USAR as instances in which, in the opinion of the Petitioner, plant licensing bases do not permit operation of the plant with known fuel leakage.

A reference to the USAR in the petition is the USAR definition of unacceptable consequences (USAR Table 15A.2-4), which lists as an unacceptable consequence ''Failure of the fuel barrier as a result of exceeding mechanical or thermal limits.'' The Petitioner considers this criterion violated since a fuel failure exists in advance of any design-basis accident that may now occur.

The petition then discusses USAR Chapter 15 accident analysis descriptions, which state either (1) that fuel cladding integrity will be maintained as designed or (2) radioactive material is not released from the fuel for the event. The following events cited in the petition have event descriptions in the River Bend USAR, which state that fuel cladding will function and maintain its integrity as designed:

Loss of Feedwater Heating (USAR § 15.1.1.4),
Feedwater Controller Failure — Maximum Demand (USAR § 15.1.2.4),
Pressure Regulator Failure — Open (USAR § 15.1.3.4),
Pressure Regulator Failure — Closed (USAR § 15.2.1.4).

The following two events cited in the petition have event descriptions in the River Bend USAR, which state that ''no radioactive material is released from the fuel'' during the event:

Control Rod Withdrawal Error at Power (USAR § 15.4.2.5),
Recirculation Flow Control Failure with Increasing Flow (USAR § 15.4.5.5).

The Petitioner also states that the River Bend licensing basis for worker radiation protection is violated by operation with leaking fuel. Again, the petition cites the USAR (§§ 12.1.1 and 12.1.2.1) as the pertinent reference to the licensing basis.

1. Evaluation of Plant-Specific Concerns

As discussed in the consideration of generic safety concerns, the Staff does not agree that preexisting fuel cladding defects and resultant fuel leakage violate plant licensing bases. The Staff also considers that conclusion valid for River Bend. The basis for this conclusion is supported in the following discussion.

a. USAR Appendix 15A

The Petitioner referenced two sections of USAR Appendix 15A, ''Plant Nuclear Safety Operational Analysis (NSOA)'' (as stated):

> UFSAR 15A.2.8, ''General Nuclear Safety Operational Criteria,'' stated:
>
> The plant shall be operated so as to avoid unacceptable consequences.
>
> UFSAR Table 15A.2-4, ''Unacceptable Consequences Criteria Plant Event Category: Design Basis Accidents,'' defined ''unacceptable consequences'' as follows:
>
> 4-1 Radioactive material release exceeding the guideline values of 10 CFR 100.
>
> 4-2 Failure of the fuel barrier as a result of exceeding mechanical or thermal limits.

4-3 Nuclear system stresses exceeding that allowed for accidents by applicable industry codes.

4-4 Containment stresses exceeding that allowed for accidents by applicable industry codes when containment is required.

4-5 Overexposure to radiation of plant main control room personnel.

The current operating condition at the River Bend Station apparently violates the spirit, if not the letter, of Criterion 4-2 since the fuel barrier has already failed, albeit to a limited extent. This UFSAR text does *not* accept a low level of fuel barrier failure based on meeting the offsite and onsite radiation protection limits. Integrity of the fuel barrier is an explicit criterion in addition to the radiation requirements.

In the petition, the UCS highlights the table concerning the consequences for the design-basis accident. This plant condition is a highly improbable event, and safety analyses ensure that safety limits and regulatory requirements are not exceeded as a result of the accident occurring. This is why USAR Table 15A.2-4, Item 4-2 states, ''Failure of a fuel barrier *as a result of exceeding mechanical or thermal limits*'' (emphasis added). The unacceptable consequences of this type of event are independent of preexisting fuel cladding defects. The unacceptable consequences of this event are additional fuel failures as a result of the accident occurring.

Within the framework of the USAR, ''unacceptable consequences'' are specified measures of safety and analytically determinable limits on the consequences of different classifications of plant events. They are used for performing a nuclear safety operational analysis. Unacceptable consequences are described for various plant conditions, including ''Normal (Planned) Operation,'' ''Anticipated (Expected) Operational Transients,'' ''Abnormal (Unexpected) Operational Transients,'' ''Design Basis (Postulated) Accidents,'' and ''Special (Hypothetical) Events.'' USAR Tables 15A.2-1 through 15A.2-5 identify the unacceptable consequences for each of the five plant conditions, and are different for each of the cases.

The USAR text clearly documents the acceptability of a low level of fuel cladding failures based on meeting the offsite and onsite radiation protection limits. For example, USAR Table 15A.2-1 discusses the unacceptable consequences for normal operation. This USAR table defines unacceptable consequences for normal operation as follows:

4-1 Release of radioactive material to the environs that exceeds the limits of either 10 C.F.R. Part 20 or 10 C.F.R. Part 50.

4-2 Fuel failure to such an extent that were the freed fission products released to the environs via the normal discharge paths for radioactive material, the limits of 10 C.F.R. Part 20 would be exceeded.

4-3 Nuclear system stress in excess of that allowed for planned operation by applicable industry codes.

4-4 Existence of a plant condition not considered by plant safety analysis.

Item 4-2 in Table 15A.2-1 implies that fuel cladding failures are not an unanticipated condition during normal operations and is, therefore, consistent with other parts of the River Bend licensing basis. Fuel cladding defects are acceptable to the extent that they do not jeopardize radiation protection limits established in the plant technical specifications and other licensing-basis documents. USAR Table 15A.2-4 does not apply for normal operations; only USAR Table 15A.2-1 applies. Furthermore, the provisions found in USAR Table 15A.2-4 would continue to be met for postulated design-basis accidents.

USAR § 15.0.3.1.1 provides further clarification in its list of unacceptable safety consequences for ''moderate frequency'' events, which lists: ''Reactor operation induced fuel-cladding failure as a direct result of the transient analysis above the minimum critical power ratio (MCPR) uncertainty level (0.1 percent).'' Accordingly, preexisting cladding defects are considered during some postulated transients. In fact, the acceptance criteria for moderate-frequency event analyses, based on the GDC (10 C.F.R. Part 50, Appendix A) and the Standard Review Plan, and described in the Safety Evaluation Report (SER) for River Bend (NUREG-0989), state the following expectations for fuel cladding performance: ''An incident of moderate frequency . . . should not result in a loss of function of any fission product barrier other than the fuel cladding. A limited number of fuel rod cladding perforations are acceptable.''

USAR Chapter 11, ''Radioactive Waste Management,'' Section 11.1, ''Source Terms,'' details the expected reactor coolant and main steam activities to be used to form the basis for estimating the average quantity of radioactive material released to the environment during normal operations, including operational occurrences. This section further addresses that the offgas release rate of 304,000 Ci/s at a 30-minute delay time corresponds to design failed fuel conditions, that is, maximum acceptable cladding failure for normal operation, and is also conservatively based upon 105% of rated thermal power. This is consistent with limits prescribed in Technical Specification 3.7.4, ''Main Condenser Offgas,'' which requires that the gross gamma activity rate of the noble gases shall be < 290 mCi/s (or < 290,000 Ci/s) after a decay time of 30 minutes.

In addition, two other parts of the fuel system licensing basis for River Bend show that limited fuel leakage during plant operation is a design consideration:

The fuel system design basis for River Bend is given in USAR § 4.2.1 by reference to the generic topical report ''General Electric Standard Application for Reactor Fuel,'' NEDE-24011-P-A. The generic topical report details fuel cladding operating limits to ensure that fuel performance is maintained within

fuel rod thermal and mechanical design and safety analysis criteria. The limits are given for normal operating conditions and AOOs in terms of specific mechanical and thermal specifications. Evaluations of specific fuel failure mechanisms under normal operation and AOOs were discussed, such as stress/strain, hydraulic loads, fretting, and internal gas pressure to ensure that fuel failure did not result from these causes. The design basis did not preclude the possibility that fuel could fail for other reasons, such as preexisting cladding flaws leading to leakage.

The Technical Specifications (§ 3.4.8) for River Bend contain a limit for reactor coolant system specific activity. The basis for this limit is the same as that discussed in the consideration of the generic safety concerns. Section B 3.4.8 of the River Bend Technical Specifications ''Bases'' acknowledges that ''the reactor coolant acquires radioactive materials due to release of fission products from fuel leaks.'' Thus, fission products released during plant operation are clearly considered to be contributors to the source term used for safety analysis of the MSLB release consequences. The Technical Specifications state that the limit is set to ensure that any release as a consequence of an MSLB is less than a small fraction of the 10 C.F.R. Part 100 guidelines. These portions of the River Bend licensing basis are consistent with NRC regulations regarding fuel performance and the associated NRC guidance used by licensees to implement those NRC regulations that were covered earlier in the discussion regarding generic concerns.

The River Bend licensing-basis items listed by the Petitioner are consistent with the parts of the fuel licensing basis discussed above with the exception of some minor inconsistencies in documentation (as discussed below). That is, fuel leakage during plant operation is not precluded by licensing-basis provisions requiring that fuel integrity be maintained as designed. The design basis itself allows the possibility of leakage while ensuring that cladding damage does not result from specific operationally related causes. Fuel is also designed to maintain its structural integrity to ensure core coolability and to ensure that control rods can be inserted.

b. Chapter 15 Accident Analysis

The Petitioner also cited references taken from accident analyses described in River Bend USAR Chapter 15 (as stated):

> UCS reviewed the UFSAR Chapter 15 description of accident analyses performed for the River Bend Station. UFSAR Section 15.1.1.4, ''Barrier Performance,'' for the loss of feedwater heating event stated:

> The consequences of this event do not result in any temperature or pressure transient in excess of the criteria for which the fuel, pressure vessel, or containment are designed; therefore, these barriers maintain their integrity and function as designed.

UFSAR Sections 15.1.2.4 for the feedwater controller failure -- maximum event, 15.1.3.4 for the pressure regulator failure -- open event, and 15.2.1.4 for the pressure regulator failure -- closed event all contain comparable statements that barrier performance was not performed because the fuel remained intact.

These analyzed events appear to be valid only when the River Bend Station is operated with no failed fuel assemblies. Operation with pre-existing fuel failures (i.e., the current plant configuration) appear to be outside of the design and licensing bases for these design bases events.

UFSAR Section 15.4.2.5, ''Radiological Consequences,'' for the control rod withdrawal error at power event stated:

> An evaluation of the radiological consequences was not made for this event since no radioactive material is released from the fuel.

UFSAR Section 15.4.5.5, ''Radiological Consequences,'' for the recirculation flow control failure with increasing flow event stated:

> An evaluation of the radiological consequences is not required for this event since no radioactive material is released from the fuel.

These analyzed events also appear valid only when the River Bend Station is operated with no failed fuel assemblies. Operation with pre-existing fuel failures (i.e., the current plant configuration) appear to be outside of the design and licensing bases for these design bases events.

The effect from pre-existing fuel failures was considered, at least partially, for one design bases event. UFSAR Section 15.2.4.5.1, ''Fission Product Release from Fuel,'' for the main steam isolation valve closure event stated:

> While no fuel rods are damaged as a consequence of this event, fission product activity associated with normal coolant activity levels as well as that released from previously defective rods is released to the suppression pool as a consequence of SRV [safety relief valve] actuation and vessel depressurization.

The aforementioned design bases events (e.g., control rod withdrawal error at power, loss of feedwater heating, et al) are *not* bound by these results because the radioactive material is not ''scrubbed'' by the suppression pool water as it is in the MSIV [main steam isolation valve] closure event.

As previously stated, the Petitioner cited four references to the USAR accident analysis section entitled ''Barrier Performance.'' At issue are essentially equivalent statements made where the USAR stated, in part, that the defense-in-depth ''barriers maintain their integrity and function as designed.'' The UCS concluded that operation with preexisting fuel failures is, therefore, outside the River Bend design and licensing bases. In stating that barriers are ''maintained,'' the USAR clearly implies that the events themselves do not result in additional

fuel cladding failures. To further support this conclusion, the radiological consequences described for three of the four events (§ 15.1.2, ''Feedwater Controller Failure — Maximum Demand''; § 15.1.3, ''Pressure Regulator Failure — Open''; and § 15.2.1, ''Pressure Regulator Failure — Closed'') are, indeed, bounded by an event that takes into consideration the effects of preexisting cladding failures. The three preceding events all result in actuation of the safety relief valves (SRVs) to the suppression pool. The USAR discussion (*see* USAR section titled ''Radiological Consequences'') notes that radioactivity is discharged to the suppression pool, and that the activity discharged is much less than those consequences identified in USAR § 15.2.4.5 (for the MSIV closure event).

The MSIV closure event, as described in the USAR, clearly considers the activity released from ''previously defective rods'' in determining dose consequences. The source term used in these calculations assumes the same iodine and noble gas activity as an initial condition as is used in the basis for determining RCS activity technical specifications limits. USAR § 15.2.4.5.1, ''Fission Product Release from Fuel,'' also explains, ''Since each of those transients identified previously which cause SRV actuation results in various vessel depressurization and steam blowdown rates, the transient evaluated in this section [the MSIV closure event] is that one which maximizes the radiological consequences for all transients of this nature.'' Thus, the USAR explicitly describes how ''the aforementioned design-basis events'' are bounded by the results for the MSIV closure event, for those events resulting in an SRV actuation. Furthermore, USAR § 15.1.1.5 describing the fourth event, the loss of feedwater heating, also states that ''this event does not result in any additional fuel failures,'' further reinforcing the Staff's position.

The quotation taken from the control rod withdrawal error from power and recirculation flow control error event descriptions — ''[a]n evaluation of the radiological consequences was not made for this event since no radioactive material is released from the fuel'' — appears to be taken out of context. Considering the many references ostensibly permitting operation with preexisting fuel cladding failures found within the USAR, technical specifications, NRC regulations, Staff implementing guidelines, and other licensing-basis documents, the intent of this statement is clearly that no *additional* radioactive material is released from the fuel as a consequence of the event.

Finally, in each of the accident analysis cases listed in the petition, the event is classified as a ''moderate frequency'' event (or an ''anticipated operational transient''). Specific criteria for unacceptable consequences are delineated in USAR Table 15A.2-2. For this type of anticipated transient, unacceptable performance of the fuel is described as, ''[r]eactor operation induced *fuel cladding failure as a direct result of the transient* analysis above the MCPR [Minimum Critical Power Ratio] uncertainty level (0.1%)'' (emphasis added).

Therefore, fuel cladding defects existing before the accident are not precluded from consideration.

c. Fuel Cladding Defect Propagation

The petition then raised concerns regarding the possibility that preexisting fuel cladding defects could propagate under design-basis transients (as stated):

> As detailed in UCS's April 1998 report on reactor operation with failed fuel cladding, it has not been demonstrated that the effects from design basis transients and accidents (i.e., hydrodynamic loads, fuel enthalpy changes, etc.) prevent pre-existing fuel failures from propagating. It is therefore possible that significantly more radioactive material will be released to the reactor coolant system during a transient or accident than that experienced during steady state operation. Thus, the existing design bases accident analyses for River Bend Station do not bound its current operation with known fuel cladding failures.

As previously stated in the evaluation of generic issues raised by the April 1998 UCS report, the Staff has previously considered the safety implications of operation with fuel leakage on a generic basis. In GSI B-22, the Staff considered the ability to accurately predict fuel performance under normal and accident conditions. In its evaluation of the issue, the Staff concluded that releases during normal operation would be increased because of fuel defects, but would not be increased beyond regulatory limits. The Staff also concluded that the release from fuel damage during design-basis accidents and severe accidents would be much larger than the release attributed to preexisting fuel defects, and the magnitude of the release would not be significantly affected by preexisting fuel defects. Therefore, the consequence from leaking fuel was determined to be very small.

The Petitioner has, however, noted some apparent inconsistencies in documentation of the licensing basis as found in the USAR for River Bend that could be taken out of context. The statements cited for two events — the control rod withdrawal error from power and recirculation flow control error — are not consistent with the other parts of the River Bend licensing basis discussed in this evaluation. The technical basis for coolant activity limits clearly permits operation with a limited amount of fuel leakage and, as discussed, the design basis does not preclude the possibility of limited fuel leakage during operation. Therefore, although these events should not cause fuel damage, preexisting leakage could still be a consideration, and only the activity in the reactor system coolant up to the technical specification limit would be available for release. The MSLB is considered the limiting event with respect to release of coolant activity from leaking fuel. The Staff expects that the consequences of the MSLB would bound those that would be predicted for the control rod withdrawal error from power or the recirculation flow control error events. Thus, the minor discrep-

ancies uncovered by the Petitioner in the documentation of the plant licensing basis do not constitute a safety concern requiring NRC action.

The Licensee has taken actions to limit the effects of the minor fuel rod defects at River Bend reported on September 21, 1998. The control rod pattern has been altered to achieve a depressed flux profile in the vicinity of the leaking rods, thereby suppressing the production of fission products as the plant continues operation at slightly less than full power. Following the initial detection of a leaking rod, the Licensee reduced the activity in the pretreatment offgas sample from 22.5 mCi/s to 1.8 mCi/s, which was very close to the prefuel-leak level of 1 mCi/s. The peak value was never more than a small fraction of the technical specification limit of 290 mCi/s. The offgas treatment system has been effectively eliminating any detectable radioactivity in offgas effluent, and only small dose rate increases were observed in areas of the plant in which offgas system components are located. Since work is not normally performed in those areas, the Licensee did not institute any additional exposure controls. However, the Licensee is continuing to closely monitor the offgas system to ensure that the coolant activity concentration remains within technical specifications limits.

d. ALARA Concerns

The Petitioner further stated that Entergy Operations, Inc., was violating its licensing basis with regard to the ALARA worker protection program (as stated):

> In addition to operating with non-bounding design bases accident analyses, it appears that the River Bend Licensee is also violating its licensing basis for worker radiation protection. UFSAR Section 12.1.1, ''Policy Consideration,'' stated:
>
> > The purpose of the ALARA [as low as reasonably achievable] program is to maintain the radiation exposure of plant personnel as far below the regulatory limits as is reasonably achievable.
>
> UFSAR Section 12.1.2.1, ''General Design Considerations for ALARA Exposures,'' stated that River Bend's efforts to maintain in-plant radiation exposure as low as is reasonably achievable included:
>
> > Minimizing radiation levels in routinely occupied plant areas and in vicinity of plant equipment expected to require the attention of plant personnel.
>
> According to the NRC Information Notice No. 87-39, ''Control of Hot Particle Contamination at Nuclear Plants:''
>
> > A plant operating with 0.125 percent pin-hole fuel cladding defects showed a five-fold increase in whole-body radiation exposure rates in some areas of the plant when compared to a sister plant with high-integrity fuel (<0.01 percent leakers). Around certain plant systems the degraded fuel may elevate radiation exposure even more.
>
> Industry experience demonstrated that reactor operation with failed fuel cladding increased radiation exposures for plant workers. The River Bend licensee has a licensing basis

requirement to maintain radiation exposures for plant workers as low as is reasonably achievable. The River Bend licensee informed the NRC about potential fuel cladding failures. It could shut down the facility and remove the failed fuel assemblies from the reactor core. Instead, it continues to operate the facility with higher radiation levels.

In its letter to the NRC dated February 11, 1999, the River Bend Licensee stated that if the plant were to shut down solely to remove leaking fuel bundles, worker exposure would be increased since additional exposure would later be incurred for normal shutdown and maintenance activities. Also, during the February 22, 1999 informal public hearing on the petition, the River Bend Licensee stated that dose rates in the general plant areas are essentially unchanged and that the average daily dose to plant workers has remained at the historical level of approximately 0.14 person-rem per day during normal operations. River Bend has seen some increased levels in dose rates in isolated areas, such as in rooms containing offgas system equipment; however, these areas are not routinely occupied and access to the rooms is controlled by the health physics department. The Licensee stated that if a 14-day outage were conducted to remove defective fuel bundles, the outage would incur a worker dose on the order of 9 person-rem for reactor disassembly, reassembly, and refueling activities. This exposure would be in addition to that incurred from activities planned for the scheduled refueling outage. The Licensee contends that shutting down in this situation to replace leaking fuel would be an action contrary to ALARA. The Staff agrees that conducting plant shutdown only to address the current situation at River Bend would be contrary to the ALARA principle for plant workers, provided exposure levels remain at their current values.

River Bend has two independent radiation-detection systems capable of sensing fission-product release from leaking fuel rods — main steamline radiation monitors and offgas system radiation monitors. The main steamline radiation monitors are used to detect high radiation levels from gross fuel failure. The offgas system radiation monitors can detect low-level emissions of noble gases, which are indicative of minor fuel damage. The offgas system monitor indication signaled the recent fuel damage found at River Bend.

The actions taken by the Licensee to limit further fuel damage, as well as the continued attention to reactor coolant activity and offgas radiation levels, provide confidence that River Bend can continue safe operation, within its licensing basis, with the limited fuel leakage recently detected.

C. Plant-Specific Concerns — Perry Nuclear Power Plant

On the basis of the reported fuel leakage at Perry, the Petitioner states that the generic concerns contained in the UCS report apply to the Perry plant. In

the opinion of the Petitioner, plant licensing bases do not permit operation of the plant with known fuel leakage.

As discussed in the consideration of generic safety concerns, the Staff does not agree that preexisting fuel cladding defects and resultant fuel leakage violate plant licensing bases. The Staff also considers that conclusion valid for Perry. Fuel leakage during plant operation is not precluded by licensing basis provisions requiring that fuel integrity be maintained as designed. The Perry design basis itself allows the possibility of leakage while ensuring that cladding damage does not result because of specific operationally related causes. Fuel is also designed to maintain its structural integrity to ensure core coolability and to ensure that control rods can be inserted.

The Updated Safety Analysis report (USAR) for Perry contains unacceptable consequences criteria for different event categories (USAR Tables 15A.2-1 through 15A.2-4). The unacceptable consequences for normal operation do not preclude fuel leakage. The second criterion listed precludes fuel failure to the extent that the limits of 10 C.F.R. Part 20 would be exceeded. The unacceptable consequences for anticipated operational transients prohibit fuel failure predicted as a direct result of transient analysis. For abnormal transients and design-basis accidents, widespread fuel cladding perforations and fuel cladding fragmentation are prohibited.

Two parts of the fuel system licensing basis for Perry show that limited fuel leakage during plant operation is a design consideration. The fuel system design basis for Perry is given in the USAR § 15B by reference to the generic topical report ''General Electric Standard Application for Reactor Fuel,'' NEDE-24011-P-A. The generic topical report details fuel cladding operating limits to ensure that fuel performance is maintained within fuel rod thermal and mechanical design and safety analysis criteria. The limits are given for normal operating conditions and AOOs in terms of specific mechanical and thermal specifications. Evaluations of specific fuel failure mechanisms under normal operation and AOOs were discussed, such as stress and strain, hydraulic loads, fretting, and internal gas pressure, to ensure that fuel failure did not result from these causes. The design bases did not preclude the possibility that fuel failure could occur for other reasons, such as preexisting cladding flaws leading to leakage.

The Technical Specifications for Perry (§ 3.4.8) contain a limit for RCS specific activity. The basis for this limit is the same as that discussed in the consideration of the generic safety concerns. Section B3.4.8 of the Perry Technical Specification ''Bases'' acknowledges that ''the reactor coolant acquires radioactive materials due to release of fission products from fuel leaks.'' Thus, fission products released during plant operation are clearly considered to be contributors to the source term used for safety analysis of the main steamline break release consequences. The technical specifications state that the limit is set to ensure that any release as a consequence of a main steamline break is

less than a small fraction of the 10 C.F.R. Part 100 guidelines. These portions of the Perry licensing basis are consistent with NRC regulations regarding fuel performance and the associated NRC guidance used by licensees to implement those NRC regulations that were covered earlier in the discussion regarding generic concerns.

The Licensee has taken actions to limit the effects of the existing minor fuel leaks at Perry. The control rod pattern has been altered to achieve a depressed flux profile in the vicinity of the leaking rods, thereby suppressing the production of fission products as the plant continues operation. The offgas treatment system has been effectively eliminating radioactivity in offgas effluent, and there has been no change in general radiation area dose rates. However, the Licensee is continuing to closely monitor the offgas system pretreatment radiation levels and is ensuring that the coolant activity concentration remains within technical specifications limits.

Perry has two independent radiation detection systems capable of sensing fission product release from leaking fuel rods: main steamline radiation monitors and offgas system radiation monitors. The main steamline radiation monitors are used to detect high radiation levels from gross fuel failure. The offgas system radiation monitors can detect low-level emissions of noble gases, which are indicative of minor fuel damage.

In its letter to the NRC, dated February 11, 1999, the Perry Licensee stated that if the plant were to shut down solely to remove fuel bundles exhibiting leakage, plant worker exposure would be increased since additional exposure would later be incurred for normal shutdown and maintenance activities. The Licensee contends that shutting down in this situation to replace leaking fuel would be an action contrary to ALARA. The Staff agrees that conducting plant shutdown only to address the current situation at Perry would be contrary to the ALARA principle for plant workers, provided exposure levels remain at their current values.

The actions taken by the Licensee to limit further fuel damage, as well as the continued attention to reactor coolant activity and offgas radiation levels, provide confidence that Perry can continue safe operation, within its licensing basis, with the limited fuel leakage detected.

IV. CONCLUSION

The Petitioner's requests are denied for the reasons specified in the preceding sections that discuss the Petitioner's information supporting the request. The Petitioner did not submit any significant new information about safety issues. Neither the information presented in the petition nor any other subsequent

information of which the NRC is aware warrants the actions requested by the Petitioner.

A copy of this Director's Decision will be filed with the Secretary of the Commission for review in accordance with 10 C.F.R. § 2.206(c). This Decision will become the final action of the Commission 25 days after its issuance 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 April 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 40-8968-ML**

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101,
Albuquerque, NM 87120) **May 27, 1999**

The Commission grants Intervenors' motion for reconsideration of a May 3, 1999 Commission order which set a page limit for final petitions for review in the current phase of the proceeding. The Commission denies Intervenors' petition for interlocutory review of the Presiding Officer's Memorandum and Order (Questions) issued on April 21, 1999.

RULES OF PRACTICE: COMMISSION AUTHORITY

The Commission's plenary supervisory authority allows it to interpret and customize its process for individual cases.

RULES OF PRACTICE: INTERLOCUTORY REVIEW

In determining whether to grant a petition for interlocutory review, the Commission considers whether the Presiding Officer's action either (1) threatens the party adversely affected with immediate and serious irreparable harm that could not be remedied by a later appeal or (2) affects the basic structure of the proceeding in a pervasive or unusual manner. *See* 10 C.F.R. § 2.786(g)(1) and (2).

PRESIDING OFFICER: AUTHORITY TO QUESTION PARTIES

The Commission's rules grant the Presiding Officer discretion to seek additional information. *See* 10 C.F.R. § 2.1233(a).

MEMORANDUM AND ORDER

In this Memorandum and Order, we address two recent filings by Intervenors Eastern Navajo Diné Against Uranium Mining (''ENDAUM") and Southwest Research and Information Center (''SRIC") in this proceeding. The first is a May 13, 1999 motion for reconsideration of a May 3, 1999 Commission order. The second is a May 14, 1999 petition for interlocutory review of the Presiding Officer's Memorandum and Order (Questions), issued on April 21, 1999, and reaffirmed on May 3 in response to a motion for reconsideration. We address each of these filings in turn.

INTERVENORS' MOTION FOR RECONSIDERATION

Intervenors seek reconsideration of a May 3, 1999 procedural order issued by the Secretary. That order indicates that, among other things, ''each party may file a single petition for review, not to exceed thirty pages, addressing all remaining challenges to decisions rendered by the Presiding Officer" after the Presiding Officer has issued his final decision related to the ''section 8" property. Intervenors believe that the thirty-page limit set out by the Commission is too short and, instead, urge the Commission to extend the limit to 60 pages on the ground that the Presiding Officer may issue as many as six additional partial initial decisions, giving rise to a potential for six petitions for review, which ordinarily are governed by a ten-page limit. *See* 10 C.F.R. § 2.786(b)(2).

The Commission's ''plenary supervisory authority allows it to interpret and customize its process for individual cases." *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-15, 48 NRC 45, 53 (1998). Thus, contrary to the Intervenors' view, page-limit adjustments are lawful. However, the Commission understands the practical concern the Intervenors have raised here and vacates the thirty-page requirement in the May 3 order. We will allow parties to file a single petition and responses up to 60 pages in length. No more than ten pages, however, may be devoted to any individual partial initial decision.

For the foregoing reasons and to the above extent, the motion for reconsideration is granted.

PETITION FOR INTERLOCUTORY REVIEW

The Presiding Officer's April 21, 1999 order posed a series of questions to the parties related to groundwater, the adequacy of the Final Environmental Impact Statement (FEIS), and environmental justice. The Intervenors seek reversal of the order because, in their view, the Presiding Officer has inappropriately provided Hydro Resources, Inc. (HRI), and the NRC Staff with a second opportunity to address issues that those parties had failed to address earlier. Intervenors argue that the Presiding Officer is not conducting this case impartially and has shown bias toward the NRC Staff and HRI. Intervenors have previously filed similar petitions in this proceeding that were denied by the Commission. *See* CLI-99-7, 49 NRC 230 (1999), and CLI-99-8, 49 NRC 311 (1999).

In determining whether to grant a petition for interlocutory review, the Commission considers whether the Presiding Officer's action either (1) threatens the party adversely affected with immediate and serious irreparable harm that could not be remedied by a later appeal or (2) affects the basic structure of the proceeding in a pervasive or unusual manner. 10 C.F.R. § 2.786(g)(1) and (2); *see Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), CLI-94-15, 40 NRC 319 (1994); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-94-2, 39 NRC 91, 93 (1994). Intervenors seek review and reversal pursuant to the second standard. As with our earlier decisions on similar issues, the Commission does not agree with Intervenors that the Presiding Officer's order has altered the basic structure of the proceeding in a pervasive or unusual manner. As such, we deny Intervenors' petition.

As we stated in CLI-99-7 and again in CLI-99-8, the propriety of the Presiding Officer's inquiry turns on fact-specific questions. We see no reason to interfere in the proceeding at this time, especially where such interference is likely to cause delay while we undertake the detailed inquiry necessary to resolve Intervenors' bias complaint. However, as we stated in CLI-99-8, our denial of interlocutory review does not reflect any position on the substance of the bias question. Intervenors may raise their bias concerns on appeal if, in the end, they do not prevail before the Presiding Officer on the merits of a particular issue and can show prejudice from information that entered the record improperly or unfairly as a result of the Presiding Officer's questions.

Intervenors have suggested that the Presiding Officer's questions regarding the adequacy of the FEIS will require the Staff to prepare a supplement to that document. However, we note that this is not always the case. Ultimate National Environmental Policy Act (NEPA) judgments with respect to any facility are to be made on the basis of the entire record before the adjudicatory tribunal. *See, e.g., Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-262, 1 NRC 163, 196-97 (1975). Accordingly, the Presiding Officer's modification of information in an FEIS does not always require recirculation

or a supplement. *See, e.g., Niagara Mohawk Power Corp.* (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 372 (1975). In issuing the questions in the April 21 order, the Presiding Officer appears only to be seeking additional information. The need, or lack thereof, for a supplement to the FEIS is speculative at this time.[1]

Intervenors also sought a stay of the Presiding Officer's April 21 and May 3 orders pending disposition of the petition for review. In view of our denial of the petition, the stay request is moot.

For the foregoing reasons, the petition is denied.

IT IS SO ORDERED.

For the Commission[2]

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 27th day of May 1999.

[1] *See* 10 C.F.R. § 51.92; *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 269 (1996).

[2] Commissioner Diaz was not available for affirmation of this Memorandum and Order. Had he been present, he would have affirmed the Memorandum and Order.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Thomas D. Murphy, Special Assistant
Robin Brett, Special Assistant

In the Matter of

Docket No. 40-8968-ML
(ASLBP No. 95-706-01-ML)
(Re: Leach Mining and Milling License)

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101, Albuquerque, NM 87120)

May 11, 1999

TECHNICAL AND FINANCIAL QUALIFICATIONS

This Partial Initial Decision finds that Applicant was technically qualified to conduct its project and that there is no regulatory requirement that it demonstrate that it is financially qualified to conduct the project. The technical qualification finding was based on a review of the qualifications of employees now employed by the company and this was considered an adequate demonstration that qualified employees will be employed by the company when economic conditions permit the project to proceed.

TECHNICAL QUALIFICATIONS: TIMING

Intervenors have raised a serious question concerning whether economic conditions will permit Applicant to proceed with its in situ leach mining project for the extraction of uranium. They argued that, in light of this uncertainty, Licensee could not demonstrate that qualified personnel will conduct this project

when the time becomes ripe. This argument was found to be invalid. The Presiding Officer ruled that the technical qualifications presented for approval demonstrated the Applicant's capacity to hire technically qualified staff.

FINANCIAL QUALIFICATIONS FOR A LEACH MINING PROJECT

Section 40.32 of 10 C.F.R. requires adequate equipment and procedures to protect the public but it does not require any findings concerning the financial qualification of an applicant for a license.

PARTIAL INITIAL DECISION
(Technical Qualification Issues)

This Partial Initial Decision is one of several decisions covering challenges to proposed in situ leach (ISL) uranium mining operations for which License SUA-1508 has been issued to Hydro Resources, Inc. (HRI). This Decision addresses Eastern Navajo Diné Against Uranium Mining (ENDAUM) and Southwest Research and Information Center (SRIC) (collectively, ''Intervenors") joint written presentations on technical and financial qualification issues,[1] pursuant to 10 C.F.R. § 2.1233. It also considers responses to my questions of March 3. The responses were filed on March 15 (HRI Question Response and Staff Question Response) and March 29, 1999 (Intervenors' Question Response).

This Partial Initial Decision does not consider issues related to financial assurance for decommissioning. *See* LBP-99-13, 49 NRC 233 (1999).

I. HRI'S TECHNICAL QUALIFICATIONS

A. Intervenors' Argument

SRIC and ENDAUM are concerned with the conclusion in the Staff's December 4, 1997 Safety Evaluation Report (SER) that HRI meets technical qualifications requirements merely because HRI has proposed minimum acceptable qualifications for key staff positions. Intervenors argue that HRI cannot qualify merely by describing criteria for as yet unfilled positions. They also argue that HRI relies for its credentials on allegedly deficient work done for Uranium Resources, Inc. (URI), which is HRI's parent firm.

[1] Eastern Navajo Diné Against Uranium Mining and Southwest Research and Information Center's Brief, January 11, 1999 (Intervenors' Qualifications Brief); HRI Response, February 11, 1999; Staff Response, February 18, 1999.

Intervenors set forth extensive arguments concerning the need for the NRC to examine the qualifications of URI before deciding that HRI is qualified by training and experience to conduct this project. Intervenors' Qualifications Brief at 3-10. They then argue that the experience gained by URI is not applicable to the HRI project because the Crownpoint mining will be at greater depth (1840 to 2290 feet in Utah, compared to 760 feet to 1030 feet in Texas) and because the Crownpoint water is of better quality. *Id.* at 10-12. They also allege that URI encountered some problems in Texas that indicate that it is not qualified to do the work in Utah. *Id.* at 12-14.

B. Findings and Conclusions

I find that Mark Pelizza, who has 19 years of employment with URI (including three years as Vice President of Health, Safety and Environmental Affairs), has extensive relevant experience. HRI Question Response at 2-6 (thirteen projects). He has supervised all radiological and nonradiological health, safety, and environmental planning activities associated with HRI. *Id.* at 2.

I am not persuaded to disregard that experience by Intervenors' assertion that the Crownpoint Uranium Project will allegedly be conducted with deeper wells than HRI personnnel previously employed or on the ground that the Crownpoint water is cleaner. Furthermore, I find, after consulting with my special advisors, that Mr. Pelizza's affidavits demonstrate necessary analytical abilities and knowledge of the field. I also find that HRI is correct in stating that ''HRI already has uniquely qualified key personnel who form the core of the company's expertise." *Id.* at 7-9.

Intervenors' argument, which is presented in just three pages of its brief, is unpersuasive. For example, Intervenors refer to Table 3 of the Written Testimony of Dr. William P. Staub, Ph.D., filed as Exhibit 2 to Intervenors' Brief Concerning Ground Water Protection Issues. Intervenors' Brief at 12. Intervenors do not, however, explain why the occurrence of excursions in URI projects indicates that URI or the HRI personnel employed by URI were technically incompetent. Similarly, Intervenors allege that URI failed to restore seven of its eight well fields to the 0.020-mg/L proposed Environmental Protection Agency drirk:ing water standard and that it permitted a ''final restoration value for uranium at the Rosita mine . . . [that was] a threefold increase in average baseline." Intervenors' Brief at 13. It is, however, not at all clear that either the occurrence of excursions or a failure to restore water purity to baseline measurements is a demonstration of incompetence.

To successfully cast doubt on technical competence, there would need to be a reasonable basis to doubt the technical analyses or the implementation done by URI. As it is, I have before me evidence that certain excursions occurred and that baseline water quality was not restored. I have no basis for finding that

URI failed to plan appropriately for the risk of these excursions when it should have, that it treated the excursions incorrectly when they occurred, or that it failed to learn from its experience.

On the other hand, my special assistants and I have reviewed technical submissions from HRI's experts and I am satisfied that these experts show a high degree of technical sophistication and skill. I am satisfied that Mark Pelizza, in particular, has demonstrated the technical skills and abilities required to qualify for this license. Accordingly, I find that the concern that HRI is unqualified should not affect its license to conduct this project.

In making this finding, I am aware that it is uncertain when this project will commence or whether the people HRI relies on for its expertise will be available when the project commences. The bleakness of the economic future for the uranium mining industry, testified to by Dr. Michael Sheehan, Ph.D., and Mr. David Osterberg, Intervenors' Brief at Exhibits 1 and 4, is conceded by HRI, as follows (Brief at 13):

> HRI acknowledges that Uranium Resources, Inc. and its subsidiaries, including HRI, are experiencing financial difficulties associated with a depressed uranium market. However, as discussed in the attached Affidavit of Joe Card, Uranium Resources, Inc.'s Senior Vice President, Marketing (attached hereto as Exhibit F) the financial and other considerations that go into seeking a license properly are distinguished from the decision-making process surrounding the commencement of operation. HRI agrees with Intervenors that current market conditions do not warrant moving forward to commence active mining operations. As explained by Mr. Card, however, the license itself is a valuable asset which increases the net worth of the company, facilitates attracting needed development capital, and positions HRI to take advantage of market opportunities when they arise.

HRI's technical qualifications provide a positive indicator that HRI will have a group of technically qualified people when work on the project commences. It is not important that the key personnel are *currently* qualified, as there may yet be years before the rubber meets the road and the project starts. Logically, HRI must be qualified when the project commences. However, I find that HRI is technically qualified at this time. I accept this as adequate proof that it will be technically qualified when it decides to commence this project. *See* SUA-1508, January 5, 1998, §§ 9.3, 9.7 (radiation safety officer); *see* Consolidated Operations Plan (COP), Rev. 2, Hearing File 10.3, August 15, 1997, at 128-33.

II. MUST HRI BE FINANCIALLY QUALIFIED?

ENDAUM and SRIC would have me infer from 10 C.F.R. § 40.32 that HRI must be financially capable of conducting its project. However, none of the language relied on supports this interpretation of the regulations. Intervenors' Qualifications Brief at 15-23. The cited section requires that ''the proposed

equipment, facilities and procedures must be adequate to protect health and minimize danger to life and property." With the exception of the requirement that there be financial assurance for decommissioning, which has been addressed in an earlier opinion (LBP-99-13, 49 NRC 233 (1999)), there is no mention of a separate financial qualification. The regulations seems to require only that there be adequate ''equipment, facilities and procedures." The adequacy of those items is not part of the challenge that is contained in the ENDAUM and SRIC brief that is the subject of this PID.

Consequently, the concern about technical qualifications should not stand in the way of having HRI proceed with this project whenever it considers itself sufficiently financially capable to fulfill its licensing commitments. There is no need for the NRC to review the financial aspects of HRI's operation. If it meets the requirements of its license, then it may proceed. If it cannot fulfill those requirements, whether for financial reasons or for any other reasons, then it will be subject to enforcement actions, including shutdown by the NRC should the violations be sufficiently serious.

The financial capability argument is, therefore, *dismissed* because of insufficient basis in the regulations.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 11th day of May 1999, ORDERED that:

1. The relief requested by Eastern Navajo Diné Against Uranium Mining (ENDAUM) and the Southwest Research and Information Center (SRIC) in their joint ''Brief in Opposition to Hydro Resources, Inc.'s [HRI] Application for a Materials License with Respect to: Hydro Resources, Inc.'s Lack of Technical and Financial Qualifications, dated January 11, 1999, is *denied.*

2. There is no reason for further filings or for oral argument.

3. Pursuant to the Commission's order of May 3, 1999, no additional petitions for Commission review shall be filed in this proceeding until the Presiding Officer completes his consideration of all questions related to the ''Section 8" property (currently expected by June 15, 1999). Within 14 days after the Presiding Officer issues his final decision related to the ''Section 8" property, each party may file a single petition for review, not to exceed thirty pages, addressing all remaining challenges to decisions rendered by the Presiding

Officer. Responses to such petitions for review shall be filed within 14 days after the petition is filed, and shall not exceed thirty pages.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Thomas D. Murphy, Special Assistant

In the Matter of

Docket No. 40-8968-ML
(ASLBP No. 95-706-01-ML)
(Re: Leach Mining and Milling License)

HYDRO RESOURCES, INC.
(2929 Coors Road, Suite 101, Albuquerque, NM 87120)

May 13, 1999

AIRBORNE EMISSIONS

The Presiding Officer agreed with Intervenors that radiation from source materials on the Applicant's site ought not to be considered to be part of background radiation. However, after reviewing Intervenors' arguments concerning radiation doses to the public, the Presiding Officer determined that Applicant is in compliance with Part 20 limitations on radiation received by a member of the public from sources under its control.

PARTIAL INITIAL DECISION
(Radioactive Air Emissions)

This Partial Initial Decision (PID) covers Radioactive Air Emission issues raised by the Eastern Navajo Diné Against Uranium Mining (ENDAUM) and

the Southwest Research and Information Center (SRIC).[1] ENDAUM and SRIC (collectively Intervenors) request me (*see* Intervenors' Brief at 1, 2) to reject the license application of HRI on the grounds of these two principal alleged air emission deficiencies:

> First, HRI and the NRC Staff fail to provide reasonable assurance that radioactive emissions from the Crownpoint Project will be maintained within regulatory limits in 10 C.F.R. Part 20. In fact, existing non-background levels of radiation at Church Rock already exceed regulatory limits, thus precluding the addition of a new source that would further jeopardize public health and safety. Second, the Final Environmental Impact Statement purported to support the issuance of the license misrepresents, distorts, or fails to disclose key information about the significant impacts of airborne emissions from the Crownpoint site.

This PID deals with the assertion that Part 20 will be violated. Other partial initial decisions will address NEPA concerns, in general, and a concern about the adequacy of the Final Environmental Impact Statement with respect to the cumulative impacts of previously existing radiation sources attributable to the HRI Crownpoint Uranium Project.

DISCUSSION

In support of its first allegation, Intervenors argue that radon-222 and radium-226 are a part of uranium ore; therefore, radiation doses from those radioactive materials cannot be considered to constitute background radiation dose and cannot be excluded when evaluating compliance with 10 C.F.R. Part 20. Intervenors' Brief at 3-6. Intervenors claim that the Staff and HRI ignore the statement of purpose of Part 20 which clearly provides that the regulations are designed to protect members of the public from all sources of radiation other than background, including unlicenced sources. Intervenors' Brief at 7; *see also* 10 C.F.R. § 20.1001(b). Intervenors assert that HRI and the Staff in their Environmental Report and FEIS, exclude from their dose calculations contributions from existing anthropogenic sources of radon and gamma radiation at the Church Rock site by mischaracterizing them as ''natural background radiation." Intervenors' Brief at 8. Intervenors cite section 3.7 of the DEIS as evidence for elevated radiation levels near the Church Rock site. Intervenors theorize that based on combined elevated radon emissions and elevated gamma radiation readings at offsite locations resulting from prior mining activities, the

[1] ENDAUM and SRIC filed their brief (Intervenors' Brief), accompanied by Testimony of Bernd Franke (Franke Testimony), on January 11, 1999. Hydro Resources, Inc. response on February 11, 1999 (HRI Response) included an Affidavit of Alan C. Eggleston, Ph.D., dated February 10, 1999 (Eggleston Affidavit). The Staff of the Nuclear Regulatory Commission responded on February 18, 1999 (Staff Response) and attached an Affidavit of Christepher A. McKenney (Staff Exhibit 1).

dose to the nearest resident is already in excess of the limits set in Part 20. Intervenors' Brief at 9-14.

Finally, Intervenors challenge HRI's dose projections by citing their expert's contention that a time-weighted groundwater source term should have been used as the basis for the calculations instead of the arithmetically averaged groundwater source term used by the Staff and HRI in its use of the MILDOS code to calculate offsite doses. Intervenors' expert, Franke, postulates that a large part of the annual dose from radon-222 in a given year occurs from exposures over very few hours at situations where wind speed and atmospheric dispersion is low. Franke calculates in a ''worst case" situation that there is a 50% chance that the regulatory limits will be exceeded. Intervenors' Brief at 14-19. Franke Testimony Exh. 2 at 10-12.

HRI responds that Intervenors misinterpret Part 20. HRI argues that:

> demonstrating both common sense and a grasp of the obvious, the agency charged with promulgating regulations to control airborne radiological emissions from Atomic Energy Act regulated facilities has developed a regulation requiring licensee's operations to meet prescribed emissions limits calculated based solely on radiation sources within the licensee's control.

HRI Response at 7. HRI continues with its response, arguing that concentrations of radon in lixiviant[2] show a high frequency of low values and that past experience with use of the NRC MILDOS code shows that, after field verification, the MILDOS has proven to predict doses in a conservative fashion. *Id.* at 10. HRI argues that since the production water containing radon is continuously circulating in the well fields, it is not valid, as the Intervenors claim, to assume a concentration distribution of radon that varies greatly over time. *Id.* at 10-11. Finally, HRI argues that NRC requires (*see* License Conditions 9.8 and 10.30) and HRI proposes a complete field verification of air emission doses as part of its licensed operations. HRI Response at 11.

The NRC Staff agrees with HRI that the Intervenors have misread Part 20 and disagrees with the findings in Franke's testimony. The Staff argues that 10 C.F.R. § 20.1302(b)(1) actually refers to the total effective dose equivalent to the individual likely to receive the highest dose from the licensed operation. Staff then states that the dose can and should be calculated or measured to a real individual, not a hypothetical individual. The Staff's expert, McKenney, demonstrates that, with the most conservative assumptions, HRI could not release sufficient radon to exceed the regulatory requirements during plant operations. McKenney also postulates an alternative worst-case scenario for a

[2] Groundwater that is enriched with dissolved oxygen and bicarbonate ions and is injected into the ground for the purpose of recovering uranium is called ''lixiviant." When the lixiviant is passed through the uranium, it becomes ''pregnant" and contains uranium oxide, radon, and radium. The pregnant lixiviant is then processed.

hypothetical individual and calculates a dose less than regulatory criteria. Staff Response at 4-5 *citing* Franke Testimony Exh. 2 at 10-11 and Staff Exh. ¶¶9 and 10.

In order to resolve this issue properly, on March 18, 1999, the Presiding Officer issued LBP-99-15, 49 NRC 261, asking the parties a series of questions. The answers and responses[3] to those questions clarify the record and confirm for the purposes of this case that NRC regulations exempt from the definition of ''background radiation," radiation coming from source material or byproduct material. There is no byproduct or special nuclear material (*see* Pelizza Affidavit at E; McKenney April 7, 1999 Affidavit at 2) on the Church Rock site. A small quantity of source material exists on Section 8. McKenney April 7, 1999 Affidavit at 3.

ANALYSIS

Intervenors' allegations and supporting opinions raise the issue of whether HRI and NRC Staff correctly addressed potential radiation exposure resulting from operations at Church Rock Section 8. Intervenors, relying on the testimony of Bernd Franke, complain that dose calculations in the Environmental Report (''ER") and FEIS, excluded contributions from sources of radon and gamma radiation at Church Rock Section 8 by characterizing them as natural background. Intervenors' Brief at 8. Similarly, in their response to questions, Intervenors rely on their definition of background for the conclusions presented. Intervenor LBP Response at 6-12. The validity of Franke's testimony turns on the definition of ''background" as his calculations and conclusions are based on the fact that ''[he] believe[s] that doses from other source and byproduct materials not regulated by the Commission . . . must also be accounted for in the compliance assessment." Franke Declaration at 6. Franke states (Franke Testimony at 6, 7) that radioactivity released from source and byproduct materials from prior uranium mining and milling activities in the Church Rock area contribute in excess of 0.2 pCi/l to the calculation of the TEDE.

[3] ENDAUM and SRIC filed a Response to LBP-99-15, Questions Concerning Radioactive Air Emissions, dated April 7, 1999 (Intervenor LBP Response) accompanied by a Declaration of Bernd Franke dated April 6, 1999 (Franke Declaration). ENDAUM and SRIC filed a response to HRI's and NRC Staff's Answers to LBP-99-15, dated April 21, 1999 (Intervenors' Response), accompanied by a Response Declaration of Bernd Franke dated April 21, 1999 (Franke Response Declaration) and a Response Affidavit of Dr. Richard J. Abitz, dated April 16, 1999 (Abitz Reponse Affidavit). Hydro Resources, Inc., filed a Response to LBP-99-15 dated April 7, 1999 (HRI LBP Response) accompanied by an Affidavit of Douglas B. Chamber, Ph.D., Pertaining to Radiation, dated April 7, 1999 (Chamber's Affidavit), and an Affidavit of Mark S. Pelizza Pertaining to Radiation dated April 5, 1999 (Pelizza Affidavit), Hydro Resources, Inc.'s Reply to Intervenors' Response to LBP-99-15, dated April 21, 1999 (HRI Reply). The Staff replied to my questions by letter dated April 7, 1999 (Staff Letter) accompanied by an Affidavit of Christepher A. McKenney dated April 7, 1999 (McKenney April 7, 1999 Affidavit). The NRC Staff's Response to Intervenors' Air Emissions Answers dated April 21, 1999 (Staff Reply) was accompanied by an Affidavit of Christepher A. McKenney dated April 21, 1999 (McKenney April 21, 1999 Affidavit).

Intervenors' concern, succinctly, is whether HRI's operations at Church Rock Section 8 will cause the total effective dose equivalent (''TEDE") to the individual likely to receive the highest dose from the licensed operation to exceed the annual dose limit. Since background radiation is excluded from the TEDE, it is important to understand the *legal* definition of background when calculating the TEDE for purposes of determining whether a project will be in compliance with NRC regulations.

The dose limits governing our inquiry for individual members of the public are set by the NRC in 10 C.F.R. § 20.1301(a)(1):

> (a) Each licensee shall conduct operations so that—
>
> (1) The total effective dose equivalent to individual members of the public from the licensed operation does not exceed 0.1 rem (1 millisievert) in a year, *exclusive of the dose contributions from background radiation,* from any medical administration the individual has received, from exposure to individuals administered radioactive material and released in accordance with § 35.75, from voluntary participation in medical research programs, and from the licensee's disposal of radioactive material into sanitary sewerage in accordance with § 20.2003; and . . . .

(Emphasis added.) In 10 C.F.R. § 20.1003, the NRC defines background radiation:

> *Background radiation* means radiation from cosmic sources; naturally occurring radioactive material, including radon (except as a decay product of source or special nuclear material); and global fallout as it exists in the environment from the testing of nuclear explosive devices or from past nuclear accidents such as Chernobyl that contribute to background radiation *and are not under the control of the licensee.* ''*Background radiation*" does not include radiation from source, byproduct, or special nuclear materials regulated by the Commission.[4]

(Emphasis added.)

As pointed out in LBP-99-15, this definition places a limit on the ''total effective dose equivalent" and ''then defines a class of contributions to dose that

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[4] The terms ''source material" and ''byproduct material," which are relevant for purposes of regulating *in situ* leach mining and milling, are defined in 10 C.F.R. § 20.1003 as follows:

> *Source material* means—
>
> (1) Uranium or thorium, or any combination of uranium and thorium in any physical or chemical form; or
>
> (2) Ores that contain, by weight, one-twentieth of 1 percent (0.05 percent), or more, of uranium, thorium, or any combination of uranium and thorium. Source material does not include special nuclear material.
>
> *Byproduct material* means—
>
> (1) Any radioactive material (except special nuclear material) yielded in, or made radioactive by, exposure to the radiation incident to the process of producing or utilizing special nuclear material; and
>
> (2) The tailings or wastes produced by the extraction or concentration of uranium or thorium from ore processed primarily for its source material content, including discrete surface wastes resulting from uranium solution extraction processes. Underground ore bodies depleted by these solution extraction operations do not constitute ''byproduct material" within this definition.

are excluded," e.g., background radiation. 49 NRC at 265. Based on this fact, the Presiding Officer concluded that ''if the source of a dose is not *excluded* then it is included in the total effective dose equivalent from licensed operations, for the purpose of complying with 10 C.F.R. §§ 20.1301 and 20.1302." *Id.*

As Intervenors assert, ''background" radiation does *not* include radiation from source or byproduct material. Although HRI would apply the phrase ''regulated by the Commission" to each of the antecedent nouns, that is not the way English grammar treats subordinate clauses. The normal meaning of this sentence is that ''regulated by the Commission" applies only to the last noun in the series, ''special nuclear materials." To interpret it otherwise would be to find that the regulation contains a drafting error and should have said: ''Background radiation" does not include radiation from *materials regulated by the Commission, including* source, byproduct, or special nuclear materials." I am not persuaded to interpret this language in such a stilted way.

Nevertheless, I disagree with Intervenors concerning the calculation of offsite doses. I have reviewed Franke's worst-case scenario from which he calculates a 50% probability that NRC regulations may be exceeded. Franke Testimony at 10-11. Franke cannot properly utilize his worst-case scenario to calculate a limit that is based on annual average exposures. *See* 10 C.F.R. § 20.1302(b)(2)(i) and Table 2 of Part 20 Appendix B. The probability that an individual will be present during the worst-case scenario is less than 100% and it is therefore inappropriate to act as if the individual would definitely be there during a ''worst case."

In addition, Franke does not show how the existing elevated levels from on site have an impermissible impact on an individual off site. Notwithstanding the corrections made by Franke to the calculation (*see* Franke Declaration at 14-16; McKenney April 21, 1999 Affidavit at 2-5), I understand McKenney's worst-case dose calculation and consider it reasonable. It indicates that doses from radon released from operations at the Church Rock site will not exceed dose limits to a hypothetical individual 100 meters off site. I find that this conclusion is correct.

The issue of radiation from source materials is also addressed by the Staff, which concludes that some of the surface radiation on Church Rock Section 8 may be from source material. McKenney April 7 Affidavit ¶3, at 2-6. However, by making conservative assumptions (calculating the highest reasonable dose based on the information available), Mr. McKenney concludes that:

> the total radon production [attributable to source material] . . . over one year would be 0.2 Ci. If I further assume that all of the radon escapes from this ground area into the atmosphere, the resulting annual TEDE exposure to the nearest resident would be a small fraction of one millirem.

Id. at 3. Accordingly, there is no substantial risk attributable to radium from source materials on Section 8.

Though there may be a risk associated with radium from source material on HRI's Church Rock Section 17, that question may be held in abeyance and not addressed in this portion of the proceedings.[5] In bypassing the issue of proper calculation of background radiation from Section 17, it has not yet been determined whether radiation released from the underground mine on Section 17 may be excluded from background. Staff and Licensee have argued, based on the Statement of Considerations (SOC) published with 10 C.F.R. § 20.1301, that material can be ''background" only if it is ''under the control of the licensee." *See* 56 Fed. Reg. 23,360, 23,374 (May 21, 1991). However, there is an important defect in this argument. The cited language from the SOC was used to support the proposition that ''dose should not be all-inclusive and should not include fallout from nuclear weapons tests, transportation of radioactive material, or other sources of radiation not under the control of the licensee." The comment does not focus on whether dose can come from underground sources on the licensee's land. Arguably, those sources are under the licensee's control because remedial measures may be taken to reduce radiation from those sources. In addition, licensee obtained its title from a prior land owner who is in the same chain of title and whose acts may reasonably be said to pass with the title, thus preventing a successor to the title from disassociating himself from actions of a prior owner.

CONCLUSION

On the basis of the analysis above, which rests on the interpretation of the relevant regulations (10 C.F.R. §§ 20.1301(a)(1) and 20.1003), I conclude that the HRI has demonstrated by a preponderance of the evidence that the airborne doses from the proposed operation of the Church Rock site will not exceed regulatory requirements.

ORDER

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 13th day of May 1999, ORDERED that:

1. The relief requested by Eastern Navajo Diné Against Uranium Mining (ENDAUM) and the Southwest Research and Information Center (SRIC) in their

[5] *See* Intervenors' Response to HRI's and NRC Staff's Answers to LBP-99-15, April 21, 1999, at 3. Under the Presiding Officer's interpretation, radon released from source material in Section 17 is excluded from background radiation.

Brief (Intervenors' Brief), accompanied by Testimony of Bernd Franke (Franke Testimony), on January 11, 1999, is *denied.*

2. There is no reason for further filings or for oral argument.

3. Pursuant to the Commission's order of May 3, 1999, no additional petitions for Commission review shall be filed in this proceeding until the Presiding Officer completes his consideration of all questions related to the ''Section 8" property (currently expected by June 15, 1999). Within 14 days after the Presiding Officer issues his final decision related to the ''Section 8" property, each party may file a single petition for review, not to exceed 30 pages, addressing all remaining challenges to decisions rendered by the Presiding Officer. Responses to such petitions for review shall be filed within 14 days after the petition is filed, and shall not exceed 30 pages.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Richard F. Cole, Special Assistant

In the Matter of **Docket No. 40-8681-MLA-6**
(ASLBP No. 99-766-06-MLA)
(Re: Materials License Amendment)

INTERNATIONAL URANIUM (USA) CORPORATION
(Receipt of Material from St. Louis, Missouri) **May 21, 1999**

Envirocare's Request for a Hearing was dismissed because Envirocare based its claim for standing on economic-competitor injuries that are not associated with any environmental harm associated with the proposed licensing action and that are therefore not cognizable under the National Environmental Protection Act or the Atomic Energy Act. *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1 (1998), and *International Uranium (USA) Corp.* (Receipt of Material from Tonawanda, New York), CLI-98-23, 48 NRC 259 (1998).

MEMORANDUM AND ORDER
(Dismissal of Envirocare)

On April 26, 1999, Petitioner Envirocare of Utah, Inc. (''Envirocare") filed a Request for Hearing challenging the Nuclear Regulatory Commission's (''NRC") amendment of International Uranium (USA) Corporation's (''IUSA") Source

Material License SUA-1358 to allow for the receipt and ''processing" of uranium-bearing material from a site being managed under the Formerly Utilized Sites Remedial Action Program (''FUSRAP") near St. Louis, Missouri.[1] In its Request for Hearing at 1-2, Envirocare states that it disagrees with prior Commission decisions but it acknowledges that *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1 (1998), and *International Uranium (USA) Corp.* (Receipt of Material from Tonawanda, New York), CLI-98-23, 48 NRC 259 (1998), may well affect its standing in this case. Envirocare states, on page two of its Request, that:

> While its appeals are pending, Envirocare hereby files this request, in good faith, to preserve its right to participate as a party in a hearing on IUSA's latest license amendment application.

Because the Request bases Envirocare's standing on economic-competitor injuries that are not associated with any environmental harm associated with the proposed licensing action and that are therefore not cognizable under the National Environmental Protection Act or the Atomic Energy Act, I am convinced that this case is on all fours with the cases Envirocare has cited and which it contests. Accordingly, the Request for a Hearing is *dismissed* for lack of standing.

IT IS SO ORDERED.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

[1] On May 4, 1999, IUSA filed its opposition to the request for hearing, citing Envirocare's persistence in making its sixth attempt to secure standing in an NRC proceeding based on alleged economic or ''competitive" injury.

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)

May 26, 1999

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 denies the request of Intervenor State of Utah to require Applicant Private Fuel Storage, L.L.C. (PFS), to submit an exemption request under 10 C.F.R. § 2.758(b) or, in the alternative, permit the State to amend its geotechnical contention to allow it to contest the PFS exemption request in this proceeding.

RULES OF PRACTICE: WAIVER OF RULES OR REGULATIONS

Section 2.758(b) of 10 C.F.R. and the waiver/exemption provisions found in the various substantive provisions of the Commission rules, *see, e.g.,* 10 C.F.R. §§ 30.11 (Part 30 byproduct material), 40.14 (Part 40 source material), 50.12 (Part 50 production and utilization facilities), 70.14 (Part 70 special nuclear material); 72.7 (Part 72 ISFSIs), offer alternative methods for seeking waivers of or exemptions from Commission rules. *See Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-86-24, 24 NRC 769, 774 n.5 (1986);

see also Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), LBP-85-33, 22 NRC 442, 445-46 (1985), *aff'd,* ALAB-841, 24 NRC 64 (1986). Prior adjudicatory rulings suggest that section 2.758 need not be invoked unless (1) the exemption request is directly related to a pending contention, *see Shearon Harris,* CLI-86-24, 24 NRC at 774 n.5; or (2) the interpretation or application of a regulation to specific facts is questioned, *Perry,* LBP-85-33, 22 NRC at 445.

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (GOOD CAUSE FOR DELAY; FACTUAL CONCRETENESS AND PROCEDURAL RIPENESS)

The question of when a new or amended contention must be filed in order to meet the late-filing standards of 10 C.F.R. § 2.714(a) — and specifically the critical criterion concerning ''good cause" for late filing — calls for a judgment about when the matter is sufficiently factually concrete and procedurally ripe to permit the filing of a contention.

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (GOOD CAUSE FOR DELAY; FACTUAL CONCRETENESS AND PROCEDURAL RIPENESS)

Relative to the good cause finding, when dealing with information supplied to the agency by a license applicant, the concept of factual concreteness requires an inquiry into the question of when the moving party had access to information sufficient to permit it to frame an issue statement with reasonable specificity and basis. And for applicant-supplied information, the concept of procedural ripeness involves consideration of whether, within the context of the agency administrative process that is the subject of an adjudication (e.g., license application review process), the applicant information to which the moving party had access to frame the contention is being put before the agency in a context that is (a) reasonably likely to have a material impact on the administrative process (e.g., will influence Staff consideration of the pending license application); and (b) is subject to consideration in the related adjudicatory proceeding.

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (GOOD CAUSE FOR DELAY; PROCEDURAL RIPENESS)

On the question of the procedural ripeness of a rule waiver request, by its nature, an exemption request is atypical. The rules promulgated by the

Commission reflect a considered judgment about the requirements necessary to protect the public health and safety and the environment. In contrast to a license application that generally seeks to demonstrate the requester's compliance with agency requirements, an exemption request attempts to show why those regulatory requirements should not be applied to the requester. The latter thus is more problematic in terms of its likely impact on the administrative process. Indeed, the uncertain nature of an exemption request (i.e., that the request may not be granted) counsels that consideration of an exemption-related contention should await Staff action on the exemption. Accordingly, the timeliness of a contention based on an applicant's exemption request is more properly judged from the time of Staff action on the exemption rather than when the exemption request is filed.

RULES OF PRACTICE: NONTIMELY SUBMISSION OF CONTENTIONS (GOOD CAUSE FOR DELAY; PROCEDURAL RIPENESS)

The matter of procedural ripeness of a rule waiver request is further influenced by the question of how that request is to be considered in the adjudicatory process. The Commission has made it clear that, in the absence of a contrary Commission directive, exemption requests falling outside the ambit of section 2.758 are not subject to challenge in an adjudicatory proceeding. *See United States Department of Energy* (Clinch River Breeder Reactor Plant), CLI-81-35, 14 NRC 1100, 1103-04 & n.2 (1981). Consequently, to countenance an adjudicatory challenge to the PFS exemption petition, a presiding officer would have to invoke his or her certified question or referred ruling authority under 10 C.F.R. §§ 2.718(i), 2.730(f) to determine whether the Commission wants the presiding officer to consider the contention. Obviously, in invoking such authority, the presiding officer should present the Commission with questions that are as concrete as possible. Any concerns about presiding officer consideration of the merits of a rule waiver or exemption will be most determinant if, and when, the Staff acts favorably on the request.

MEMORANDUM AND ORDER
(Denying Motion to Require Rule Waiver Request or to Amend Contention Utah L)

The genesis of the motion now pending with the Licensing Board is an April 2, 1999 request from Applicant Private Fuel Storage, L.L.C. (PFS), to the NRC Staff for an exemption from some of the seismic criteria of 10 C.F.R. Part 72

relative to the proposed PFS Skull Valley, Utah independent spent fuel storage installation (ISFSI). Specifically, PFS asks that it be given an exemption from the requirements of section 72.102 such that it can substitute a probabilistic approach to calculating the PFS design-basis earthquake for the deterministic methodology mandated under the existing rule. In its April 30, 1999 motion, which both PFS and the Staff oppose, Intervenor State of Utah asks that we either require PFS to frame its exemption application as a rule waiver petition under 10 C.F.R. § 2.758(b), which would be subject to Board consideration as part of this proceeding, or that we permit an amendment of contention Utah L, which deals with the PFS facility's seismic design, so as to allow the State to contest the PFS exemption request in this proceeding.

For the reasons set forth below, we deny the State's motion.

I. BACKGROUND

Under the current provisions of 10 C.F.R. Part 72 relating to ISFSI seismic analysis, a facility like that proposed by PFS must meet the same standards applicable to a nuclear power plant under 10 C.F.R. Part 100, Appendix A. *See* 10 C.F.R. § 72.102(f)(1). The Part 100 standard for calculating a safe shutdown or design-basis earthquake uses a deterministic approach.[1] In an April 2, 1999 request directed to the Staff, invoking 10 C.F.R. § 72.7, PFS asked for an exemption from this Part 72 standard to permit the use of a probabilistic seismic hazard analysis along with a consideration of the risk involved to establish the design-basis earthquake at the PFS facility. According to PFS, such a change would have some significance because its own probabilistic analysis indicates that the relative risk at the PFS ISFSI warrants a design-basis earthquake with lower peak ground accelerations than that calculated using the Part 100, Appendix A deterministic methodology. *See* [State] Motion Requiring Applicant to Apply for Rule Waiver under 10 C.F.R. § 2.758(b) or in the Alternative Amendment to Utah Contention L (Apr. 30, 1999) Exh. A, at 1-2 [hereinafter State Motion].

The State apparently received this PFS exemption request on April 7, 1999, and filed the motion now pending before us three weeks later. Citing the Commission's decision in *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), CLI-80-16, 11 NRC 674 (1980), the State declared that the Board should require PFS to make its exemption request under the provisions of

[1] Appendix A to 10 C.F.R. Part 100 defines a safe shutdown or design-basis earthquake as ''that earthquake which is based upon an evaluation of the maximum earthquake potential considering the regional and local geology and seismology and specific characteristics of local subsurface material. It is that earthquake which produces the maximum vibratory ground motion for which certain [subsequently defined safety] structures, systems, and components are designed to remain functional." 10 C.F.R. Part 100, App. A, § III(c).

10 C.F.R. § 2.758, which govern consideration of agency rules and regulations in an adjudicatory proceeding such as this one. Alternatively, the State has asserted it should be given leave to amend contention Utah L concerning the geotechnical aspects of the PFS application to permit it to contest what the State asserts will be a diminution of the standard for determining the PFS facility's seismic design if the Staff acts favorably on the PFS exemption request. *See* State Motion at 3-9.

In their May 12, 1999 responses to the State's motion, PFS and the Staff have opposed both prongs of its request. Each asserted that while section 2.758 is an alternative method for seeking a waiver of or exemption from a Commission regulation, it is not applicable in this instance. Both also declared that, pending Staff action on the exemption request, permitting an amendment of Utah L is premature and, in any event, would require Commission endorsement. *See* Applicant's Response to State's Motion Requiring Applicant to Apply for Full Waiver under 10 C.F.R. § 2.758(b) or in the Alternative Amendment to Utah Contention L (May 12, 1999) at 2-6 [hereinafter PFS Response]; NRC Staff's Response to ''[State] Motion Requiring Applicant to Apply for Rule Waiver under 10 C.F.R. § 2.758(b) or in the Alternative Amendment to Utah Contention L" (May 12, 1999) at 2-10 [hereinafter Staff Response].

II. ANALYSIS

A. Applicability of 10 C.F.R. § 2.758(b)

The regulation the State seeks to invoke relative to the pending PFS exemption request is paragraph (b) of section 2.758 of 10 C.F.R., which provides in pertinent part:

> A party to an adjudicatory proceeding involving initial or renewal licensing subject to this subpart may petition that the application of a specified Commission rule or regulation or any provision thereof . . . be waived or an exception made for the particular proceeding. The sole ground for petition for waiver or exception shall be that special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation (or provision thereof) would not serve the purposes for which the rule or regulation was adopted.

Assuming a party is able to make a prima facie showing regarding the existence of the requisite ''special circumstances," the provision further provides that the presiding officer shall certify the matter directly to the Commission for a determination whether the application of the rule or provision should be waived or an exception made. *See* 10 C.F.R. § 2.758(d).

Commission case law teaches that section 2.758(b) and the waiver/exemption provisions found in the various substantive provisions of the Commission rules,[2] offer alternative methods for seeking waivers of or exemptions from Commission rules. *See Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), CLI-86-24, 24 NRC 769, 774 n.5 (1986); *see also Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), LBP-85-33, 22 NRC 442, 445-46 (1985), *aff'd,* ALAB-841, 24 NRC 64 (1986). Moreover, prior adjudicatory rulings suggest that section 2.758 need not be invoked unless (1) the exemption request is directly related to a pending contention, *see Shearon Harris,* CLI-86-24, 24 NRC at 774 n.5; or (2) the interpretation or application of a regulation to specific facts is questioned, *Perry,* LBP-85-33, 22 NRC at 445.

In this instance we are unable to find that section 2.758 is a preferable method for proceeding with the PFS exemption request. There is a geotechnical issue in this proceeding — contention Utah L. A review of that contention leads us to conclude, in agreement with PFS and the Staff, that the requested exemption has no direct bearing on that issue statement. The seismic matters that are under scrutiny in contention Utah L, which include the adequacy of PFS's efforts to identify, characterize, and/or quantify surface faulting, ground motion, subsurface soils, and soil stability and foundation loading, are not matters that are directly impacted by whether the design-basis earthquake for the PFS facility ultimately is calculated using the Part 100 deterministic standard or the probabilistic methodology championed by PFS in its exemption request. Similarly, PFS's request to use a probabilistic methodology in lieu of the deterministic approach of Part 100 does not raise any questions about regulatory interpretation or application relative to the facts at issue in this proceeding as expressed in contention Utah L.[3] Accordingly, we see no basis for granting the State's request to compel PFS to utilize section 2.758 as its exemption avenue.

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[2] *See, e.g.,* 10 C.F.R. §§ 30.11 (Part 30 byproduct material), 40.14 (Part 40 source material), 50.12 (Part 50 production and utilization facilities), 70.14 (Part 70 special nuclear material); 72.7 (Part 72 ISFSIs).

[3] Nor do we find that the *Three Mile Island* case relied upon by the State mandates a different result. In that instance, the Commission found section 2.758 was not the appropriate vehicle for considering whether an exemption was needed relative to a regulatory provision establishing a design basis for post-accident combustion gas control systems. Although the Commission acknowledged that hydrogen gas generation during the then-recent Three Mile Island Unit 2 accident was well in excess of the design basis amount, the Commission concluded a section 2.758 waiver was not the appropriate response to address the issue because that condition did not create any special circumstances relative to the particular case before the Board. Rather, the Commission held the issue was a generic matter relating to all light water power reactors that should be addressed in a rulemaking proceeding that it intended to initiate. *See* CLI-80-16, 11 NRC at 675. How the Commission's holding in that case provides any support for the State's position here is not apparent.

B. Amending Contention Utah L

Similarly, the State's alternative request for relief — the amendment of contention Utah L — also provides no basis for Board action at this time. Putting aside the fact there is a considerable question whether the State has really framed what could be considered a ''contention" relative to the PFS request, in these circumstances the State's request for adjudicatory consideration of its concerns is premature.

The question of when a new or amended contention must be filed in order to meet the late-filing standards of 10 C.F.R. § 2.714(a) — and specifically the critical criterion concerning ''good cause" for late filing — is one we have already explored in this proceeding in other contexts. *See, e.g.,* LBP-99-7, 49 NRC 124, 128 (1999); *see also* LBP-99-3, 49 NRC 40, 47-48 (1999) (late-intervention petition), *aff'd,* CLI-99-10, 49 NRC 318 (1999). In large part, this calls for a judgment about when the matter is sufficiently factually concrete and procedurally ripe to permit the filing of a contention.

When dealing with information supplied to the agency by a license applicant, such as now is at issue in connection with the instant PFS exemption request, the concept of factual concreteness requires an inquiry into the question of when the moving party had access to information sufficient to permit it to frame an issue statement with reasonable specificity and basis. And for applicant-supplied information, the concept of procedural ripeness involves consideration of whether, within the context of the agency administrative process that is the subject of an adjudication (e.g., license application process), the applicant information to which the moving party had access to frame the contention is being put before the agency in a context that is (a) reasonably likely to have a material impact on the administrative process (e.g., will influence Staff consideration of the pending license application); and (b) is subject to consideration in the related adjudicatory proceeding.

In this instance, the exemption material provided by PFS to the Staff and the State seems to be sufficiently well-defined to provide the information needed to formulate a contention. Considerably less certain, however, is the question of its ripeness. By its nature, an exemption request is atypical.[4] The rules promulgated by the Commission reflect a considered judgment about the requirements necessary to protect the public health and safety and the environment. In contrast to a license application that generally seeks to demonstrate the requester's compliance with agency requirements, an exemption

[4] As the Staff notes, *see* Staff Response at 3, in contrast to the exemption provision for 10 C.F.R. Part 50 governing power reactors, the exemption provision applicable to ISFSIs does not require a showing of ''special circumstances" in order to obtain a rule waiver. *Compare* 10 C.F.R. § 50.12(a)(2) *with id.* § 72.7. For the reasons we outline above, however, a request to waive the agency's duly adopted rules is never a matter that can be treated as wholly routine.

request attempts to show why those regulatory requirements should not be applied to the requester. The latter thus is more problematic in terms of its likely impact on the administrative process. Indeed, the uncertain nature of an exemption request (i.e., that the request may not be granted) counsels that consideration of an exemption-related contention should await Staff action on the exemption. Accordingly, the timeliness of a contention based on an applicant's exemption request is more properly judged from the time of Staff action on the exemption rather than when the exemption request is filed.

In addition, the matter of ripeness is further influenced by the question of how that request is to be considered in the adjudicatory process. The Commission has made it clear that, in the absence of a contrary Commission directive, exemption requests falling outside the ambit of section 2.758 are not subject to challenge in an adjudicatory proceeding. *See United States Department of Energy* (Clinch River Breeder Reactor Plant), CLI-81-35, 14 NRC 1100, 1103-04 & n.2 (1981). Consequently, to countenance an adjudicatory challenge to the PFS exemption petition,[5] the Board would have to invoke its certified question or referred ruling authority under 10 C.F.R. §§ 2.718(i), 2.730(f) to determine whether the Commission wants the Board to consider the contention. Obviously, in invoking such authority, we should present the Commission with questions that are as concrete as possible. And, in the case of the PFS exemption request, any concerns about Board consideration of the merits of the exemption will be most determinant if, and when, the Staff acts favorably on the request.[6]

Accordingly, as the State itself has suggested may be true, *see* State Motion at 2-3, its request to amend contention Utah L is premature.[7] We thus deny it as well, albeit without prejudice to a subsequent filing if the Staff acts favorably on the PFS request.

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[5] As far as we are aware, there is nothing that precludes the State presently from making the Staff aware of its views on the substance of the April 1999 PFS exemption request as part of the Staff's review of the request.

[6] As the Staff also notes, *see* Staff Response at 4-5 & n.4, there have been instances in the past when the Commission has sanctioned Licensing Board consideration of exemption requests, most notably *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-84-8, 19 NRC 1154 (1984). There, the Commission directed that an applicant's planned but yet to-be-filed exemption request should be treated as an application modification that was subject to Board consideration in the ongoing adjudication regarding the application. *See id.* at 1155.

Here, however, we cannot find that *Shoreham* supports the State's position. The PFS exemption application has already been filed with the Staff. Under the case law cited in the text above and the agency's management directives, *see* United States Nuclear Regulatory Commission, Management Directives, Directive 9.17 (Sept. 1991) (authority delegation to Executive Director for Operations (EDO)); *id.* Directive 9.26 (NRC Manual Chapter 0124, § 0124-0311 (Oct. 1989) (authority delegation from EDO to Director, Office of Nuclear Materials Safety and Safeguards)), it is the Staff that has the delegated authority to consider the request wholly outside this adjudication.

[7] Our determination to forego action at this time on the State's concerns regarding the PFS exemption request is buttressed by the fact, as the Staff notes, *see* Staff Response at 8-10 & n.7, that there already is an outstanding Commission-approved Staff rulemaking plan to modify the seismic design criteria for ISFSIs to encompass a probabilistic (i.e., risk-informed) approach. *See* LBP-98-7, 47 NRC 142, 179 (contention that seeks to litigate matter clearly about to become subject of rulemaking is inadmissible), *aff'd on other grounds,* CLI-98-13, 48 NRC 26 (1998). That rulemaking activity is expected to result in the issuance of a proposed rule in fiscal year 2000.

III. CONCLUSION

The State has asked that a 10 C.F.R. § 72.2 request by PFS for an exemption from the seismic design criteria of 10 C.F.R. Part 100, App. A, be resubmitted as an exemption request under 10 C.F.R. § 2.758(b) so that the exemption can be litigated in this adjudicatory proceeding. We deny that request, finding section 2.758(b) inapplicable because the PFS request has no direct bearing on the only pending geotechnical issue, contention Utah L. Additionally, we deny the State's alternative request to consider its motion as a request to amend its contention Utah L to frame a challenge to the substance of the PFS exemption request. We find that the question of admitting or amending contentions relative to the PFS exemption request must await favorable Staff action on that request.

For the foregoing reasons, it is, this twenty-sixth day of May 1999, ORDERED that the State's April 30, 1999 motion to require Applicant PFS to apply for a 10 C.F.R. § 2.758(b) rule waiver or, in the alternative, to amend contention Utah L is *denied.*

THE ATOMIC SAFETY AND
LICENSING BOARD[8]

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Dr. Jerry R. Kline
ADMINISTRATIVE JUDGE

Dr. Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland
May 26, 1999

[8] Copies 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 of Goshute Indians, 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

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta J. Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 50-482-LT**

KANSAS GAS AND ELECTRIC COMPANY, et al.
(Wolf Creek Generating Station, Unit 1) **June 18, 1999**

On October 27, 1998, Kansas Gas and Electric Company (KGE) and Kansas City Power and Light Company (KCPL) (Applicants) filed a license transfer application seeking Commission approval of a transfer of their possession-only interests in the operating license for the Wolf Creek Generating Station, Unit 1, to a new company, Westar Energy, Inc. Currently, Wolf Creek is jointly owned and operated by the Applicants, each of which owns an undivided 47% interest, and Kansas Electric Power Cooperative, Inc. (KEPCo), which owns the remaining 6% interest. The Applicants request that the Commission amend the operating license for Wolf Creek by deleting KGE and KCPL as licensees and adding Westar Energy in their place. Pursuant to the Commission's procedures for license transfer applications, KEPCo opposed the transfer on antitrust grounds, claiming, that the transfer would have ''serious adverse and anticompetitive effects,'' would result in ''significant changes'' in the competitive market, and, therefore, warrants an antitrust review under section 105c of the Atomic Energy Act.

The Commission concludes that the Atomic Energy Act does not require or even authorize antitrust reviews of post-operating license transfer applications, and that such reviews are inadvisable from a policy perspective. The Com-

mission therefore dismisses KEPCo's petition to intervene on antitrust grounds. The Commission permits Applicants and KEPCo to submit letters to the Commission suggesting the appropriate disposition of the existing antitrust license conditions due to the planned changes in Wolf Creek ownership and operation.

ATOMIC ENERGY ACT: ANTITRUST AUTHORITY

After consideration of the arguments presented in the briefs, and based on a thorough *de novo* review of the scope of the Commission's antitrust authority, the Commission concludes that the structure, language, and history of the Atomic Energy Act cut against our prior practice of conducting antitrust reviews of post-operating license transfers.

ATOMIC ENERGY ACT: ANTITRUST AUTHORITY

The Commission now in fact has concluded, upon a close analysis of the Act, that its antitrust reviews of post-operating license transfer applications cannot be squared with the terms or intent of the Act and that we therefore lack authority to conduct them. But even if the Commission is wrong about that, and it possesses some general residual authority to continue to undertake such antitrust reviews, it is certainly true that the Act nowhere requires them, and the Commission thinks it sensible from a legal and policy perspective to no longer conduct them.

ATOMIC ENERGY ACT: ANTITRUST AUTHORITY

The competitive and regulatory landscape has dramatically changed since 1970 in favor of those electric utilities who are the intended beneficiaries of the section 105 antitrust reviews, especially in connection with acquisitions of nuclear power facilities and access to transmission services. For this Commission to use its scarce resources needed more to fulfill its primary statutory mandate to protect the public health and safety and the common defense and security than to duplicate other antitrust reviews and authorities makes no sense and only impedes nationwide efforts to streamline and make more efficient the federal government.

ADJUDICATORY HEARINGS: CONSIDERATION OF ISSUES INVOLVED IN RULEMAKING

No NRC regulation explicitly mandates an antitrust review of post-operating license transfer applications. Not one comma of the Commission's current regulations need be changed in the wake of a cessation of such reviews, although

because of the NRC's past practice of conducting such reviews, the Commission has decided that clarification of its rules is warranted. Thus, while a dismissal of this antitrust proceeding based on a new but permissible interpretation of the Commission's authority would be contrary to past practice, it would not be contrary to the explicit language of any Commission rule.

ADJUDICATORY HEARINGS: CONSIDERATION OF ISSUES INVOLVED IN RULEMAKING

The Supreme Court has repeatedly emphasized that the choice between rulemaking and adjudication 'lies primarily in the informed discretion of the administrative agency.

MEMORANDUM AND ORDER

I. INTRODUCTION

Pending before the Commission is a license transfer application filed on October 27, 1998, by Kansas Gas and Electric Company (KGE) and Kansas City Power and Light Company (KCPL) (Applicants) seeking Commission approval pursuant to 10 C.F.R. § 50.80 of a transfer of their possession-only interests in the operating license for the Wolf Creek Generating Station, Unit 1, to a new company, Westar Energy, Inc. Currently Wolf Creek is jointly owned and operated by the Applicants, each of which owns an undivided 47% interest, and Kansas Electric Power Cooperative, Inc. (KEPCo), which owns the remaining 6% interest. The Applicants request that the Commission amend the operating license for Wolf Creek pursuant to 10 C.F.R. § 50.90 by deleting KGE and KCPL as licensees and adding Westar Energy in their place.

Pursuant to the Commission's recently promulgated Subpart M, 10 C.F.R. § 2.1300 *et seq.,* KEPCo opposed the transfer on antitrust grounds, claiming, in a February 18, 1999, ''Petition to Intervene and Request for Hearing,'' that the transfer would have ''serious adverse and anticompetitive effects'' (*id.* at 5), would result in ''significant changes'' in the competitive market (*id.* at 15-17), and, therefore, warrants an antitrust review under section 105c of the Atomic Energy Act, 42 U.S.C. § 2135(c). In response to the petition to intervene, on March 1, 1999, Applicants filed an ''Answer of Applicants to Petition to Intervene and Request for Hearing of the Kansas Electric Power Cooperative, Inc.'' Applicants requested that the Commission deny the petition because the issues raised were outside the scope of the license transfer proceeding, the positions taken were not factually supported, and the Commission had not made

and should not make a finding of ''significant changes'' in the activities under the license.

By Memorandum and Order dated March 2, 1999, CLI-99-5, 49 NRC 199 (1999), the Commission indicated that although its Staff historically has performed a ''significant changes'' review in connection with certain kinds of license transfers, it intended to consider in this case whether to depart from that practice and ''direct the NRC Staff no longer to conduct significant changes reviews in license transfer cases, including the current case.'' The Commission stated that, in deciding this matter, it expected to consider a number of factors, including its statutory mandate, its expertise, and its resources. Accordingly, the Commission directed the Applicants and KEPCo to file briefs on the single question: ''whether as a matter of law or policy the Commission may and should eliminate all antitrust reviews in connection with license transfers and therefore terminate this adjudicatory proceeding forthwith.'' *Id.* at 200. The Commission also invited *amicus curiae* briefs.

Briefs and reply briefs have been filed by the Applicants and KEPCo. *Amicus* briefs were timely filed by the National Rural Electric Cooperative Association (NRECA), the Nuclear Energy Institute (NEI), the American Public Power Association (APPA), the Florida Municipal Power Agency (FMPA), the National Association of State Utility Consumer Advocates (NASUCA), and the American Antitrust Institute (AAI), and an untimely brief was filed by WML Associates (WML).[1]

Applicants argue that both legal and policy reasons justify the elimination of all antitrust reviews in license transfer proceedings. They state that by the express terms of section 105 of the Atomic Energy Act, which is the sole source of the Commission's antitrust jurisdiction, antitrust reviews are required only at two stages of the licensing process: when an application for a construction permit is submitted and then when the application for the initial operating license is submitted. Applicants' position is that ''Commission antitrust review of a license transfer is not authorized by statute, nor would such a review be consistent with the purpose of section 105c. For these reasons, as a matter of law the Commission should eliminate all antitrust reviews in connection with license transfers.'' ''Initial Brief of Applicants in Response to the NRC's Memorandum and Order Regarding Antitrust Review of License Transfers'' (March 16, 1999) (Applicants' Initial Brief) at unnumbered p. 11. Applicants state it clearly another way: ''neither section 105c nor Commission case law supports a finding that the Commission has jurisdiction to review the antitrust

[1] WML's brief was filed approximately 5 days after the time provided by CLI-99-5. WML's excuse is that the filing date coincided with Passover and the Easter holiday week and created unforeseen scheduling problems for it. Although WML has not satisfied us that it had good cause for the untimely filing, in the circumstances here we have considered WML's comments.

implications of a license transfer . . . .'' *Id.* at unnumbered p. 18. In addition to their argument that the Commission is not authorized to conduct antitrust reviews of transfer applications, Applicants also argue that there are compelling policy reasons why the Commission should not perform such reviews. Finally, and notwithstanding their ''lack of authority'' argument, Applicants request that the Commission decide this case not on the absence of authority, but rather on the merits of the merger and the antitrust issues (i.e., by finding no ''significant changes'' in the Applicants' activities).

KEPCo and NRECA, in their ''Joint Brief of the Kansas Electric Power Cooperative, Inc., and *Amicus Curiae* National Rural Electric Cooperative Association'' (March 16, 1999) (KEPCo Brief), argue that the Commission may not, as a matter of law, eliminate all antitrust reviews in license transfer proceedings. They argue that neither the statutory language nor its legislative history hint that Congress intended to allow the Commission to eliminate administratively any and all antitrust review when a nuclear power facility is sold or transferred. They further argue that even if the Commission had the statutory authority to eliminate such reviews, it cannot do so in this proceeding because applicable regulations ''unambiguously'' require a threshold ''significant changes'' determination which can only be changed by notice-and-comment rulemaking, which should not be undertaken for policy reasons.

NEI's position, reflected in the ''Amicus Brief of the Nuclear Energy Institute on the Issue of Antitrust Reviews in License Transfer Cases'' (March 31, 1999) (NEI Brief), is that the NRC has the legal authority to, and as a matter of policy should, eliminate antitrust reviews in license transfer cases as duplicative of other federal and state agencies with mandates to address competitive issues and because such reviews divert NRC's finite resources from its fundamental health and safety mission and constitute an unnecessary barrier to the completion of beneficial license transfers.

APPA and FMPA, in their ''Joint Brief of the American Public Power Association and Florida Municipal Power Agency'' (March 31, 1999) (APPA Brief), assert that a license transfer application seeks the issuance of an operating license requiring antitrust review and that this ''proposition is so plain it previously has never been challenged.'' APPA Brief at 3. APPA and FMPA argue that the Act, the Commission's regulations, and its consistent past practices would be unlawfully disregarded were the Commission to abandon antitrust reviews of license transfer applications.

NASUCA supports KEPCo's argument that the Commission may not, as a matter of law, eliminate all antitrust reviews in connection with license transfers. ''Amicus Filing, The National Association of State Utility Consumer Advocates'' (March 31, 1999) (NASUCA Brief).

AAI argues that antitrust is a primary statutory function of the Commission which can only be eliminated by Congress, though it can be limited by the

Commission. ''Motion to Submit Comments and Comments of Amici Curiae of the American Antitrust Institute'' (March 31, 1999) (AAI Brief) at 4-5. AAI takes the position that the Commission's role of focusing an antitrust review on electric industry competitive problems cannot be substituted for by other agencies.

WML argues that the ''Commission's success in conducting competitive reviews is unchallenged,'' and that without delaying any construction permit or operating license, NRC antitrust license conditions have saved ''disadvantaged'' entities millions of dollars in ''monopoly rents'' and significantly enhanced the competitive environment of the bulk power services markets. *Amicus Curiae* Brief, WML Associates'' (April 5, 1999) (WML Brief) at 4. WML points out that Congress has not eliminated the NRC's antitrust function and speculates that, in view of its history, probably would not do so. *Id.* at 5.

II. ANALYSIS

After consideration of the arguments presented in the briefs, and based on a thorough *de novo* review of the scope of the Commission's antitrust authority, we have concluded that the structure, language, and history of the Atomic Energy Act cut against our prior practice of conducting antitrust reviews of post-operating license transfers. It now seems clear to us that Congress never contemplated such reviews. On the contrary, Congress carefully set out exactly when and how the Commission should exercise its antitrust authority, and limited the Commission's review responsibilities to the anticipatory, prelicensing stage, prior to the commitment of substantial licensee resources and at a time when the Commission's opportunity to fashion effective antitrust relief was at its maximum. The Act's antitrust provisions nowhere even mention post-operating license transfers.

The statutory scheme is best understood, in our view, as an implied prohibition against additional Commission antitrust reviews beyond those Congress specified. At the least, the statute cannot be viewed as a requirement of such reviews. In these circumstances, and given what we view as strong policy reasons against a continued expansive view of our antitrust authority, we have decided to abandon our prior practice of conducting antitrust reviews of post-operating license transfers and to dismiss KEPCo's antitrust-driven request for a hearing on the proposed Wolf Creek license transfer.

A. The Atomic Energy Act

1. Statutory Framework: The Antitrust Provisions

Analysis of the Commission's statutory authority must begin with the language and structure of the Atomic Energy Act itself. To properly interpret both the specific language and the overall scheme of the Commission's antitrust authority, it is important to understand the background and history of that statutory authority.

In 1954, Congress wished to eliminate the government monopoly over the development of atomic energy for peaceful purposes and provide the incentives of competition and free enterprise in the further development of nuclear power.[2] Since nuclear power technology was developed to a great extent at government (i.e., taxpayer) expense, Congress believed that its benefits should be available to all on fair and equitable terms. Congress was concerned, however, that because the construction of large nuclear generating facilities was expensive and only the largest electric utility companies likely could afford such a capital asset, they could monopolize nuclear power plants and exclude smaller utility companies from sharing in the benefits of nuclear resources and thereby create an anticompetitive situation. It, therefore, was especially concerned that smaller electric systems have access to nuclear power plant electrical output by sharing in their ownership at the outset. Ownership access by itself, however, would be meaningless if the generated electricity could not be effectively transmitted and distributed by the smaller owners, many of whom were ''captive'' bulk power supply customers of the larger, dominant utilities that would be constructing and operating the nuclear facilities. Thus, ownership access had to be accompanied by other services such as ''wheeling'' of bulk power.

To alleviate these concerns, Congress amended the Atomic Energy Act of 1946 (''Act'') to authorize the Atomic Energy Commission, the NRC's predecessor, to conduct an antitrust review, in consultation with the Attorney General, prior to issuing a license for a nuclear generating facility. As subsequently amended in 1970, section 105 of the Act, 42 U.S.C. § 2135, requires the Commission to determine whether the activities under the license would create or maintain a situation inconsistent with the antitrust laws. The Commission, with its unique authority over the licenses it issues, also was given the authority to remedy such situations by refusing to issue licenses or by amending or conditioning them as it deemed appropriate. With this historical background in mind,

[2] *See* Report by the Joint Committee on Atomic Energy: Amending the Atomic Energy Act of 1954, as Amended, to Eliminate the Requirement for a Finding of Practical Value, to Provide for Prelicensing Antitrust Review of Production and Utilization Facilities, and to Effectuate Certain Other Purposes Pertaining to Nuclear Facilities, H.R. Rep. No. 91-1470 (also Rep. No. 91-1247), at 8 (1970), *reprinted in* 3 U.S.C.C.A.N. 4981 (1970) (''Joint Committee Report'') (*quoting* from legislative history of 1954 Act).

the carefully crafted antitrust review authority given to the Commission can be considered.

Section 105 of the Act is the sole source of the Commission's antitrust authority. Before examining the Commission's specific antitrust authority granted in section 105, it is important to understand that this authority is not plenary but instead, as a general matter, is limited to certain types of applications or otherwise limited in scope or nature. No other provision of the Act grants any antitrust authority to the Commission. As the Commission stated some years ago:

> We find the specificity and completeness of Section 105 striking. The section is comprehensive; it addresses each occasion on which allegations of anticompetitive behavior in the commercial nuclear power industry may be raised, and provides a procedure to be followed in each instance.

Houston Lighting & Power Co. (South Texas Project, Units 1 and 2), CLI-77-13, 5 NRC 1303, 1312 (1977). Further, the Commission's antitrust authority is not derived from its broad powers provided by sections 161 and 186 of the Act. *Id.* at 1317 & n.12. Thus, absent section 105, the Commission would have no antitrust authority.

Because the prelicensing antitrust reviews described in section 105c apply only to applications for certain types of licenses authorized under section 103, we set out section 103 before turning to section 105. Section 103a provides, in relevant part:

> The Commission is authorized to issue to persons applying therefor to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import or export . . . utilization or production facilities for industrial or commercial purposes.

Section 105 (''Antitrust Provisions'') of the Act[3] provides, in relevant part:

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[3] A point of clarification is in order concerning ''antitrust laws.'' The ''Acts'' explicitly cited in section 105a include the two most basic antitrust laws — the Sherman Act and the Clayton Act — as well as the Federal Trade Commission Act (FTC Act). Whether the FTC Act truly is an ''antitrust'' law is debatable. Clearly, conduct that violates the Sherman or Clayton acts is also cognizable under section 5 of the FTC Act. In *FTC v. Cement Institute,* 333 U.S. 683, 690-91 (1948), the Supreme Court specifically rejected the argument that because the price-fixing scheme (which the FTC had held was an ''unfair method of competition'') was cognizable under the Sherman Act, the FTC lacked jurisdiction. In general, all conduct prohibited by either the Sherman Act or the Clayton Act is within the scope of section 5 of the FTC Act. *See FTC v. Brown Shoe Co.,* 384 U.S. 316 (1966); *FTC v. Motion Picture Advertising Service Co.,* 344 U.S. 392, 394 (1953); *Times-Picayune Publishing Co. v. United States,* 345 U.S. 594, 609 (1953); *Fashion Originators' Guild of America v. FTC,* 312 U.S. 457 (1941). But practices that do not necessarily violate either the letter or spirit of the traditional ''antitrust laws'' (the Sherman, Clayton, and Robinson-Patman acts) may nevertheless violate section 5 of the FTC Act as unfair or deceptive acts or practices affecting consumers, regardless of their effect on competition. *FTC v. Sperry & Hutchison Co.,* 405 U.S. 233, 239 (1972). Whether or not purists would consider the FTC Act as an ''antitrust law,'' that act is one of the specific acts enumerated in section 105a and we hereinafter include it in our use of the phrase ''antitrust laws.''

a. Nothing contained in this Act shall relieve any person from the operation of the [antitrust laws]. In the event a licensee is found by a court of competent jurisdiction, either in an original action in that court or in a proceeding to enforce or review the findings or orders of any Government agency having jurisdiction under the laws cited above, to have violated any of the provisions of such laws in the conduct of the licensed activity, the Commission may suspend, revoke, or take such other action as it may deem necessary with respect to any license issued by the Commission under the provisions of this Act.

b. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of special nuclear material or atomic energy which appears to violate or tend toward the violation of any of the foregoing Acts, or to restrict free competition in private enterprise.

c. (1) The Commission shall promptly transmit to the Attorney General a copy of any license application provided for in paragraph (2) of this subsection, and a copy of any written request provided for in paragraph (3) of this subsection; and the Attorney General shall, within a reasonable time, but in no event to exceed 180 days after receiving a copy of such application or written request, render such advice to the Commission as he determines to be appropriate in regard to the finding to be made by the Commission pursuant to paragraph (5) of this subsection. Such advice shall include an explanatory statement as to the reasons or basis therefor.

(2) Paragraph (1) of this subsection shall apply to an application for a license to construct or operate a utilization or production facility under section 103: *Provided, however,* That paragraph (1) shall not apply to an application for a license to operate a utilization or production facility for which a construction permit was issued under section 103 unless the Commission determines such review is advisable on the ground that significant changes in the licensee's activities or proposed activities have occurred subsequent to the previous review by the Attorney General and the Commission under this subsection in connection with the construction permit for the facility.

* * *

(5) . . . The Commission shall give due consideration to the advice received from the Attorney General . . . and shall make a finding as to whether the activities under the license would create or maintain a situation inconsistent with the antitrust laws as specified in subsection 105a.

(6) . . . On the basis of its findings, the Commission shall have the authority to issue a license, to rescind a license or amend it, and to issue a license with such conditions as it deems appropriate.

* * *

Not surprisingly, the parties' and the *amicus* briefs focus almost exclusively on section 105c, which describes the construction permit and operating license antitrust reviews, the antitrust finding the Commission must make, and the licensing remedies available to the Commission in the event of an adverse finding. While the language in section 105c unquestionably is at the heart of the determination whether an antitrust review is required in connection with post-operating license transfer applications, we find that the scope of antitrust authority granted the Commission in section 105 as a whole sheds considerable light on the correct interpretation of the specific language in section 105c. And as will be seen, the structure of the section 105 scheme, as well as the legislative

history of section 105, support the conclusion that section 105c does not require, and indeed does not authorize, antitrust reviews of post-operating license transfer applications.[4]

a. Statutory Structure

We start at the beginning, and will examine each portion of section 105 in turn. At the outset, section 105a makes clear that nothing in section 105 relieves any person (e.g., applicant or licensee — *see* section 11s of the Act) from complying with any of the antitrust laws. Further, if any licensee is found by a court to have violated any antitrust law, then the Commission is empowered to suspend, revoke, or take such other action as it deems necessary, with respect to the license issued. Thus, after issuing an operating license, to the extent that an antitrust violation is found which may warrant some remedy involving the license itself, or ''licensed activities,'' the Commission could order a remedy. Similarly, section 105b requires the Commission to report to the Attorney General any information it may have with respect to its licensees' anticompetitive practices. As will be seen, these provisions assist in understanding the nature and scope of the prelicensing antitrust reviews required by section 105c.

Section 105c(1) provides for transmittal of ''any license application provided for in paragraph (2)'' and related information to the Attorney General, and for advice, with explanatory reasons, from the Attorney General regarding the antitrust finding to be made by the Commission pursuant to paragraph (5).

Section 105c(2) states that the review process provided in paragraph (1) ''shall apply to an application for a license to construct or operate'' a nuclear power facility but that ''paragraph (1) shall not apply to an application for a license to operate a . . . facility for which a construction permit was issued . . . unless the Commission determines such review is advisable on the ground that significant changes in the licensee's activities or proposed activities have occurred subsequent to the previous review by the Attorney General and the Commission . . . in connection with the construction permit for the facility.''

Section 105c(5) requires the Commission, with respect to applications subject to paragraphs (1) and (2), ''to make a finding as to whether the activities under the license would create or maintain a situation inconsistent with the antitrust laws . . . .'' In the case of affirmative findings, section 105c(6) grants the

[4] The issue of our authority to conduct antitrust reviews of post-operating license transfers has not been explicitly addressed heretofore in any Commission adjudicatory decision (or elsewhere by the Commission). While some briefs contain arguments that certain past Commission adjudicatory decisions can be read to imply that the Commission has asserted such authority, and others suggest the opposite, we conclude that at most they reflect an *assumption* by the Commission of such authority, but certainly not a reasoned conclusion. Accordingly, past adjudicatory decisions provide, at best, marginally useful assistance in resolving this issue.

Commission authority to refuse to issue the license, to rescind or amend it, or ''to issue a license with such conditions as it deems appropriate.''

The overall structure of the process designed by Congress to address its concerns about potential antitrust problems arising from the licensing of nuclear generating facilities is evident from the nature of its concerns and the corresponding scheme provided above. To address the concern over smaller utilities' ability to obtain ownership access to a nuclear facility (and associated services such as ''wheeling'') before it operates and in order to resolve incipient antitrust problems before any competitors were damaged, a mandatory and ''complete'' antitrust review was provided at the construction permit stage of the licensing process.[5] At this time, all entities who might wish ownership access to the nuclear facility, and who are in a position to assert that the activities under the license would create or maintain a situation inconsistent with the antitrust laws, are able to seek an appropriate licensing remedy from the Commission prior to actual operation of the facility, thus realizing their fair benefits of nuclear power from the beginning of electrical power generation.

This construction permit review theoretically is the broadest antitrust review provided in the law, not only because it measures the competitive situation against all the antitrust laws, including the FTC Act, but also because the standard of anticompetitive conduct and basis for a remedy is not the traditional one of antitrust violations but the potential for the licensed activities to create or maintain ''a situation inconsistent with the antitrust laws.''[6] At the time Congress enacted section 105, it envisioned this broad and comprehensive review at the construction permit phase of licensing a facility but, as we shall see, not at other licensing or post-licensing phases for the facility in question. Congress believed that at the construction phase — before the plant is built and before its operation is authorized by the Commission — the Commission would be peculiarly well-positioned to offer meaningful remedies, such as license conditions, if it found that granting the license would create or maintain a situation inconsistent with the antitrust laws.

The Commission's independent antitrust review responsibilities diminish from plenary reviews prior to initial licensing to passive information-reporting after licensing. Section 105c(2) explicitly states that the Act's formal antitrust review provisions ''shall not apply to an application for a license to operate a utilization or production facility for which a construction permit was issued under section 103 unless the Commission determines such review is advisable on the ground that significant changes in the licensee's activities or proposed

[5] The Commission's traditional process for licensing nuclear facilities is known as a two-step licensing process, consisting first of a construction permit followed by an operating license. *See* section 185 of the Act, 42 U.S.C. § 2235.

[6] *But see* note 22, *infra.*

activities have occurred subsequent to the previous review . . . in connection with the construction permit for the facility.'' As suggested in the legislative history (*see* discussion below), Congress added this restriction — in effect, a prohibition of second antitrust reviews at the operating license stage absent a significant changes finding — as part of compromise legislation in 1970 intended both to require vigorous prelicensing antitrust reviews and to avoid undue disruption of utility planning and investment decisions.

Consistent with the progressively diminishing role Congress intended for the Commission regarding the competitive practices of its applicants and licensees, sections 105a and b preserve traditional antitrust forums to resolve allegedly anticompetitive conduct by Commission licensees. Once a nuclear facility is licensed to operate, traditional antitrust forums — the federal courts and governmental agencies with longstanding antitrust expertise — are better equipped than the Commission to resolve and remedy antitrust violations by NRC licensees. To the extent that a court finds antitrust violations that arguably warrant some unique ''licensing'' relief that only this Commission can provide, such as by imposing conditions on the operating license, then 105a provides the Commission with remedial (but not review) authority.

From the mandatory and broad construction permit review to the conditional review in connection with the initial operating license, to the constricted review authority after issuance of the initial operating license (limited to information-reporting), section 105, in concept, describes a logical and progressively more narrow and less active role for a Commission whose primary and almost sole responsibility under the Act is to protect the public health and safety and the common defense and security.[7]

b. Statutory Language

The overarching structure of the Commission's antitrust responsibilities, both the prelicensing construction permit and operating license antitrust reviews, as well as the post-operating license authority to order a remedy for antitrust violations found elsewhere, as described above, is consistent with the very purpose for the congressional grant of specific and limited antitrust authority to the Commission. We turn now to our analysis and interpretation of the key statutory words and phrases material to the issue of whether section 105 contemplates antitrust reviews of post-operating license transfer applications.

[7] If the Commission has continuing antitrust review responsibility over post-operating license transfers, it conceivably could have to conduct at least a ''significant changes'' review almost 40 years after the initial operating license is issued, since section 103 of the Act provides that section 103 licenses are issued for up to 40 years. Nothing in the Act or in its legislative history — which, as we shall see below, focused on the Commission's ''anticipatory,'' prelicensing antitrust role — suggests that Congress intended to assign the Commission such extensive and long-lasting antitrust review duties.

Although the antitrust laws continue to apply to all Commission licensees after issuance of the facility operating license and the Commission continues to have authority to order licensing-type relief, if warranted, based on violations of the antitrust laws found by other forums (sections 105a and b), the prelicensing antitrust reviews required by section 105c are limited both in terms of the types of applications subject to the review and the threshold for conducting the review. Section 105c(1) requires transmittal of antitrust information to the Attorney General only for a ''license application provided for in paragraph (2).'' Paragraph (2), in turn, applies to ''an *application* for a license to *construct or operate* a . . . facility under *section 103*'' but limits the review of operating license applications by stating that paragraph (1) ''*shall not apply to an application for a license to operate* a . . . facility for which a construction permit was issued under section 103 *unless* the Commission determines such review is advisable on the ground that *significant changes in the licensee's activities* or proposed activities have occurred *subsequent to the previous review by the Attorney General and the Commission . . . in connection with the construction permit for the facility.*'' Section 103a provides, in relevant part, that the ''Commission is authorized to issue licenses to persons applying therefor to transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, possess, use, import or export . . . utilization or production facilities for industrial or commercial purposes.''

By its terms, section 105c(2) requires a Commission antitrust review of applications for certain activities. The only types of applications the provision explicitly subjects to antitrust review are those for construction permits and operating licenses issued under section 103. Section 103, however, does not use either ''construct'' or ''operate'' to identify the activities for which the Commission is authorized to issue licenses. These two basic terms, which are the hallmarks of the NRC's historical two-step licensing process (construction permit followed by operating license), are conspicuously absent from section 103. To construct a facility, however, is the same as to manufacture or produce a facility. ''Construct'' in section 105c(2), therefore, is equivalent to the section 103 activities of ''manufacture'' or ''produce.'' Similarly, to operate a facility is the same as to possess and use the facility. ''Operate'' in section 105c(2) thus is equivalent to the section 103 activities of ''possess'' and ''use.'' The only types of applications expressly made subject to antitrust review under section 105c(2), therefore, are applications to manufacture or produce (''construct'') a facility and applications to ''possess'' and ''use'' (''operate'') a facility, not applications for any other activities requiring a license under section 103.

Equally as conspicuous as the absence of the words ''construct'' and ''operate'' from section 103 is the *inclusion* of ''acquire'' and ''transfer'' in section 103 as activities explicitly requiring a license from the Commission. Yet section 105c(2) does *not,* explicitly or implicitly, identify applications to either ''acquire''

or ''transfer'' facilities as being subject to antitrust review. So the only types of applications explicitly mentioned in section 105c(2) as requiring an antitrust review (construction and operation) are not mentioned verbatim in section 103 but are mentioned using equivalent language, while the type of application that is not mentioned in section 105c(2), but for which an antitrust review is urged by some (transfer), is identified verbatim in section 103 (transfer) as well as in equivalency (acquire).

It would be strange, to say the least, if Congress intended the Commission to perform an antitrust review of post-operating license transfer (or acquisition) applications but did not mention applications for those section 103 activities, either explicitly or equivalently, in section 105c(2), but instead mentioned only applications to ''construct'' and ''operate,'' two commonly used words for the section 103 activities of manufacture or produce, and possess and use, respectively. Construing section 105c(2) in this fashion would violate the basic canon of construction that where a particular term is used in one section of a statute, neither it nor its equivalent should be implied in another section of the same statute where it is omitted. *See BFP v. Resolution Trust Co.,* 511 U.S. 531, 537 (1994); *R. Mayer of Atlanta, Inc. v. City of Atlanta,* 158 F.3d 538, 545 (11th Cir. 1998).

The explicit focus of section 105c(2) on applications for only two types of section 103 activities — construction (manufacture or production) and operation (possess and use), coupled with the omission from section 105c(2) of any mention, either explicitly or by equivalency, of applications to ''transfer'' (or ''acquire'') — strongly suggests that our section 105c prelicensing antitrust review authority does not include applications for post-operating license transfers. This conclusion is supported both by the overall structure of the Commission's antitrust authority provided in section 105 and the specific language Congress used to authorize prelicensing antitrust reviews of only certain types of license applications. Congress's grant of limited antitrust review authority to the Commission does not give us free rein to conduct across-the-board reviews of license applications not specified by Congress. ''The duty to act under certain carefully defined circumstances simply does not subsume the discretion to act under other, wholly different, circumstances, unless the statute bears such a reading.'' *Railway Labor Executives' Association v. National Mediation Board,* 29 F.3d 655, 671 (D.C. Cir. 1994) (*en banc*). *Accord, University of the District of Columbia Faculty Associatio v. DCFRMAA,* 163 F.3d 616, 621 (D.C. Cir. 1998).

The only conceivable way to interpret section 105c to require some form of antitrust review of applications to transfer an existing operating license is to

construe the application to transfer as an application for an operating license.[8] But if it is so construed, section 105c(2) brings our antitrust review responsibility into play only if there is a ''significant changes'' finding made in accordance with the process described in that section. The mandated significant changes process, however, does not lend itself to reviews of post-operating license transfer applications.

To trigger the Commission's duty to conduct an antitrust review of an operating license application, there must be ''significant changes'' in the licensee's activities that ''have occurred subsequent to the previous review by the Attorney General and the Commission . . . *in connection with the construction permit for the facility.*'' Section 105c(2). It is immediately obvious from this language that the statutory ''significant changes'' inquiry is not compatible with antitrust reviews of post-operating license transfers, for the statutory baseline from which to measure ''significant changes'' is the facility's construction permit, whereas at the time of post-operating license transfers the facility already would have received its operating license, and undergone a previous ''significant changes'' review. It would be absurd for the Commission to look back again to the original construction permit and make the ''significant changes'' inquiry anew.

In short, while the statutory method of making the ''significant changes'' finding reflects a common sense approach in the case of the initial — original — application for an operating license submitted to the Commission by the construction permit licensee, the approach makes no sense whatever if a post-operating license application for license transfer is construed as the equivalent of an initial operating license application and thus force-fit into the ''significant changes'' process. A comparison of activities of new licensees with activities of other licensees who underwent *at least* two previous antitrust reviews (there could be a series of post-operating license transfer applications) for any facility that underwent an operating license antitrust review makes no practical sense and also would ignore the significant changes explicitly found to exist between construction and initial operation of the facility. The statutory scheme and language are simply inconsistent with treating post-operating license transfer applications as operating license applications.

Interestingly, the Commission's past practice of conducting ''significant changes'' reviews of post-operating license transfer applications, now being reconsidered in this case, compared the activities at the time of transfer with those

[8] Such a construction is at odds with reality, since no new license will be issued to effectuate a Commission-approved transfer. Instead, as will be true in this *Wolf Creek* case if the Commission approves the transfer request, a license amendment will be issued to reflect the new licensee. The Commission has characterized such amendments as ''essentially administrative in nature'' and not involving any significant substantive changes. Streamlined Hearing Process for NRC Approval of License Transfers, 63 Fed. Reg. 66,727 (Dec. 3, 1998) (codified at 10 C.F.R. Part 2, Subpart M). An amendment reflecting a license transfer does not require a prior hearing. *See Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-92-4, 35 NRC 69, 77 (1992).

at the time of the previous operating license review, a comparison more logical than that required by the statute. We suspect that no one ever suggested that the Commission should have been using the statutorily required construction permit review as the benchmark for its ''significant changes'' determination for post-operating license transfer applications for the simple reason that it makes no sense in reality if post-operating license transfer applications are deemed to be ''operating license'' applications for purposes of a section 105c antitrust review. This, too, strongly suggests that section 105c cannot be read to require Commission antitrust reviews of post-operating license transfer applications and that the Commission's past practice of reviewing post-operating license transfer applications for significant changes is at odds with the clear language of the statute.

Because the statute does not explicitly address the issue of antitrust authority over post-operating license transfer applications, however, we turn to the legislative history for additional guidance on congressional intent.

2. Legislative History

Desiring to end the government's monopoly over the development of nuclear power for peaceful purposes, Congress, in 1954, amended the Atomic Energy Act of 1946 to provide for further development by private enterprise. Because the development of nuclear power had theretofore been at government (i.e., taxpayer) expense, Congress wanted to ensure that commercial nuclear facilities were accessible to all types of electric utility systems, large investor-owned, smaller private ones, municipal systems, electric cooperatives, and others, on fair and equitable terms. Although large nuclear generating facilities would be expensive to construct, the noncapital generating costs were expected to be inexpensive (one AEC Chairman erroneously predicted that nuclear-generated electricity would be ''too cheap to meter''). This meant that, absent some mandated means to address this situation, large, wealthy, dominant electric utilities could achieve great economies of scale by constructing large, expensive nuclear facilities which the smaller utilities could not afford to do, thereby increasing the already dominant competitive position of the larger utilities in the marketplace. To address these concerns, Congress included in the 1954 Act a requirement that the Atomic Energy Commission (the NRC's predecessor), in consultation with the Attorney General, conduct an antitrust review prior to issuing any license under section 103 for a nuclear power facility for commercial or industrial purposes.[9]

[9] Only commercial licenses issued under section 103 of the Act were made subject to the antitrust review provisions. ''Research and development'' licenses issued under section 104 were exempt from antitrust review. *(Continued)*

Because nuclear power plants were being licensed in the years after the 1954 amendments under section 104b as ''research and development'' facilities, however, no section 105 antitrust reviews actually were being conducted. In 1970, the Joint Committee on Atomic Energy identified the section 105c antitrust review requirement as a major roadblock to ''commercial'' licensing under section 103 and in need of clarification and revision. *See* Joint Committee Report at 13. Proponents and opponents of prelicensing antitrust review expressed strong positions and emotions from one extreme to the other. *Id.* at 14. Proponents of prelicensing antitrust review feared that, absent such review, the large, already dominant utilities would further increase their market share and power by monopolizing nuclear power, with its large economies of scale, with the smaller private, municipal and cooperative systems denied their fair share of nuclear power. These proponents, therefore, urged the need and importance of antitrust review ''at the outset of the licensing process,'' ''before any competitor was damaged'' or ''much money and time has been spent.'' *See* Hearings at 21, 420, 481.[10]

Opponents of prelicensing review, on the other hand, believed that the Commission's section 105a and b authority (to report anticompetitive conduct of its licensees to the Attorney General and to take licensing action to remedy antitrust violations found by a court) was sufficient by itself. Joint Committee Report at 14. They believed that it would be unreasonable and unwise to delay the construction and operation of nuclear facilities by imposing special antitrust reviews on those willing to invest in nuclear facilities. *Id.*

The AEC proposed an antitrust review at both the construction permit and operating license stages of the licensing process but with no operating license review in cases where antitrust concerns were satisfactorily resolved at the construction permit stage. Hearings at 38, 481. This proposal was met with strong opposition, including that of the Chairman of the Joint Committee. *See* Hearings at 37-38 (remarks of Rep. Holifield). The concern was that after a utility had planned, sized, and constructed a facility to meet its customers' power requirements, including any requirements from the construction permit antitrust review, any further review would delay the licensing of the facility and unfairly damage the utility's considerable investment. *Id.* The legislation that resulted — including the limitation of such reviews to construction permit applications and adding the ''significant changes'' trigger for a second antitrust review of operating license applications — reflects a careful balancing and compromise of

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The 1954 Act authorized the issuance of commercial licenses only upon a written finding that such facilities had been ''sufficiently developed to be of practical value for industrial and commercial purposes.'' For many years after 1954, the Commission made no findings of ''practical value'' and issued all licenses for the construction and operation of civilian nuclear power plants as ''research and development'' facilities under section 104b of the Act.

[10] *Prelicensing Antitrust Review of Nuclear Power Plants: Hearings Before the Joint Comm. on Atomic Energy,* pt. 1, 91st Cong. (1969); pt. 2, 91st Cong. (1970).

the respective concerns and positions. Joint Committee Report at 13. *See also* 116 Cong. Rec. H9449 (daily ed. Sept. 30, 1970). The 1970 amendments, which remain in effect today as reflected in section 105, were passed by Congress after considering the Joint Committee Report.

As is evident from the language of section 105c, the Commission's antitrust review obligations are triggered by applications for only two types of licenses issued under section 103: construction permits and operating licenses. As indicated above, applications for activities requiring a license under section 103 other than enumerated activities equivalent to "construction" or "operation," such as ''acquire'' and ''transfer,'' are not included in section 105c(2). The legislative history is consistent with this reading. In its Report, the Joint Committee[11] made clear that the term ''license application'' referred only to applications for construction permits or operating licenses filed as part of the ''initial'' licensing process for a new facility not yet constructed, or for modifications that would result in a substantially different facility:

> The committee recognizes that applications may be amended from time to time, that there may be applications to extend or review [*sic* — renew] a license, and also that the form of an application for construction permit may be such that, from the applicant's standpoint, it ultimately ripens into the application for an operating license. The phrases ''any license application'', ''an application for a license'', and ''any application'' as used in the clarified and revised subsection 105 c refer to the initial application for a construction permit, the initial application for an operating license, or the initial application for a modification which would constitute a new or substantially different facility, as the case may be, as determined by the Commission. The phrases do not include, for purposes of triggering subsection 105 c, other applications which may be filed during the licensing process.

Joint Committee Report at 29. *See generally American Public Power Association v. NRC,* 990 F.2d 1309, 1311-12 (D.C. Cir. 1993). These remarks were made with the narrow issue in mind of clarifying the scope of the terms ''license application'' and ''application for a license'' used in section 105c and thus reasonably can ''be said to demonstrate a Congressional desire.'' *See Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.,* 467 U.S. 837, 862 (1984). The ''other applications which may be filed'' but which do not trigger an antitrust review clearly encompass applications for those activities listed in section 103, such as transfers, that do not constitute construction or operation.[12]

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[11] The Joint Committee Report is the best source of legislative history of the 1970 amendments. *See Alabama Power Co. v. NRC,* 692 F.2d, 1362, 1368 (11th Cir. 1982). The Report was considered by both houses in their respective floor deliberations on the antitrust legislation and is entitled to special weight because of the Joint Committee's ''peculiar responsibility and place . . . in the statutory scheme.'' *See Power Reactor Development Co. v. International Union,* 367 U.S. 396, 409 (1961).

[12] *In American Public Power Associationn v. NRC,* 990 F.2d 1309 (D.C. Cir. 1993), the Commission's determination that license renewal applications were not required to undergo a section 105 antitrust review was upheld because such applications were not ''initial'' applications or applications for a ''new or substantially different facility.''

In sum, the legislative history of the Commission's antitrust authority supports the overall scheme of one mandatory antitrust review at the initial construction permit stage of the licensing process and one potential antitrust review at the initial operating license stage if and only if there are significant changes from the previous construction permit review. So, too, does it support the interpretation of the term ''license application'' to exclude post-operating license transfer applications from an antitrust review based on their being interpreted as applications for an initial operating license.[13] There is no evidence in the statutory text or history that Congress expected the Commission to conduct antitrust reviews of post-operating license transfers. In such a detailed statutory scheme, congressional silence on such transfers seems to us tantamount to an absence of agency authority. At the least, it cannot be said that Congress *required* antitrust reviews of post-operating license transfers.

B. NRC Regulations, Guidance, and Practice

The Commission's practice has been to perform a ''significant changes'' review of applications to directly transfer section 103 construction permit and operating licenses to a new entity, including those applications for post-operating license transfers. While the historical basis for such reviews in the case of post-operating license transfer applications remains cloudy — it does not appear that the Commission ever explicitly focused on the issue of whether such reviews were authorized or required by law, but instead apparently assumed that they were[14] — the reasons, even if known, would have to yield to a determination

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[13] In its Joint Brief (*amicus curiae*) (at 6), the American Public Power Association and the Florida Municipal Power Agency argue that it ''could not have been Congress's intention . . . that a utility must undergo an antitrust review if it applies for a construction permit, but not if it induces others to construct the project and then purchases the already-operational nuclear plant. After all, it is the *operation* of the plant, not its *construction,* that most offers the potential of harm to competition.'' (Emphasis in original.) We find it highly unlikely, to say the least, that one utility could ''induce'' another to construct a nuclear power plant in a sham scheme to obtain operational control of the completed and operationally licensed plant without undergoing the *NRC's* prelicensing antitrust review. Moreover, if that were suspected and could be proven, then it would be strong evidence that the inducing utility had serious concerns that its market position or competitive practices might run afoul of the antitrust laws. In that case, those who arguably have been injured could bring a private antitrust action or bring the matter to the attention of the Justice Department, FERC, the FTC, or other governmental agencies with traditional antitrust authority. And if NRC authority over the license were considered to be necessary to fashion an appropriate remedy, the Commission could exercise its section 105a authority.

APPA also argues that sections 184 and 189 of the Act prevent the Commission from foreclosing antitrust hearings on license transfers. APPA Brief at 9-10. Section 184 prohibits license transfers unless, ''after securing full information,'' the Commission finds the transfer in accordance with the Act, and section 189 provides for hearings in certain licensing proceedings, including transfers. We disagree. If the Act does not require or even authorize antitrust reviews of post-operating license transfers, then antitrust issues associated with the transfer are not material to the license transfer decision and antitrust information is not required to be considered by the Commission, except perhaps to determine the fate of existing antitrust license conditions. We, therefore, do not believe that these provisions provide any obstacle to terminating these antitrust reviews.

[14] Until recently, the Commission's Staff applied the ''significant changes'' review process to both ''direct'' and ''indirect'' transfers. Indirect transfers involve corporate restructuring or reorganizations that leave the licensee

(Continued)

that such reviews are not authorized by the Act. *See American Telephone & Telegraph Co. v. FCC,* 978 F.2d 727, 733 (D.C. Cir. 1992). We now in fact have concluded, upon a close analysis of the Act, that Commission antitrust reviews of post-operating license transfer applications cannot be squared with the terms or intent of the Act and that we therefore lack authority to conduct them. But even if we are wrong about that, and we possess some general residual authority to continue to undertake such antitrust reviews, it is certainly true that the Act nowhere requires them, and we think it sensible from a legal and policy perspective to no longer conduct them.

It is well established in administrative law that, when a statute is susceptible to more than one permissible interpretation, an agency is free to choose among those interpretations. *Chevron,* 467 U.S. at 842-43. This is so even when a new interpretation at issue represents a sharp departure from prior agency views. *Id.* at 862. As the Supreme Court explained in *Chevron,* agency interpretations and policies are not ''carved in stone'' but rather must be subject to re-evaluations of their wisdom on a continuing basis. *Id.* at 863-64. Agencies ''must be given ample latitude to 'adapt its rules and policies to the demands of changing circumstances.' '' *Motor Vehicle Manufacturers Association of United States, Inc. v. State Farm Mutual Automobile Insurance Co.,* 463 U.S. 29, 42 (1983), *quoting Permian Basin Area Rate Cases,* 390 U.S. 747, 784 (1968). An agency may change its interpretation of a statute so long as it justifies its new approach with a ''reasoned analysis'' supporting a permissible construction. *Rust v. Sullivan,* 500 U.S. 173, 186-87 (1991); *Public Lands Council v. Babbit,* 154 F.3d 1160, 1175 (10th Cir. 1998); *First City Bank v. National Credit Union Admin Board,* 111 F.3d 433, 442 (6th Cir. 1997); *see also Atchison, Topeka & Santa Fe Railway Co. v. Wichita Board of Trade,* 412 U.S. 800, 808 (1973); *Hatch v. FERC,* 654 F.2d 825, 834 (D.C. Cir. 1981); *Greater Boston Television Corp. v. FCC,* 444 F.2d 841, 852 (D.C. Cir. 1971).

We therefore give due consideration to the Commission's established practice of conducting antitrust reviews of post-operating license transfer applications but appropriately accord little weight to it in evaluating anew the issue of section 105's scope and whether, even if such reviews are authorized by an interpretation of section 105, they should continue as a matter of policy. Moreover, as we noted above, the Commission's actual practice of reviewing license transfer applications for significant changes is on its face inconsistent with the statutory

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itself intact as a corporate entity and therefore involve no application for a new operating license. The vast majority of indirect transfers involve the purchase or acquisition of securities of the licensee (e.g., the acquisition of a licensee by a new parent holding company). In this type of transfer, existing antitrust license conditions continue to apply to the same licensee. The Commission recently did focus on antitrust reviews of indirect license transfer applications and approved the Staff's proposal to no longer conduct ''significant changes'' reviews for such applications because there is no effective application for an operating license in such cases. *See* Staff Requirements Memorandum (November 18, 1997) on SECY-97-227, Status of Staff Actions on Standard Review Plans for Antitrust Reviews and Financial Qualifications and Decommissioning-Funding Assurance Reviews.

requirement regarding how significant changes must be determined. The fact that the statutory method does not lend itself to post-operating license transfer applications, while the different one actually used does logically apply, also must be considered and suggests that such a review is not required by the plain language of the statute and was never intended by Congress.

In support of the arguments advanced in KEPCo's briefs and some of the *amicu*s briefs that the Commission must conduct antitrust reviews of transfer applications, various NRC regulations and guidance are cited. Just as the Commission's past practices cannot justify continuation of reviews unauthorized by statute, neither can regulations or guidance to the contrary. Before accepting the argument that our regulations require antitrust reviews of post-operating license transfer applications, however, they warrant close consideration.

Section 50.80 of the Commission's regulations, 10 C.F.R. § 50.80, ''Transfer of licenses,'' provides, in relevant part:

> (b) An application for transfer of a license shall include [certain technical and financial information described in sections 50.33 and 50.34 about the proposed transferee] as would be required by those sections if the application were for an initial license, and, if the license to be issued is a class 103 license, the information required by § 50.33a.

Section 50.33a, ''Information requested by the Attorney General for antitrust review,'' which by its terms applies only to applicants for construction permits, requires the submittal of antitrust information in accordance with 10 C.F.R. Part 50, Appendix L. Appendix L, in turn, identifies the information ''requested by the Attorney General in connection with his review, pursuant to section 105c of the Atomic Energy Act of 1954, as amended, of certain license applications for nuclear power plants.'' ''Applicant'' is defined in Appendix L as ''the entity applying for authority to construct or operate subject unit and each corporate parent, subsidiary and affiliate.'' ''Subject unit'' is defined as ''the nuclear generating unit or units for which application for construction or operation is being made.'' Appendix L does not explicitly apply to applications to transfer an operating license.

KEPCo argues that the section 50.80(b) requirement, in conjunction with the procedural requirements governing the filing of applications discussed below, requires the submittal of antitrust information in support of post-operating license transfer applications and that the Wolf Creek case cannot lawfully be dismissed without a ''significant changes'' determination. *See* KEPCo Brief at 11. While we agree that section 50.80 may imply that antitrust information is required for purposes of a ''significant changes'' review, linguistically it need not be read that way. The Applicants plausibly suggest that the phrase ''the license to be issued'' could be interpreted to apply only to entities that have not yet been

issued an initial license. *See* App. Brief at 11.[15] Moreover, neither this regulation nor any other states the purpose of the submittal of antitrust information. For applications to construct or operate a proposed facility, it is clear that section 50.80(b), in conjunction with section 50.33a and Appendix L, requires the information specified in Appendix L for purposes of the section 105c antitrust review, for construction permits, and for the ''significant changes'' review for operating licenses. But for applications to transfer an existing operating license, there are other section 105 purposes that could be served by the information. Such information could be useful, for example, in determining the fate of any existing antitrust license conditions relative to the transferred license, as well as for purposes of the Commission's section 105b responsibility to report to the Attorney General any information that appears to or tends to indicate a violation of the antitrust laws.

While we acknowledge that information submitted under section 50.80(b) has not been used for these purposes in the past, and has instead been used to develop ''significant changes'' findings, the important point is that section 50.80(b) is simply an information submission rule. It does not, in and of itself, mandate a ''significant changes'' review of license transfer applications. No Commission rule imposes such a legal requirement. Nonetheless, in conjunction with this decision, we are directing the NRC Staff to initiate a rulemaking to clarify the terms and purpose of section 50.80(b).[16]

KEPCo also argues that the Commission's procedural requirements governing the filing of license applications supports its position that antitrust review is required in this case. *See* KEPCo Brief at 11-13. The Applicants disagree, arguing that nothing in those regulations states that transfer applications will be subject to antitrust reviews. *See* App. Reply Brief at 3. For the same reasons we believe that the specific language in section 105c does not support antitrust review of post-operating license transfer applications, we do not read our procedural requirements to indicate that there will be an antitrust review of transfer applications. Indeed, the language in 10 C.F.R. § 2.101(e)(1) regarding operating license applications under section 103 tracks closely the process

[15] This reading is consistent with the history of section 50.80(b). Its primary purpose appears to have been to address transfers that were to occur before issuance of the initial (original) operating license, transfers that unquestionably fall within the scope of section 105c. *See Detroit Edison Co.* (Enrico Fermi Atomic Power Plant, Unit 2), LBP-78-13, 7 NRC 583, 587-88 (1978). When section 50.80(b) was revised in 1973 to require submission of the antitrust information specified in section 50.33a, the stated purpose was to obtain the ''*prelicensing* antitrust advice by the Attorney General.'' 38 Fed. Reg. 3955, 3956 (Feb. 9, 1973) (emphasis added).

[16] In one important respect the language of section 50.80(b), quoted above, in fact supports the Commission's analysis of section 105 and its legislative history. The phrase ''if the application were for an *initial license*'' certainly demonstrates that, consistent with the clearly intended focus of section 105c on antitrust reviews of applications for initial licenses, the Commission has long distinguished initial operating license applications from license transfer applications. Be that as it may, clarification of section 50.80(b) will be appropriate in the wake of our decision that our antitrust authority does not extend to antitrust reviews of post-operating license transfer applications.

described in section 105c. As stated in 10 C.F.R. § 2.101(e)(1), the purpose of the antitrust information is to enable the Staff to determine ''whether significant changes in the licensee's activities or proposed activities have occurred since the completion of the *previous antitrust review in connection with the construction permit.*'' (Emphasis added.) As explained above, this description of the process for determining ''significant changes'' is consistent with an antitrust review of the initial operating license application for a facility but wholly inconsistent with an antitrust review of post-operating license transfer applications.

Nevertheless, clarification of the rules governing the filing of applications by explicitly limiting which types of applications must include antitrust information is appropriate. So too should Regulatory Guide 9.3, ''Information Needed by the AEC Regulatory Staff in Connection with Its Antitrust Review of Operating License Applications for Nuclear Power Plants,'' and NUREG-1574, ''Standard Review Plan on Antitrust Reviews,'' be clarified. In conjunction with this decision, we are directing the NRC Staff to initiate an appropriate clarifying rulemaking.

C. Policy Considerations: Other Agencies and Other Forums

The parties' and *amicus* briefs, at our invitation, advanced policy reasons why the Commission should, or should not, terminate its practice of reviewing post-operating license transfer applications for antitrust considerations. Presuming that the Commission is free under the Act to continue its prior practice, we would abandon it as largely duplicative of other, more appropriate agencies' responsibilities, and not a sensible use of our limited resources needed to fulfill our primary mission of protecting the public health and safety and the common defense and security, from the hazards of radiation.

At the time of the 1970 antitrust amendments to the Atomic Energy Act, Congress believed that the Commission was in a unique position to ensure that the licensed activities of nuclear utilities could not be used to create or maintain a situation inconsistent with the antitrust laws. As explained above, the focus of the 1970 amendments was on prelicensing antitrust reviews conducted during the pendency of the two-step licensing process comprising applications for construction permits and initial operating licenses. In contrast to the competitive situation that existed in 1970, the current competitive and regulatory climate in which the electric utility industry operates is markedly different. Key statutory changes substantially enhance smaller utilities' ability to compete with the larger generating facilities and gain access to essential transmission services. These differences from 1970 reduce, if not eliminate, the incremental protection of competition that the NRC could provide through its antitrust reviews. To the extent that the Commission can still be considered to be in a unique position vis a

vis other governmental authorities to address antitrust concerns, such uniqueness surely ends at the time the facility is granted its initial operating license.

In 1992, Congress passed the Energy Policy Act of 1992, Public Law 102-486 (EPAct), substantially enlarging the authority of the Federal Energy Regulatory Commission (FERC) to prevent and mitigate potential and existing abuses of market power by electric utilities, including nuclear utilities. Specifically, the EPAct amended sections 211 and 212 of the Federal Power Act,[17] 16 U.S.C. §§ 824j and 824k, with respect to wholesale transmission services. Pursuant to these amended sections, any electric utility or person generating electricity may apply to FERC for an order requiring a transmission utility to provide transmission services to the applicant at prices recovering just and reasonable costs.

After enactment of the EPAct, FERC issued Orders 888 (April 24, 1996) and 888-A (March 4, 1997) which in part provide for tariffs to be filed regarding transmission service and certain necessary ancillary services.[18] In Order No. 888, FERC exercised its expanded statutory authority and required all public utilities that own, control, or operate transmission facilities ''to have on file open access non-discriminatory transmission tariffs that contain minimum terms and conditions of non-discriminatory services.''[19] Pursuant to these required tariffs, utilities can now enter into arrangements for transmission and ancillary services without instituting proceedings under section 211.

As a result, FERC now possesses statutory authority overlapping that of the NRC under section 105 to remedy potential and existing anticompetitive conduct by the NRC's nuclear facility licensees, at least with respect to transmission services. As we noted above, transmission services are the services without which access to nuclear power facilities is meaningless and which, therefore, were of great concern to Congress in granting prelicensing antitrust review authority to the Commission. With this expanded FERC authority, however, the NRC cannot be said to be in a unique position to address or remedy antitrust problems involving access to transmission services. To the contrary, NRC antitrust review might even be said to be redundant and unnecessary. As FERC stated in Order 888-A, ''unbundled electric transmission service will be the centerpiece of a freely traded commodity market in electricity in which wholesale customers can shop for competitively-priced power.'' FERC Order 888-A, 62 Fed. Reg. 12,275 (1997). In conjunction with the Department of Justice's

[17] Section 272 of the Atomic Energy Act provides that every NRC nuclear facility licensee is subject to the regulatory provisions of the Federal Power Act.

[18] It is our understanding that these FERC orders are currently undergoing judicial review.

[19] Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities and Recovery of Stranded Costs by Public Utilities and Transmission Utilities, 61 Fed. Reg. 21,540 (May 10, 1996) (to be codified at 18 C.F.R. Parts 35 and 385), *reh'g denied in pertinent part,* Order 888-A, 62 Fed. Reg. 12,274 (March 14, 1997), *petitions for review pending, People of New York, supra* note 13.

broad authority to enforce compliance by NRC licensees with the antitrust laws (*see* subsections 105a and b of the Act), this expanded FERC authority and enhanced competitive climate for the electric utility industry render the NRC's post-operating license antitrust reviews duplicative regulation contrary to the sound objective of a streamlined government.

Since 1970, changes in the Clayton Act also have contributed to eliminating any need for an NRC role in reviewing acquisitions of nuclear power facilities by new owners. The Hart-Scott-Rodino Antitrust Improvements Act of 1976, Pub. L. 94-435, 90 Stat. 1383 (1976), added section 7A to the Clayton Act, 15 U.S.C. § 18a, which established a ''waiting period'' notification process which allows the Department of Justice and the Federal Trade Commission to screen certain commercial transactions such as acquisitions of assets[20] for potential violations of the antitrust laws before the transactions are consummated. Under section 7A(f), DOJ has the authority to institute a court proceeding to enjoin a transaction that it has determined would violate the antitrust laws. Since the Clayton Act standard, like that of section 105c, is ''anticipatory'' in nature, designed to permit the correction of anticompetitive problems in their incipiency,[21] the scrutiny of DOJ's pre-acquisition review is comparable at least to the NRC's ''significant changes'' review.

In summary, the competitive and regulatory landscape has dramatically changed since 1970 in favor of those electric utilities who are the intended beneficiaries of the section 105 antitrust reviews, especially in connection with acquisitions of nuclear power facilities and access to transmission services. For this Commission to use its scarce resources needed more to fulfill our primary statutory mandate to protect the public health and safety and the common defense and security than to duplicate other antitrust reviews and authorities[22] makes no sense and only impedes nationwide efforts to streamline and make more efficient the federal government.

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[20] The transaction must meet certain threshold jurisdictional amounts, but acquisitions of nuclear power facilities always have met, and are expected to meet, the requirement and thus are subject to the screening process.

[21] *See generally South Texas,* CLI-77-13, *supra.*

[22] Theoretically, the section 105c.(5) standard of ''whether the activities under the license would create or maintain a situation inconsistent with the antitrust laws'' is broader than any used elsewhere in antitrust law enforcement since no actual violation is required. As a practical matter, however, it is difficult at best to even envision a competitive situation that satisfied the section 105 standard for relief but would not warrant relief under traditional antitrust statutes, which have been broadly construed by the courts. For example, section 5 of the FTC Act has been held to empower the FTC ''to arrest trade restraints in their incipiency without proof that they amount to an outright violation of section 3 of the Clayton Act or other provisions of the antitrust laws.'' *FTC v. Brown Shoe Co.,* 384 U.S. 316, 322 (1966). Thus, there will be no realistic gap in antitrust law enforcement if the NRC no longer performs antitrust reviews of post-operating license transfer applications.

D. Existing Antitrust License Conditions

Whether or not the Commission conducts a ''significant changes'' review of post-operating license transfer applications, it still must consider the fate of any existing antitrust license conditions under the transferred license. Theoretically, at least, three possibilities exist: (1) the existing license conditions should be attached verbatim to the transferred license, (2) the existing conditions should be rescinded or eliminated in their entirety, or (3) the existing conditions should be modified and attached as modified to the transferred license. We do not believe it is possible in the abstract to generically preordain any one solution for all conceivable cases. The license conditions on their face, the nature of the license transfer, and perhaps the competitive situation as well, would need to be considered to determine what action were warranted in a given case. (For example, and without regard to the competitive situation, (1) it might be appropriate to retain the existing conditions where they apply only to a particular co-owner or co-operator that will remain a licensee under the transferred license, (2) it might be appropriate to remove the conditions where they apply to only one of several licensees and that one will no longer be a licensee after the transfer, and (3) it might be appropriate to remove existing conditions or modify references to licensees in the conditions when existing licensees to whom the conditions apply merge among themselves or with other entities and new corporate licensees will result.)

While the issue of the appropriate treatment of existing antitrust license conditions in the past would have been addressed as part of the ''significant changes'' review of license transfers, there will need to be some means provided for consideration of the matter in connection with transfers of licenses with existing antitrust license conditions. In such cases, the Commission will entertain submissions by licensees, applicants, and others with the requisite antitrust standing that propose appropriate disposition of existing antitrust license conditions. Here, antitrust license conditions are attached to the Wolf Creek license. We therefore direct all parties to this proceeding (and other persons with an interest in the license conditions) to submit letters to the Commission addressing the disposition of the conditions. Such letters shall be filed within 15 days of this decision and shall not exceed 15 pages. [23]

[23] Consideration of the Wolf Creek antitrust license conditions is not inconsistent with our holding that the NRC need not conduct ''significant changes'' antitrust reviews of license transfers, for the Wolf Creek conditions were imposed at a licensing stage (initial licensing) when the NRC undoubtedly had antitrust authority. The Commission plainly has continuing authority to modify or revoke its own validly imposed conditions. *See Ohio Edison Co.* (Perry Nuclear Power Plant, Unit 1), CLI-92-11, 36 NRC 47, 54-59 (1992).

E. Rulemaking Versus Adjudication

KEPCo argues that the Commission cannot lawfully eliminate antitrust reviews by pronouncement in an adjudicatory decision, either in general or in this Wolf Creek case in particular, without first resorting to notice and comment rulemaking. *See* KEPCo Brief at 11-14. KEPCo asserts that to do so would violate the NRC's regulations, *id.,* and such a policy determination could not lawfully be binding in other cases, *id.* at 13. We disagree.

As explained above, no NRC regulation explicitly mandates an antitrust review of post-operating license transfer applications. Not one comma of the Commission's current regulations need be changed in the wake of a cessation of such reviews, although because of the NRC's past practice of conducting such reviews, we have decided that clarification of our rules is warranted. Thus, while a dismissal of this antitrust proceeding based on a new but permissible interpretation of the Commission's authority would be contrary to past practice, it would not be contrary to the explicit language of any Commission rule.

With respect to the propriety of deciding in this proceeding that henceforth there will be no antitrust reviews of post-operating license transfer applications in this or any future cases, ''the Supreme Court has repeatedly emphasized that the choice between rulemaking and adjudication 'lies primarily in the informed discretion of the administrative agency.'' *General American Transport Corp. v. ICC,* 883 F.2d 1029, 1031 (D.C. Cir. 1989), *quoting SEC v. Chenery Corp.,* 332 U.S. 194, 203 (1947). *See also Cassell v. FCC,* 154 F.3d 478, 485 (D.C. Cir. 1998).

In fact, what criticism there has been of agencies' use of adjudication to decide new general policy or changes in general policy has focused on the unfairness of doing so without giving nonparties advanced notice and opportunity to comment. *See General Am. Transp. Corp.,* 883 F.2d at 1030, and the authorities cited therein. For the very purpose of avoiding such unfairness, however, the Commission in this case sought *amicus curiae* briefs from ''any interested person or entity'' and received briefs on the issue from a number of nonparties. CLI-99-5, 49 NRC at 200 n.1. Widespread notice of the Commission's intent to decide this matter in this proceeding was provided by publishing that order on the NRC's Web site and in the *Federal Register,* and also by sending copies to organizations known to be active in or interested in the Commission's antitrust activities. *Id.* While KEPCo and others may have preferred that the Commission proceed by rulemaking, the Commission is acting well within its discretion in deciding this matter now in this proceeding.

III. CONCLUSION

For the foregoing reasons, the Commission has concluded that the Atomic Energy Act does not require or even authorize antitrust reviews of post-operating license transfer applications, and that such reviews are inadvisable from a policy perspective. We therefore dismiss KEPCo's petition to intervene on antitrust grounds. Applicants and KEPCo may submit letters to the Commission suggesting the appropriate disposition of the existing antitrust license conditions due to the planned changes in Wolf Creek ownership and operation. All such letters shall be submitted to the Office of the Secretary no later than 15 days after the date of this Order and shall not exceed 15 pages in length. Any other person with an interest in the Wolf Creek antitrust license conditions also may submit a letter, not to exceed 15 pages, within 15 days of the date of this Order. Finally, the NRC Staff will be directed to initiate a rulemaking to clarify the Commission's regulations to remove any ambiguities and ensure that the rules clearly reflect the views set out in this decision.

IT IS SO ORDERED.

For the Commission,

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 18th day of June 1999.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Shirley Ann Jackson, Chairman
Greta Joy Dicus
Nils J. Diaz
Edward McGaffigan, Jr.
Jeffrey S. Merrifield

In the Matter of **Docket No. 11005070**
(License No. XSNM-03060)

TRANSNUCLEAR, INC.
(Export of 93.3% Enriched Uranium) **June 29, 1999**

ATOMIC ENERGY ACT: HEU EXPORT LICENSE

Diplomatic notes containing a foreign government's assurance that it will use LEU targets when such targets become available, provided that their use does not result in a large percentage increase in the total cost of operating the pertinent reactor, constitute assurances sufficient to satisfy AEA section 134a(2). That provision requires that the proposed recipient of HEU provide assurances that, whenever an alternative nuclear reactor target can be used in that reactor, it will use that alternative in lieu of HEU.

ATOMIC ENERGY ACT: HEU EXPORT LICENSE

The requirement under AEA section 134a(3) of an active program for the development of an LEU target that can be used in the particular reactor to which the HEU exports are being made is satisfied where the Commission finds that the principals have executed a confidentiality agreement to enable the principals to forward technical information that would enable a feasibility study to be completed, and have provided information pursuant to that agreement.

ATOMIC ENERGY ACT: COMMON DEFENSE AND SECURITY

Judgments of the Executive Branch regarding the common defense and security of the United States in export licensing proceedings involve matters of its foreign policy and national security expertise, and the NRC may properly rely on these judgments.

MEMORANDUM AND ORDER

I. BACKGROUND

On October 30, 1998, Transnuclear, Inc., as agent for Atomic Energy of Canada, Ltd. (AECL), filed License Application No. XSNM-03060 with the Commission, seeking authorization to export 130.65 kilograms of highly enriched uranium (HEU) containing 121.8966 kilograms of U-235 in the form of uranium dioxide (UO_2) targets. The HEU targets, to be shipped quarterly over a 5-year period, would be irradiated to produce radioisotopes, in particular Mo-99, for medical applications. The targets are to be irradiated in the MAPLE I and 2 reactors, currently in an advanced state of construction, and processed in a new facility at AECL's Chalk River Nuclear Laboratories. The MAPLE reactors and associated processing facility will be operated by AECL on behalf of MDS Nordion (Nordion).[1]

On December 30, 1998, the Nuclear Control Institute (NCI) filed a petition for leave to intervene and a request for hearing on the application. NCI is a nonprofit, educational corporation that disseminates information to the public concerning the proliferation, safety, and environmental risks associated with the use of weapons-useable nuclear materials, equipment, and technology. The Department of State provided the Commission with Executive Branch views on the merits of Transnuclear's application on March 5, 1999. The Executive Branch concluded that the application satisfied the applicable export licensing criteria and requested that the Commission issue the license. After receiving these views and evaluating the pleadings filed in this proceeding, and without ruling on the intervention petition and hearing request, the Commission posed further questions to the participants. CLI-99-9, 49 NRC 314 (1999). The Commission received responses to the questions from NCI, Transnuclear/AECL on April 22, 1999, and from the Executive Branch on April 27, 1999.

On April 26, 1999, the Commission ruled that Petitioner lacked standing under section 189a of the Atomic Energy Act of 1954, as amended (AEA), to

[1] Transnuclear, AECL, and Nordion will be collectively referred to in this Memorandum and Order as ''Applicants.''

intervene and to demand a hearing as a matter of right.[2] The Commission further ruled that a discretionary hearing under 10 C.F.R. § 110.84 was not warranted in this proceeding, because such a hearing would pose unnecessary burdens on the participants without assisting the Commission in making its statutory findings. However, to allow the participants to summarize their positions, and respond to questions from the Commission, the Commission invited all participants to make presentations at a public meeting on June 16, 1999. CLI-99-l5, 49 NRC 366 (1999).

Before that meeting, the Commission posed additional questions to Applicants in a letter, dated May 18, 1999, regarding the possibility of starting up one MAPLE reactor using HEU targets, while delaying the commencement of operation of the second MAPLE reactor until low-enriched uranium (LEU) targets could be developed for use in that reactor. Applicants' June 11, 1999 response detailed Applicants' views that there would be no advantage likely to be gained by such an approach.

The Commission held the public meeting on June 16, 1999, and heard presentations from Applicants, NCI, and the Executive Branch (which included representatives from the Argonne National Laboratory (ANL)). The Commission commends each of the participants for their thoughtful written submissions and oral presentations. The Commission is now confident that it has developed a sufficient record upon which to base its licensing determination.[3]

Before turning to the merits of the application, it is important to note the current state of medical radioisotope production in Canada. Until 1993, two reactors, NRU and NRX, operated to produce Mo-99 (whose decay product, Tc-99m, is used for diagnostic radioimaging) through the irradiation of targets. In 1993, the NRX reactor was permanently shut down. The MAPLE 1 and 2 reactors are being constructed to replace AECL's remaining NRU reactor, which has been operating since 1957 and is currently scheduled to cease large-scale radioisotope production in the year 2000. Transcript of June 16 Commission meeting at 70 (Hereinafter ''Tr.''). Applicants have stated that by the end of

[2] Indeed. NCI had conceded that it is unable to meet the judicial standing tests that the Commission applies in export licensing proceedings. *See* Reply of Petitioner Nuclear Control Institute to the Opposition of Transnuclear, Inc. and Atomic Energy of Canada, Ltd. to the Petition for Leave to Intervene and Request for a Hearing, Feb. 12, 1999 (NCI Reply) at 3.

[3] On June 21, 1999, NCI submitted an additional set of comments to the Commission, which restated the main points of its June 16 presentation, to be discussed *infra.* In addition, this submission offered a new proposal. Under NCI's new plan, the Commission is asked to condition the export license on operating the NRU reactor until a feasibility study and any required modifications are completed at AECL's New Processing Facility (NPF) to accommodate LEU targets. If there are operational problems with the NRU that would interrupt the production of medical isotopes during this time, the MAPLE reactors would commence operation using NRU HEU targets, to produce medical isotopes. The targets would then be processed in the NRU processing facility, in order to keep the NPF ''clean'' pending modification to accommodate LEU targets. The Commission has considered this proposal, but the Commission is of the view that it would be inappropriate to impose any such condition that would dictate how and when a foreign reactor would he operated. The Commission has not adopted this suggestion, particularly since the Schumer Amendment and other requirements for issuance of this export license have been met.

that year, it will no longer be possible to operate the NRU reactor because the associated waste storage tank will be full. Moreover, Applicants have expressed concern about whether the reactor is capable of continuous reliable production due to its age. Currently, the NRU reactor produces approximately 60% of the Mo-99 for use in radiopharmaceuticals worldwide; it is an important source of Mo-99 for the United States.[4] Because the lifetimes of Mo-99 and Tc-99m are extremely short (with half-lives of 66 hours and 6 hours, respectively), it is not possible to stockpile the isotopes. Thus, a continued reliable Canadian supply of medical radioisotopes currently hinges on the NRU reactor, operating without backup until the MAPLE reactors are brought on line. MAPLE 1 is expected to begin operation in the fall of 1999, MAPLE 2 in the spring of 2000. Tr. at 18. Following startup of the MAPLE 1 reactor, NRU will revert to the role of a backup unit. Applicants' Response to Commission Questions (Apr. 21, 1999) at 13. Once MAPLE 2 is operational, NRU will operate as a research reactor, with no further role in routine isotope production. *Id.*

II. STATUTORY REQUIREMENTS FOR AUTHORIZATION OF EXPORT OF HEU TARGETS

Participants' submissions focused primarily on two issues: (1) whether the proposed exports would be in compliance with the ''Schumer Amendment''[5]; and (2) whether the proposed exports would be inimical to the common defense and security of the United States.

A. The Schumer Amendment

The Schumer Amendment, added to the Atomic Energy Act by the Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776 (1992), and subsequently codified in the Commission's regulations at 10 C.F.R. § 110.42(a)(9), imposes the following restrictions on exports of HEU fuel and targets:

> a. The Commission may issue a license for the export of high enriched uranium to be used as a fuel or target in a nuclear research or test reactor only if, in addition to any other requirements of this Act, the Commission determines that —

[4] The Executive Branch has asserted that the NRU reactor supplies more than 60% of the U.S. supply of Mo-99. Views of the Executive Branch at 5 (June 16, 1999). Additionally, the U.S. Department of Energy has found that ''[a] shutdown of this single remaining reactor would jeopardize the U.S. supply of Mo-99.'' Record of Decision for the Medical Isotopes Production Project; Molybdenum-99 and Related Isotopes. 61 Fed. Reg. 48,921, 48,922 (1996). There is currently no reactor in the United States producing Mo-99 but one is being converted at Sandia National Laboratory pursuant to the 1996 Record of Decision.

[5] Atomic Energy Act of 1954, as amended, § 134, 42 U.S.C. § 2160d.

(1) there is no alternative nuclear reactor fuel or target enriched in the isotope 235 to a lesser percent than the proposed export, that can be used in the reactor;

(2) the proposed recipient of that uranium has provided assurances that, whenever an alternative nuclear reactor fuel or target can be used in that reactor, it will use that alternative in lieu of highly enriched uranium; and

(3) the United States Government is actively developing an alternative nuclear reactor fuel or target that can be used in that reactor.

There is no dispute as to whether the first criterion has been satisfied; all participants agree there is currently no LEU target available that ''can be used'' in the MAPLE reactors.[6] The arguments in this proceeding thus have focused on whether the other two criteria, and principally criterion three, have been satisfied. NCI argues that these two criteria are not satisfied, and therefore, the Commission must deny Applicants' request for a license.

1. Governmental Assurances That LEU Targets Will Be Used When Available

NCI asserts that the Canadian government has provided insufficient assurances that LEU targets will be used if developed. NCI argues that AECL failed to provide information and cooperation to ANL,[7] which has slowed progress on an active program to develop targets for the MAPLE reactors. Petition of the Nuclear Control Institute for Leave to Intervene and Request for Hearing (Pet.) at 23. In addition, during the June 16 meeting, NCI stated that the lack of a firm agreement between the United States and Canadian governments as to cost-sharing aspects of the ANL target development program undercuts prior governmental commitments to seek to develop LEU targets. Tr. at 85; Statement of Paul L. Leventhal and Alan J. Kuperman at 2, 4.

Based on its examination of the record, the Commission does not reach the same conclusion. The Embassy of the United States in Canada and the Canadian Ministry of Foreign Affairs exchanged diplomatic notes on September 4, 1997. These notes reflect Canada's assurance that it will use LEU targets when such targets become available, provided that their use does not result in a large percentage increase in the total cost of operating the pertinent reactor

[6] AEA subsection 134b(3), which has been codified in the Commission's regulations at 10 C.F.R. § 110.42(a)(9)(ii), states: ''a fuel or target 'can be used' in a nuclear research or test reactor if

(A) the fuel or target has been qualified by the Reduced Enrichment Research and Test Reactor [RERTR] Program of the Department of Energy, and

(B) use of the fuel or target will permit the large majority of ongoing and planned experiments and isotope production to be conducted in the reactor without a large percentage increase in the total cost of operating the reactor.''

[7] ANL, under contract with the Department of Energy, is tasked with the implementation of the RERTR program, a program to develop LEU fuel and targets for research and test reactors.

(including the necessary associated equipment for the production and processing of medical isotopes). This language in the notes mirrors that used in AEA subsection 134a(2) and subsection 134b(3)(B).[8]

We are satisfied that these notes constitute assurances sufficient to satisfy the requirement of subsection 134a(2). *See* CLI-98-10, 47 NRC 333, 338 n.5 (1998). As discussed more fully below, we further believe that in recent months the interactions between the Applicants and ANL reveal a clearer commitment by the Applicants to utilize LEU targets should they become available at reasonable cost.

2. ''Active Development'' of LEU Targets for the MAPLE Reactors

The core of NCI's argument is that the third criterion, AEA subsection 134a(3), is not met because the United States government is not currently ''actively developing'' an alternative nuclear reactor target suitable for use in the production of medical isotopes in the MAPLE reactors. NCI contends that, through informal contacts with ANL, it has learned that Applicants have not shared with ANL the information necessary to begin actively developing an LEU target suitable for the MAPLE reactors. *See, e.g.,* NCI Reply at 14: Leventhal Decl. ¶ 36.

At the time NCI filed its pleadings with the Commission, the continuing existence and extent of an active program to develop LEU targets for use in the MAPLE reactors were not readily apparent. As detailed below, however, actions taken by the participants, particularly since the issuance of CLI-99-9 on April 8, 1999, satisfy us that an active LEU target development program for the MAPLE reactors is currently under way at ANL.

Following review of the Executive Branch's March 5, 1999 letter, and the pleadings of NCI and Applicants, the Commission concluded that it should seek additional information prior to making a decision on the license application. The Commission was particularly concerned that there appeared to be limited progress made on the LEU target development program since the Commission's June 5, 1998 approval of licenses to export HEU for use as target material in the NRU and MAPLE reactors. *See* CLI-98-10. The participants' initial submissions reflected the following actions:

> (1) On November 5, 1998, a meeting was held between representatives of ANL, AECL and Nordion to discuss cooperation in developing LEU targets and processes for Mo-99 production. At that time, the parties executed a non-disclosure agreement to protect proprietary information of ANL, AECL, and Nordion during future discussions.

[8] Section 134b(3)(B) does not define ''total cost of operating the reactor.'' For the purposes of this export license, Canada and the United States provided that ''total cost'' includes costs associated with equipment for processing.

(2) A December 23, 1998 letter from J. Labrie, AECL, to A. Travelli, ANL, indicated that AECL would require a further agreement, primarily to protect its intellectual property rights, prior to disclosure of its technology to ANL.

(3) In its March 5, 1999 submission of Executive Branch views, the State Department enclosed a letter from T. Dedik, Department of Energy, to R. Stratford, U.S. Department of State, detailing a January 12, 1999 meeting between Nordion representatives and ANL to discuss the program to convert the HEU targets for the MAPLE project to LEU targets.[9]

Due to the seeming lack of significant progress on the program implied in the pleadings, the Commission posed a series of questions, contained in an Appendix to CLI-99-9, in order to obtain, inter alia, updates on the status of the NRU reactor and the MAPLE project, and current information as to funding of DOE's RERTR program to develop alternative LEU targets for the MAPLE reactors. The participants' written responses to these questions, as well as presentations made at the June 16 public meeting, furnished new information and evidence of a currently active program at ANL for the development of LEU targets for use in the MAPLE project.

The responses indicated that, on March 18, 1999, representatives from Nordion met with representatives of the Executive Branch. At that time, Nordion again confirmed its move toward the use of LEU targets. During the period March 24–April 19, 1999, the participants continued to meet and work toward completion of a confidentiality agreement.

On June 16, the Commission was informed that ANL, AECL, and Nordion executed a tripartite confidentiality agreement on May 13, 1999, after more than a year of meetings on the subject. AECL subsequently forwarded technical information to ANL on May 20, 1999. Although ANL informed the Commission that further technical information is required from AECL, we understand no further confidentiality agreements are required in order to effectuate this transmission of information and allow ANL's work to go forward. We learned at the June 16 meeting that an intellectual property agreement remains to be negotiated, but it is our understanding that this agreement is not essential for ANL to prepare a feasibility study — the next step in the development of LEU targets for the Maple reactors. This study will enable Applicants to determine the probability of success of conversion to LEU targets, address the technical challenges presented by the conversion process, set a meaningful schedule for conversion, and make appropriate cost estimates. Tr. at 115.

In its Response to Commission Questions, the Executive Branch stated that, of $1 million in funding slated for target work under the RERTR program

[9] The letter included a finding by DOE and the RERTR program managers that the course of action being followed continued to meet the requirements of the third criterion of the Schumer Amendment.

in FY99,[10] approximately $75,000 is set aside for work with AECL/Nordion. Executive Branch representatives at the June 16 meeting stated that this seemingly modest sum would be sufficient to enable ANL to complete the feasibility study. ANL representatives also indicated that, once ANL has received additional necessary information from Applicants, this study can be completed in approximately 3 months. Thus, the expectation is that the feasibility study will be completed well before the end of 1999.[11]

Based upon our assessment of the new information the Commission has received, particularly over the last 2 months, we are satisfied that an active program is under way for the development of LEU targets for the MAPLE reactors, as required under subsection 134a(3). Thus, all requirements of the Schumer Amendment have been met in this proceeding.

B. Other Export Licensing Criteria

As part of its licensing decision the Commission must determine whether the other applicable export licensing criteria have been satisfied. There is no disagreement here that the nonproliferation criteria set forth in AEA sections 127 and 128 have been met. Thus, the last finding the Commission must make is whether issuance of the proposed export would be ''inimical to the common defense and security of the United States.'' AEA § 57c(2); 10 C.F.R. §§ 110.42(a)(8), 110.45(a). NCI contends that the approval of the proposed export would imply a more generalized U.S. approval of the continued use of HEU in research or test reactors which would ultimately discourage foreign reactor operators from converting to LEU. Pet. at 24. NCI is also concerned that the proliferation and terrorism risks associated with increasing the amount of international traffic of HEU outweighs the benefits of the proposed export. *Id.* at 25.

The State Department, in its March 5, 1999 transmittal of Executive Branch views, determined that ''the proposed export would not be inimical to the common defense and security of the United States.'' In making this determination, the State Department consulted with the Defense Department to confirm that physical protection measures will be adequate to deter theft, sabotage, and other acts of international terrorism that would result in diversion of the material during the export. Views of the Executive Branch (June 16, 1999) at 2.

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[10] DOE intends to fund ANL for target work at the same level for FY2000. Executive Branch Response to Commission Questions at 1 (Apr. 27, 1999).

[11] From the representations at the June 16, 1999 meeting, we expect the Applicants to provide the additional information requested by ANL expeditiously, and we would similarly expect ANL to complete its feasibility study as promptly as possible. Prompt completion of the feasibility study might permit any necessary modifications to the MAPLE reactor processing facility to be made before the processing facility commences operation. *See* Section III of this Order.

Judgments of the Executive Branch regarding the common defense and security of the United States involve matters of its foreign policy and national security expertise, and the NRC may properly rely on those conclusions. *See Natural Resources Defense Council v. NRC,* 647 F.2d 1345, 1364 (D.C. Cir. 1981). Canada's nonproliferation credentials are exemplary. Canada is a party to the Treaty on the Nonproliferation of Nuclear Weapons and the Convention on the Physical Protection of Nuclear Materials. The Canadian government places all of its peaceful nuclear activities under International Atomic Energy Agency (IAEA) safeguards, and adheres to the IAEA Recommendations on the Physical Protection of Nuclear Materials (INFCIRC/225/rev. 4). The Canadian Atomic Energy Control Board has confirmed that this proposed export would be subject to all the terms and conditions of the existing Agreement for Cooperation Concerning the Civil Uses of Atomic Energy Between the Government of Canada and the Government of the United States. Moreover, Canada has adopted the Nuclear Supplier Group Guidelines, and is a member of the NPT Exporters Committee (''Zangger Committee'').

Although the Commission is mindful of NCI's concerns, we hold that the Executive Branch conclusions and Canada's longstanding nonproliferation policies support a finding that this proposed export will not be inimical to the common defense and security of the United States. Indeed, as discussed below, the conditioned approval of this license to export HEU targets for use in the short term promotes a program for use of LEU targets in the long term which directly serves the objective of the Schumer Amendment and the U.S. policy goal of reducing international commerce in weapons-grade material.

III. ISSUANCE OF THE LICENSE

The Commission has determined that the export licensing criteria set forth in the Atomic Energy Act are satisfied and directs the Office of International Programs to issue license XSNM-03060 to Transnuclear, Inc. Specifically, the Commission finds that the export licensing criteria set forth in AEA sections 127, 128, and 134 have been met. Moreover, pursuant to AEA sections 53 and 57, issuance of this license would not be inimical to the common defense and security or constitute an unreasonable risk to the health and safety of the public.

To ensure that the provisions of the Schumer Amendment continue to be met, the Commission directs that the 5-year license be conditioned to require the Applicants to submit in writing to the Commission a yearly status report detailing the progress of the program and Canadian cooperation in developing LEU targets for the MAPLE reactors. The first report should be submitted 60 days prior to the first quarterly shipment that will take place after July 1, 2000. Thus, if a shipment is scheduled for July 4, 2000, the NRC should

receive a status report no later than May 8, 2000. Further annual reports will be required no later than 365 days after the submission of the first annual report. At the June 16 meeting, the Executive Branch offered to provide the Commission with a similar annual status report communicating the Executive Branch's views on the progress in development of LEU targets for the MAPLE reactors. The Commission accepts this offer and requests that the Executive Branch report be submitted to the Commission annually no later than 30 days after the submission of Applicants' report. The Executive Branch reports should include assurances that the funds necessary to develop the LEU targets in a timely manner have been made available to ANL. The Commission intends to place both the Applicants' reports and the Executive Branch reports in the Public Document Room. Therefore, proprietary information should be handled as an annex to the reports so that the information can be easily segregated from the rest of the reports. Upon examination of the reports, the Commission may hold a public meeting, if necessary, to gather additional information. If the Commission should make a finding, following review of these periodic status reports and a public meeting, if necessary, that the requirements of the Schumer Amendment are not being met, the Commission may modify, suspend, or revoke the license pursuant to section 186 of the AEA and 10 C.F.R. § 110.52.

From the assurances provided to the Commission in the June 16, 1999 meeting, it is the Commission's understanding that ANL will be able to complete a feasibility study promptly, within approximately 3 months of receiving the necessary technical information. The Commission further understands that AECL will cooperate fully with ANL to complete a feasibility study as soon as possible. In light of these commitments, the Commission is encouraged that AECL may have a feasibility study in hand in time to consider whether minor modifications could be made prior to the MAPLE reactors and their processing facility coming on line that would permit the use of LEU targets, or take other reasonable measures that would at least preserve the opportunity to move to LEU targets in the future. To ensure compliance with the Schumer Amendment, the Commission expects Applicants to pursue all reasonable measures that would not cause ''a large percentage increase in the total cost of operating the reactor.'' Having said this, we recognize that in determining whether changes are feasible, Applicants will have to consider the commitments it has made to the Canadian government and its customers with respect to ensuring the supply of medical isotopes and otherwise keeping costs to a minimum.

Commissioners Diaz and McGaffigan, believing that the Commission did not have adequate assurance that active development of LEU targets for the MAPLE reactors would continue, voted to limit the license to 60% of the requested amount of HEU.

It is so ORDERED.

For the Commission[12]

ANNETTE VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland,
this 29th day of June 1999.

[12] Commissioner Diaz was not available for affirmation of this Memorandum and Order. Had he been present, he would have voted to disapprove the 5-year license and would have limited the license to 60% of the requested amount of HEU.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. Thomas S. Elleman
Thomas D. Murphy

In the Matter of **Docket No. 50-029-LA-R**
(ASLBP No. 99-754-01-LA-R)
(License Termination Plan)

YANKEE ATOMIC ELECTRIC COMPANY
(Yankee Nuclear Power Station) **June 14, 1999**

In a proceeding considering the adequacy of a License Termination Plan LTP) for the Yankee-Rowe reactor, where portions of the proceeding are pending before the Atomic Safety and Licensing Board as well as before the Commission (in its reviewing capacity), the Licensing Board determines that it should address in the first instance the Licensee's motion (addressed to the Commission, with copies to the Licensing Board) to withdraw its current LTP and terminate the proceeding. The Licensing Board also permits parties to respond to an Intervenor's motion to condition termination on the Licensee's payment to the Intervenor of certain costs (including attorney's fees) and fulfillment of certain tasks (such as response to outstanding discovery requests).

RULES OF PRACTICE: TERMINATION OF PROCEEDING

When a proceeding is pending both before an Atomic Safety and Licensing Board and the Commission (in its reviewing capacity), and where the Licensing Board has previously issued a Notice of Hearing, jurisdiction to consider a

Licensee's motion to withdraw its application and terminate the proceeding lies in the first instance with the Licensing Board. 10 C.F.R. § 2.107. (Jurisdiction to dismiss the pending appeal lies with the Commission.)

MEMORANDUM AND ORDER
(Requesting Replies to NECNP Response to Termination Motion)

I. BACKGROUND

Pending before this Atomic Safety and Licensing Board is the request of Yankee Atomic Electric Company (YAEC or Licensee) for approval of a License Termination Plan for the Yankee Nuclear Power Station, a nuclear reactor that is located in Rowe, Massachusetts (hereinafter, Yankee-Rowe). The Commission, in CLI-98-21, 48 NRC 185 (1998), determined that two petitioners for intervention — the New England Coalition on Nuclear Pollution (NECNP) and the Citizens Awareness Network (CAN) — had standing to challenge the LTP, and it remanded the proceeding to the Licensing Board to determine whether the Petitioners had any viable contentions (with respect to which it spelled out a number of standards, both generic and specific, that would be applicable).

In a Prehearing Conference Order issued following the holding of a prehearing conference in Greenfield, Massachusetts, the Licensing Board extensively analyzed all of the 33 contentions proffered by NECNP and CAN and admitted four that had been consolidated from those sponsored jointly by both Intervenors. LBP-99-14, 49 NRC 238 (1999). (We also permitted the Franklin Regional Council of Governments to participate as an interested governmental entity under 10 C.F.R. § 2.715(c)).

Shortly thereafter, on March 29, 1999 (prior to the telephone conference on scheduling of discovery and the evidentiary hearing that we had set for March 31, 1999), YAEC filed a motion for us to reconsider one of the four contentions that we had admitted. On April 1, 1999, the day following the scheduling conference, YAEC appealed to the Commission our admission of all four contentions (not merely the one for which it had sought reconsideration). On April 6, 1999, we issued a Notice of Hearing, based on our approval of the four contentions together with the Commission's earlier determination of standing for the two Intervenors. *See* 64 Fed. Reg. 17,689 (Apr. 12, 1999). On April 22, 1999, we denied YAEC's above-referenced motion for reconsideration of one of the four admitted contentions. LBP-99-17, 49 NRC 375. The Licensee's appeal of all four contentions has not yet been acted upon.

On April 1, 1999, the NRC Staff issued an Environmental Assessment and Finding of No Significant Impact for the LTP that is the subject of this

proceeding. (The EA/FONSI was published in the Federal Register on April 12, 1999, 64 Fed. Reg. 17,690.) On May 17, 1999, NECNP filed proposed late-filed contentions based on the EA. Presumably reflecting other developments in this proceeding, as described below, no responses to these contentions have been filed, and we have not taken any action with regard to them.

II. MOTION TO TERMINATE PROCEEDING

On May 13, 1999, YAEC filed a Board Notification advising the Commission, Licensing Board, and parties that it would be modifying its plan for the final status survey of the site (a significant portion of the LTP) so as to employ a so-called MARSSIM survey methodology (*see* NUREG-1575/EPA 402-R-97-106, dated December 1997) in lieu of the survey methodology based on NUREG/CR-5849 (draft dated June 1992). The Board Notification indicated that YAEC had not yet determined the implications of this change for this proceeding and that a further notification would follow when that determination was made.

Subsequently, on May 26, 1999, YAEC filed another Board Notification with the Commission (with copies to this Board and the parties), advising that YAEC had withdrawn its application for an operating license amendment approving the LTP and that no date had been set for submission of a new LTP. (YAEC indicated that, in its opinion, it could submit its new LTP concurrently with its license termination request, which it did not envision as being filed ''for at least a decade.'' YAEC also moved, in accordance with 10 C.F.R. § 2.107, for the proceeding to be terminated, noting that all contentions dealing with its existing LTP would be moot with respect to a new LTP. In passing, YAEC suggested to the Commission that its appeal of the four contentions admitted in LBP-99-14 had become moot and likewise should be dismissed.

Two separate responses have been filed by NECNP on behalf of the Joint Intervenors. By a filing dated June 5, 1999, NECNP supported YAEC's dismissal motion but sought dismissal with prejudice. NECNP construed the dismissal motion as being filed both with the Commission and this Licensing Board, and it construed 10 C.F.R. § 2.107 as placing responsibility for termination conditions with this Board. (NECNP also construed ''Presiding Officer'' in that section to refer to the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel, but inasmuch as this Licensing Board has been named Presiding Officer for this proceeding (*see* 10 C.F.R. § 2.721), we shall construe NECNP's references to ''Presiding Officer'' to refer to us.) YAEC, by filing dated June 7, 1999, opposes the ''with prejudice'' portion of NECNP's response.

NECNP's second response to the termination motion, dated June 7, 1999, was filed directly with this Board. It opposes the termination motion absent YAEC's reimbursement to it of listed costs and expenses, including attorneys'

fees (totaling $56,494 for NECNP and $3,363 for CAN) and fulfillment of certain other tasks such as responding to certain interrogatories, production of certain documents to Intervenors (with the responses and documents to be both provided to Intervenors and placed in the local public document room), and conduct of a geological investigation to respond to the claims made by its expert, Robert Ross, of Ross Environmental Associates, Inc. (submitted in support of the Intervenors' proposed contentions on the Environmental Assessment).

III. JURISDICTION TO DECIDE TERMINATION MOTION AND REQUEST FOR INFORMATION

Given our prior issuance of a Notice of Hearing, we deem that, pursuant to 10 C.F.R. § 2.107, the authority not only to rule on the terms and conditions that may accompany termination but on the termination motion itself lies with this Board. *See Duke Power Co.* (Perkins Nuclear Station, Units 1, 2, and 3), ALAB-668, 15 NRC 450 (1982). (Only the Commission, of course, has authority to dismiss as moot the appeal pending before it.) Before reaching the termination motion and related relief sought by NECNP, however, we invite the parties, in accordance with 10 C.F.R. § 2.730(c), to reply to NECNP's June 7, 1999 response that seeks the above-described terms and conditions for termination. We also would like parties to reply to YAEC's opposition to termination with prejudice (which appears to deal only with the viability of the current accepted contentions in a future proceeding involving a different LTP), commenting in particular on the impact of a dismissal with prejudice on the Commission's rulings concerning NECNP's and CAN's standing to participate, particularly with respect to a proceeding involving a future LTP submitted by or on behalf of YAEC.

Replies and further responses, as set forth above, should be submitted (mailed) to this Board no later than 10 days following service of this Memorandum and Order (15 days in the case of the NRC Staff).

IT IS SO ORDERED.

FOR THE ATOMIC SAFETY
AND LICENSING BOARD

Charles Bechhoefer, Chairman
ADMINISTRATIVE JUDGE

Rockville, Maryland
June 14, 1999

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bol1werk, 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) **June 17, 1999**

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), acting pursuant to 10 C.F.R. § 2.749, the Licensing Board grants summary disposition in favor of PFS in connection with contention Utah C — Failure to Demonstrate Compliance with the NRC Dose Limits — on the ground the contention has become moot in light of information subsequently provided in a PFS license application amendment.

RULES OF PRACTICE: SUMMARY DISPOSITION

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.''

RULES OF PRACTICE: SUMMARY DISPOSITION (BURDEN OF PERSUASION; BURDEN OF PROOF)

The movant bears the initial burden of making the requisite showing that there is no genuine issue as to any material fact through the use 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: SUMMARY DISPOSITION

When summary disposition is being sought based on a contention's mootness in light of revised information submitted by an applicant in response to NRC Staff requests for additional information (RAI), a summary disposition motion is not premature because the information was not incorporated into a license application amendment until after the dispositive motion was filed. Regardless of the situation prior to the submission of the application amendment, given there is no material dispute that the application currently contains the RAI information, nothing precludes the entry of summary disposition.

RULES OF PRACTICE: SUMMARY DISPOSITION

When summary disposition is being sought based on a contention's mootness in light of revised information submitted by the applicant, a challenge to the validity of the revised information does not support the notion there is a controversy, factual or otherwise, regarding the existing contention so that summary disposition is inappropriate; instead, this is an argument in favor of a new contention.

MEMORANDUM AND ORDER
(Granting Motion for Summary Disposition Regarding Contention Utah C)

Applicant Private Fuel Storage, L.L.C. (PFS), has requested that summary disposition be entered in its favor regarding contention Utah C — Failure to Demonstrate Compliance with NRC Dose Limits — because that issue is now

moot. As admitted, that contention details Intervenor State of Utah's (State) assertion that, for various reasons, the PFS application for its proposed Skull Valley, Utah 10 C.F.R. Part 72 independent spent fuel storage installation (ISFSI) does not adequately evaluate the dose consequences of a loss-of-confinement accident. According to PFS, however, there is no genuine issue as to any material fact relevant to this contention so that, in accordance with 10 C.F.R. § 2.749, it is entitled to a determination on this contention as a matter of law. The NRC Staff supports this request, while the State, as the contention's sponsor, opposes it.

For the reasons described below, on this issue we grant summary disposition in favor of PFS.

I. BACKGROUND

In our April 1998 initial ruling on contention admissibility, we admitted three of the eight paragraphs that made up contention Utah C as supported by bases establishing a genuine material dispute adequate to warrant further inquiry. *See* LBP-98-7, 47 NRC 142, 185-86, *aff'd on other grounds,* CLI-98-13, 48 NRC 26 (1998). As accepted for litigation, the contention reads as follows:

> UTAH C — Failure to Demonstrate Compliance with NRC Dose Limits
>
> CONTENTION: The Applicant has failed to demonstrate a reasonable assurance that the dose limits specified in 10 C.F.R. § 72.106(b) can and will be complied with in that:
>
> 1. [The] License Application makes selective and inappropriate use of data from NUREG-1536 for the fission product release fraction.
> 2. [The] License Application makes selective and inappropriate use of data from SAND80-2124 for the respirable particulate fraction.
> 3. The dose analysis in the License Application only considers dose due solely to inhalation of the passing cloud. Direct radiation and ingestion of food and water are not considered in the analysis.

Id. at 251. Subsequently, this contention was placed in litigation Group I, which currently includes eleven issues relating to PFS facility safety and security that are scheduled to go to hearing first in this proceeding. *See* Licensing Board Memorandum and Order (Additional E-Mail Address for Administrative Judge Kline and Revised General Schedule) (May 18, 1999) Attach. A n.l (unpublished).

As the language of the contention makes clear, the regulatory underpinning for Utah C is paragraph (b) of section 72.106 of Title 10 of the *Code of Federal Regulations,* which states that ''[a]ny individual located on or beyond the nearest boundary of the controlled area may not receive from any design basis accident

the more limiting of a total effective dose equivalent of 0.05 Sv [(sievert)] (5 rem), or the sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue (other than the lens of the eye) of 0.5 Sv (50 rem).'' Moreover, from the State's statement of basis for the admitted portions of the contention, it is clear that the focus of its concern is the dose analysis in section 8.2.7.2 of the Safety Analysis Report (SAR) that accompanied the June 20, 1997 PFS ISFSI application, which the State asserts generally ''makes selective and inappropriate use of data sources regarding doses, and fails to take important dose contributors into account.'' [State] Contentions on the Construction and Operating License Application by [PFS] for an [ISFSI] Nov. 23, 1997) at 18 [hereinafter Utah Contentions]. Specifically, in describing the basis for the admitted portions of this contention, the State declared:

1. In the table on page 8.2-37 of the SAR, PFS inappropriately assumed that the fraction of fission products Cesium(Cs)-134, Cs-137, and Strontium(Sr)-90 that will be released into the storage canister is 2.3 E-5, based on NUREG-1536, the Standard Review Plan for Dry Cask Storage Systems (Jan. 1997), notwithstanding the fact that a Sandia National Laboratories report concerning transportation accidents, SAND80-2124, Transportation Accident Scenarios for Commercial Spent Fuel (Feb. 1981), that PFS subsequently uses for its estimate of a respirable particulate fraction provides an estimate of 4E-3 that is 200 times greater.
2. The PFS SAR dose analysis inappropriately relied upon SAND80-2124 to support its release fraction assumption that 90% of the — volatiles (Cobalt(Co)-60, Sr-90, Iodine(I)-129, Ruthenium(Ru)-106, Cs-134, and Cs-137) released from the spent fuel to the canister will not escape the canister given the fact that the Sandia report is based on a high-velocity cask breach impact while the SAR scenario involves an onsite storage accident.
3. The PFS dose analysis inappropriately relied upon the Sandia report for — its assumption that only 5% of the release fraction of Co-60 and Sr-90 will be respirable (i.e., have a particulate diameter of less than 10 microns) given that (a) PFS did not explain why it was appropriate to use that assumption but not the Sandia report initial release assumption; and (b) the Sandia report is based upon a transportation accident involving impact and fire rather than the SAR-evaluated onsite fuel failure accident, which should result in a greater respirable percentage.
4. The PFS dose analysis did not take into account the dose contribution from pathways other than inhalation of the passing cloud, such as direct radiation from cesium deposited on the ground and ingestion of food and water or incidental soil ingestion in violation of 10 C.F.R. § 72.24(m).

See id. at 19-21.

In an April 21, 1999 motion for summary disposition regarding Contention C, which is supported by the affidavit of PFS assistant project manager William Hennessy, PFS asserted that, as a consequence of its revision of the dose analysis for the PFS facility, (1) there no longer are any material facts in dispute relative to contention Utah C; and (2) because the contention has been rendered moot, PFS is entitled to a ruling in its favor as a matter of law. *See* [PFS] Motion for Summary Disposition of Utah Contention C — Failure to Demonstrate Compliance with NRC Dose Limits (Apr. 21, 1999) at 2-3 [hereinafter PFS Motion].

PFS declared this is so based on one of its February 10, 1999 responses to the Staff's December 10, 1998 requests for additional information (RAI), specifically RAI 7-1, in which it provided a new dose calculation for a postulated loss of confinement event in accordance with new Staff guidance, Interim Staff Guidance-5 (ISG-5), Accident Dose Calculations (Sept. 1998). According to PFS, in the new calculations it did not use the NUREG-1536 fission product release fractions, relying instead on the fractions from NUREG-1617, Standard Review Plan for Transportation Packages for Spent Fuel (draft Mar. 1998), in accordance with ISG-5. Nor did PFS assume that 90% of the volatile fission products released from the spent fuel would be retained in the canister; instead, it assumed that 100% of the volatile fission products are available for release. Further, it no longer used the 5% Co-60 and Sr-90 respirable release assumption in SAND80-2124, but rather based its analysis on the assumption that the respirable fraction for all released materials is 100%. Finally, PFS asserted its new dose calculation considers other applicable dose pathways in addition to passing cloud inhalation, including direct exposure to contaminated ground, inhalation or resuspended radioactive material, ingestion of milk and beef following grazing, and soil ingestion. PFS acknowledged, however, that it does not include water as an applicable dose pathway because this would involve surface drinking water and there is no public or private surface drinking water in the vicinity of the PFS facility. *See* PFS Motion at 17-18; *see also id.* Statement of Material Facts on Which No Genuine Dispute Exists at 2-3 [hereinafter PFS Material Pacts Statement].

In its May 11, 1999 response to the PFS summary disposition motion, the Staff declared its support for the PFS summary disposition request. In its response, which is supported by the joint affidavit of Elaine Keegan, a health physicist in the Staff's Spent Fuel Project Office, and James Weldy, a research engineer with the Center for Nuclear Waste Regulatory Analysis, a division of the Southwest Research Institute that provides contract technical assistance to the Staff, the Staff declared that the PFS February 1999 revised dose analysis submitted to the Staff in response to the December 1998 RAI satisfactorily addressed each of the concerns raised in contention Utah C. *See* NRC Staff's

Response to [PFS] Motion for Summary Disposition of Utah Contention C (Dose Limits) (May 11, 1999) at 11-15 [hereinafter Staff Response].

The State does not agree. In its May 11, 1999 response to the PFS motion, which is supported by the affidavit of Dr. Marvin Resnikoff, a senior associate with the private consulting firm Radioactive Waste Management Associates, the State asserted that, notwithstanding the revised analysis included in the PFS RAI response, there are still material factual disputes relative to Utah C that make summary disposition inappropriate. Acknowledging that the revised PFS analysis does incorporate the various ''alleged new conservatisms'' described in its motion, the State nonetheless declared that analysis likewise is footed on several questionable assumptions. [State] Opposition to [PFS] Motion for Summary Disposition of Contention [Utah] C (May 11, 1999) at 5 [hereinafter State Response]. The State points out that rather than adhering to the SAR assumption that the cask breaks open, based on Table 4-1 to NUREG-1617 the RAI response assumes the cask leaks very slowly. In addition, based on ISG-5, PFS also makes other assumptions that are questionable or different from, or not discussed in, the SAR, including a 30-day limit to the postulated release; the fence line (500 meter) dose is received only for 2,000 hours per year; and the deposited material is mixed with the top 1 centimeter of soil. *See id.* at 5, 11-15. The State also maintained that contention Utah C is not moot, and thus summary disposition is not appropriate, because although the calculations and assumptions in the RAI analysis differ from the SAR, PFS has not amended the SAR to change its dose calculations. *See id.* at 5-6, 7-11; see also [State] Reply to NRC Staff's Response to [PFS] Motion for Summary Disposition of Utah Contention C (Dose Limits) (May 20, 1999) at 1-2.

Some 10 days after the State and Staff responses, Applicant Private Fuel Storage, L.L.C. (PFS), provided the Board with a copy of Amendment No. 3 to its proposed Skull Valley ISFSI. Among other things, that May 19, 1999 amendment, which was sent to the State, revises chapter eight of the PFS SAR to incorporate the February 1999 RAI revised dose analysis for a postulated loss of confinement event.

In a June 2, 1999 directive, the Board provided the parties with an opportunity to address the impact of this information on the pending PFS motion for summary disposition regarding Utah C. In a response filed June 8, 1999, PFS asserted that the amendment had no significance because summary disposition was appropriate based on its RAI response. *See* [PFS] Brief in Response to Atomic Safety and Licensing Board's June 2, 1999 Memorandum and Order (June 8, 1999) at 3. The Staff took the position that the filing of the application amendment resolved any outstanding questions regarding the grant of summary disposition. *See* NRC Staff Comments Concerning the Effect of the May 19, 1999 License Application Revision on [PFS] Motion for Summary Disposition of Utah Contention C (Dose Limits) (June 4, 1999) at 7. On the other hand,

citing the Commission's decision in *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041 (1983), the State declared that the amendment only serves to confirm its position that the PFS dispositive motion was premature in that the motion, based only on the PFS RAI answers, lacked a sufficient substantive basis until the SAR amendment was filed. The State thus asserted that the motion should be denied and it should be given a reasonable opportunity to amend or withdraw Utah C. *See* [State] Response Regarding Significance of License Amendment Application with Respect to Motion for Summary Disposition of Utah Contention C (June 8, 1999) at 4-5 [hereinafter State Amendment Response].

II. ANALYSIS

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).

In this instance, PFS has provided a statement of material facts, accompanied by the supporting affidavit of an individual competent to attest to those matters, that indicates the deficiencies alleged in the three admitted portions of contention Utah C have been addressed in the new dose analysis submitted in February 1999. As to the first two portions of the contention concerning the fission product release fraction and the respirable particulate fraction, PFS has responded to the State's concerns about its use of data from NUREG-1536 and SAND80-2124 to arrive at those fractions by eliminating those figures as a basis for its dose analysis. *See* PFS Motion, Material Facts Statement at 2 (Paragraph 6). Instead, for the former fraction, in accordance with recent Staff guidance provided in ISG-5, it uses a figure from NUREG-1617. For the latter, it uses no fraction for radionuclide release, but assumes that all (100%) of that material will be dispersed. *See id.* at 2, 3 (Paragraphs 8, 14). And regarding the third segment of the contention — failure to consider dose pathways other than passing cloud inhalation, including direct radiation and food and water ingestion pathways —

the new analysis does consider other pathways, including direct exposure to contaminated ground, inhalation of resuspended radioactive material, ingestion of milk and beef following grazing, and ingestion of soil. *See id.* at 3 (Paragraph 17). The analysis does not, however, include water as a dose pathway because for such a pathway to be significant it would need to include surface water and, according to PFS, there are no public or private surface drinking water supplies in the vicinity of the PFS facility. *See id.* (Paragraph 18).

For its part, the Staff does not disagree with any portion of this showing by PFS. Indeed, its submission, accompanied by two affidavits of persons competent to aver to the matters at issue in the motion, supports the PFS summary disposition request by indicating that the Staff finds the PFS revised dose analysis both conforms to applicable Staff guidance and satisfies applicable agency requirements, including 10 C.F.R. §§ 72.24(m), 72.106(b). The Staff concludes that upon revision of the SAR to reflect the revised dose analysis, PFS will have satisfied the NRC regulatory requirements concerning loss-of-confinement offsite dose consequences analysis. *See* Staff Response at 14-15; *see also id.* Affidavit of James Weldy and Elaine Keegan Concerning Utah Contention C (Dose Limits) (May 11, 1999) at 11-13.

In light of these submissions, PFS seemingly has met its initial burden of showing that there are no material facts in dispute regarding contention Utah C.[1] Further, those facts, if uncontroverted, would establish that the issues presented in Utah C are no longer in controversy. As such, it is incumbent upon the State to establish that a disputed material factual issue exists relative to Utah C or there is some other defect in the motion.

It seeks to do so in two ways. First, the State declares that with the recent PFS application, the motion is premature because the necessary support for the motion — the amendment application — was not submitted until after the motion was filed.[2] This argument, in turn, hinges on the notion that until PFS formally incorporated the analysis it provided in its RAI response into its application, that analysis lacked sufficient regulatory significance to support a dispositive motion.

We are unable to conclude that the timing of the PFS motion vis-á-vis its application amendment acts as a bar to the entry of summary disposition regarding Utah C. As the State notes in its June 8 response, ''[t]he SAR now conforms to the dose calculations provided by PFS in its February 1999 RAI

[1] As we discuss below, the ultimate issue of the validity of the revised PFS calculations is not now before us. we thus do not view the Staff's analysis as conclusive evidence that the revised PFS calculations are ''correct.'' Instead, the Staff's appraisal supports the notion that the revised PFS computations are facially sufficient to support the PFS ''mootness'' argument regarding Utah C.

[2] As a variation on this theme, prior to the PFS application amendment the State maintained that, contrary to PFS's assertion, Utah C was not moot because PFS had not amended its application. *See* State Motion Response at 5-6, 7-ll.

Response.'' State Amendment Response at 3. Thus, whatever the situation prior to the submission of the PFS application amendment, there is no question now that the PFS application incorporates the revised dose calculations that were in the RAI. Given there is not a material dispute over the present status of the application relative to the RAI calculations,[3] we find nothing on that score that precludes the entry of summary disposition at this juncture.[4]

As the other ground for its assertion that summary disposition is inappropriate, the State relies on the fact that it does not necessarily agree with (and needs further information regarding) the validity of the revised PFS dose calculation methodology, especially a number of the assumptions that appear to underlie it. This, however, does not support the notion there is a controversy, factual or otherwise, regarding the existing contention Utah C and its bases so that summary disposition is inappropriate. It is, instead, an argument in favor of the admission of a new contention challenging this new dose analysis. Indeed, in its most recent filing, the State indicates it currently is contemplating such action. *See* State Amendment Response at 4. And nothing we decide here forecloses the State from taking such action, subject, of course, to its being able to meet the late-filing and contention admission criteria of 10 C.F.R. § 2.714.

As for contention Utah C, however, we conclude that PFS has met its burden of establishing there are no material factual issues in dispute and that summary disposition should be entered in favor of PFS on that issue, which is now moot.[5]

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[3] Thus we need not, and do not, reach the question of whether the RAI calculations standing alone would provide a sufficient basis for the PFS dispositive motion.

[4] Certainly, nothing in the Commission's Catawba decision referenced by the State suggests a different result. Although making the point that the subsequent issuance of the Staff's Safety Evaluation Report (SER) can provide a basis for entering summary disposition in connection with existing contentions based on the Applicant's SAR, *see* CLI-83-19, 17 NRC at 1049, that decision does not indicate that action on an applicant's properly supported dispositive motion regarding an SAR-based contention must await such a Staff issuance. Indeed, the Staff SER has not yet issued in this case, yet the State has made no suggestion that PFS must await that document prior to seeking summary disposition for contention Utah C.

We note further that, because it conflicts with existing agency rules, *see* 10 C.F.R. § 2.714(b)(2)(iii), the State-quoted Licensing Board statement in *Kerr-McGee Chemical Corp.* (West Chicago Rare Earths Facility), LBP-89-16, 29 NRC 508, 514 (1989), indicating it would be premature to file contentions regarding a Staff draft environmental impact statement has no current precedential significance.

[5] In addition to being the subject of the PFS summary disposition request, contention Utah C also is the source of a discovery dispute between PFS and the State. In an April 30, 1999 motion, the State asked that we compel PFS to respond to April 9, 1999 discovery requests regarding Utah C, including requests for admissions, interrogatories, and a document request. In support of its motion to compel, the State presented essentially the same arguments it puts forth in support of its opposition to the PFS summary disposition motion, including its purported need to understand the assumptions that underlie the new dose analysis and the failure of PFS to submit a license application amendment incorporating those calculations. *See* [State] Motion to Compel [PFS] to Respond to State's First Set of Discovery Requests (Apr. 30, 1999) at 3-9. For the reasons stated above relative to the PFS dispositive motion, we likewise find those arguments unpersuasive as support for their discovery requests and thus deny the motion to compel.

III. CONCLUSION

With regard to contention Utah C — Failure to Demonstrate Compliance with NRC Dose Limits — based on the revised dose analysis put forth by applicant PFS in its February 1999 RAI response and incorporated into its pending application in a May 19, 1999 amendment, PFS has established there is no genuine issue as to any material fact and it is entitled to judgment in its favor as a matter of law in that Utah C is now moot.

For the foregoing reasons, it is, this 17th day of June 1999, ORDERED, that:

1. The April 30, 1999 motion of the State to compel PFS to respond to April 9, 1999 discovery requests regarding contention Utah C is *denied.*

2. The April 21, 1999 motion for summary disposition of PFS regarding contention Utah C is *granted* and, for the reasons given in this Memorandum and Order, a decision regarding contention Utah C is rendered in favor of PFS on the ground that issue is now moot.

THE ATOMIC SAFETY AND
LICENSING BOARD[6]

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Dr. Jerry R. Kline
ADMINISTRATIVE JUDGE

Dr. Peter S. Lam
ADMINISTRATIVE JUDGE

Rockville, Maryland
June 17, 1999

[6] Copies 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 of Goshute Indians, 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 PANEL

Before Administrative Judges:

Peter B. Bloch, Presiding Officer
Richard F. Cole, Special Assistant

in the Matter of **Docket No. 40-8681-MLA-7**
(ASLBP No. 99-766-07-LA)
(Re: Materials License Amendment)

INTERNATIONAL URANIUM (USA) CORPORATION
(Receipt of Material from St. Louis, Missouri) **June 25, 1999**

A petition for a hearing in a license amendment case is dismissed because Petitioner failed to particularize how he would be injured by the license amendment rather than by Licensee's continuing operations, which have been already licensed.

MEMORANDUM AND ORDER
(Dismissal of Kenneth Sleight)

On June 2, 1999, Mr. Ken Sleight submitted by fax a Request for Hearing challenging the Nuclear Regulatory Commission's (''NRC'') amendment of International Uranium (USA) Corporation's (''IUSA'') Source Material License SUA-1358 to allow for the receipt and ''processing'' of uranium-bearing material

from a site being managed under the Formerly Utilized Sites Remedial Action Program (''FUSRAP'') near St. Louis, Missouri.[1]

Mr. Sleight's petition bears a distinct resemblance to the petition he also filed in an earlier amendment case involving IUSA, Docket No. 40-8681-MLA-5. In that case, we permitted Mr. Sleight to amend his petition to meet the NRC's standing requirements. LBP-99-8, February 19, 1999. In particular, he was advised that in an amendment case, such as this, he must show how he is injured by the *amendment* rather than by the operations that were already authorized by the license that is being amended. Accordingly, Mr. Sleight is on notice of the standing requirements and it is appropriate to act now to determine the merits of his petition.

After reviewing Mr. Sleight's petition in light of legal requirements, I reach the same conclusion I reached in the earlier case. Mr. Sleight has not demonstrated the standing required to obtain a hearing on his concerns. In particular, since the disposal of tailings is already authorized under an existing license, the question of possible injury to Mr. Sleight is whether he will be injured because the tailings from the milling authorized by this amendment will be more hazardous than tailings already authorized under the license. *International Uranium (USA) Corp.* (White Mesa Uranium Mill), LBP-97-14, 46 NRC 55, 56 (1997). As I wrote in *International Uranium (USA) Corp.* (Receipt of Additional Material from Tonawanda, New York), LBP-99-8, 49 NRC 131, 133-34 (1999):

> With respect to . . . Mr. Sleight[,] . . . [he does] not have standing to intervene as [a party] to the proceeding. [He] . . . has failed to demonstrate that, as a result of the amendment, it will likely suffer injury that is ''distinct and palpable, particular and concrete, as opposed to being conjectural or hypothetical.'' *See* [*International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-98-6, 47 NRC 116, 117 (1998), *citing Steel Co. v. Citizens for a Better Environment,* 118 S. Ct. 1003, 1016 (1998); *Warth v. Seldin,* 422 U.S. 490, 501, 508, 509 (1975); *Sequoyah Fuels Corp.* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 72 (1994)]. [He has] . . . not shown a harm that is distinct and apart from that caused by the initial licensing and continued operation of the facility. *See Energy Fuels Nuclear, Inc.,* LBP-94-33, 40 NRC [151], 153-54 (1994). . . .
>
> While Mr. Sleight mentions the processing and storage of material from the Ashland 1 (as well as the Ashland 2) site, the injuries claimed stem from general concerns about operations at White Mesa and general objections to nuclear-related activities in the region and its perceived effect on his business, his other activities in the region, the local economy, and cultural resources. Such general ''injuries'' are not caused by the contested license amendment and are not sufficient to support standing. *See Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 95 n.10 (1993) (standing requires more than general interests in the cultural, historical, and economic resources of a geographic area), *citing Sierra Club v. Morton,* 405 U.S. 727, 734-35 (1972). Moreover, Mr.

[1] On June 11, 1999, IUSA opposed the Petition of Ken Sleight and on June 16, 1998, the Staff of the Nuclear Regulatory Commission (Staff) also filed an opposition.

Sleight's claims of harm from the processing of the Ashland I material are speculative since he does specify a credible means by which the proposed action could directly harm him, and thus, he falls to describe an injury that is ''distinct and palpable'' from his general concerns about the continued operation of the facility. *See White Mesa,* CLI-98-6, 47 NRC at 117-18; *Sequoyah Fuels Corp.,* CLI-94-12, 40 NRC at 72; *Energy Fuels Nuclear,* LBP-94-33, 40 NRC at 153-54.

Accordingly, for the same basic reasons expressed in LBP-99-8, Mr. Sleight's petition in this proceeding is dismissed.

IS SO ORDERED.

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Rockville, Maryland

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