

December 2, 2004

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

December 3, 2004 (8:20am)

BEFORE THE COMMISSION

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

In the Matter of:)	
)	
YANKEE ATOMIC ELECTRIC)	
COMPANY)	
z)	Docket No. 50-29
(Yankee Nuclear Power Station))	
)	
License Termination Plan)	

MOTION FOR STAY OF PROCEEDING

On November 22, 2004, the Atomic Safety and Licensing Board ("ASLB") issued a Memorandum and Order granting the hearing request and petition to intervene in this matter.¹ The licensee, Yankee Atomic Electric Company ("Yankee"), is filing with the Commission — in parallel with this motion — a timely appeal of the Licensing Board decision as provided in 10 C.F.R. § 2.311(c). In accordance with 10 C.F.R. § 2.342, Yankee herein moves that the Commission stay the Licensing Board decision and this proceeding pending Commission review.

In particular, under the Commission's revised Subpart L rules of procedure, the next actions in this proceeding following the order granting the hearing request are certain mandatory disclosures by all parties (*see* 10 C.F.R. § 2.336) and posting of the hearing file by the NRC Staff (*id.*; 10 C.F.R. § 2.1203). These actions are due within 30 days following the November 22, 2004 order — December 22, 2004 in this case. Yankee seeks a stay of the mandatory disclosures, such that they would be due (to the extent still required) within 30 days

¹ Memorandum and Order (Granting Hearing Request), LBP-04-27, slip op. November 22, 2004.

of a Commission decision affirming the decision granting a hearing. This proceeding would then continue thereafter in accordance with the rules of procedure. Yankee believes this approach will preserve its available resources to continue ongoing decommissioning activities, with no prejudice to the other parties in the proceeding. The same stay would be extended to the other parties' disclosures and the Staff's preparation of the hearing file.²

Under Section 2.342, four factors will be considered in determining whether to grant a stay. 10 C.F.R. § 2.342(e). The first is whether the moving party has made a strong showing that it is likely to prevail on the merits. Yankee's appeal and supporting brief are filed this same day with the Commission. Without repeating those arguments here, Yankee maintains that it has made a strong, credible argument on appeal. The Licensing Board's Memorandum and Order does not correctly characterize Yankee's position, does not correctly reflect the Commission's regulatory process for decommissioning and license termination, and does not adequately apply the threshold standards for admissibility of contentions. Yankee would not file an appeal if it did not believe it is likely to prevail on the merits.

The second criterion to be considered for a stay is whether the moving party (Yankee) will be irreparably harmed unless a stay is granted. Yankee recognizes case law suggesting that the expense of an administrative proceeding is usually not considered irreparable injury. *Uranium Mill Licensing Requirements* (10 C.F.R. Parts 30, 40, 70, and 150), CLI-81-9, 13 NRC 460, 465 (1981, citing *Meyers v. Bethlehem Shipbuilding Corp.*, 303 U.S. 41 (1938) and *Hornblower and Weeks-Hemphill Noyes, Inc. v. Csaky*, 427 F. Supp. 814 (S.D.N.Y. 1977).

² Another interim step is the notification from the NRC Staff required within 15 days of the Licensing Board's decision, under 10 C.F.R. § 12.1202(b)(2). This motion does not seek a stay of that action. With respect to the hearing file, Yankee and the Staff have essentially already agreed to provide CAN with the relevant regulatory correspondence in light of the current unavailability of ADAMS.

However, in this case harm to Yankee beyond expense does exist and should be considered. Yankee is conducting decommissioning of the Yankee Nuclear Power Station ("YNPS") site under a fixed budget established by settlement agreement in a Federal Energy Regulatory Commission ("FERC") rate proceeding. The project is almost 90% complete, and Yankee is moving forward to complete the project by the end of calendar year 2005. Yankee understands the importance of this proceeding, but also recognizes that resources devoted to an administrative process that is later determined to be unnecessary, would be resources diverted from the goal of thorough and timely decommissioning. The document disclosure process under the Commission's regulations is a process that Yankee expects to be resource-intensive — particularly given the vague scope of the three admitted contentions. Yankee has no interest in compromising the quality of the site decommissioning.

Considerations of efficiency and conservation of resources also extend to all parties in the proceeding. All parties would be required to prepare the disclosures mandated by the rules and the NRC Staff would be required to prepare the hearing file. These actions would be stayed until necessary. Accordingly, under this factor Yankee concludes that the limited stay requested is warranted.

The third factor is whether the requested stay would harm other parties. In this case there clearly would be no such harm. CAN certainly does not lose any hearing rights from a temporary stay. Ordinarily, the only party harmed by a delay in an administrative proceeding is the applicant — because of the delay of the proposed licensing action and the costs attendant to such delay. In the present circumstances, Yankee will suffer no such harm. Decommissioning is ongoing at the site and will continue. The Commission has previously indicated that, if a hearing is granted on a license termination plan, the hearing must be completed before release of the

site.³ However, Yankee sees no harm in a short stay given that the license will remain in effect for a least a portion of the site, in any event, so long as fuel remains on site at the existing Independent Spent Fuel Storage Installation.

Moreover, a stay of the proceeding may, in fact, be of benefit to the parties. When the hearing resumes, it is possible that the NRC Staff will have progressed in its required safety and environmental reviews. It is also entirely possible that the NRC will have restored ADAMS. Therefore, at that point a prompt hearing would be feasible. Furthermore, the ongoing decommissioning will continue at the site, and at the time the hearing is held the project will be even closer to "complete" than it currently is. This progress may help eliminate some of the concerns expressed by the Licensing Board and in the contentions, potentially expediting resolution of any remaining issues.

The fourth factor to be considered is the "public interest." In this case, the public interest favors the requested, limited stay. A stay would preserve ratepayer expenses allocated for decommissioning (as discussed above). A stay would also maximize the efficiency of the NRC administrative process, saving taxpayer money. Finally, a stay would allow Yankee's limited staff to focus on the important work of ongoing decommissioning as discussed above.

Yankee recognizes that stays pending appeal are rarely granted. *See, e.g., Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-877, 26 NRC 187 (1987). However, in denying such a stay request in *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-9, 40 NRC 1, 6 (1994), the Commission at least

³ *Final Rule, "Decommissioning of Nuclear Power Reactors," 61 Fed. Reg. 39278, 39289 (at col. 3) (July 29, 1996).*

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acknowledged that “only in unusual cases should the normal discovery and other processes be delayed pending the outcome of an appeal or petition to the Commission.” The present case is “the unusual case,” if there ever was one. There is no project schedule at stake and no discernable public interest in proceeding pending appeal. In fact, as described above, the public interest in focusing resources on decommissioning the site and the practical benefits of deferring the hearing until the issues are truly ripe favor a brief stay. In total, the requested stay is warranted and appropriate under the present, atypical circumstances.

Given that Yankee is currently under a 30-day deadline for mandatory disclosures, Yankee respectfully requests an expedited Commission decision on this motion. Counsel for Yankee has contacted counsel for the other parties and requested a position on the motion. Counsel for the NRC Staff has stated that the Staff does not oppose the requested stay. Counsel for CAN has indicated that CAN’s position is that the stay should be denied.

Respectfully submitted,



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COUNSEL FOR YANKEE ATOMIC
ELECTRIC COMPANY

Dated in Washington, District of Columbia
This 2nd day of December 2004

December 2, 2004

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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COMPANY)	Docket No. 50-29
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NOTICE OF APPEAL BY YANKEE ATOMIC ELECTRIC COMPANY

Pursuant to 10 C.F.R. § 2.311(c), Yankee Atomic Electric Company (“Yankee”) hereby gives notice of appeal of the November 22, 2004, Memorandum and Order of the Atomic Safety and Licensing Board (“Licensing Board”) in this matter.¹ That Memorandum and Order granted the request for hearing and petition to intervene of Citizens Awareness Network (“CAN”), and admitted three contentions for hearing. As discussed further in the supporting Memorandum of Law filed with this Notice of Appeal, Yankee concludes that the Licensing Board decision should be reversed. The three admitted contentions fail to establish, with basis, a genuine dispute on an issue material to a proceeding on the approval of a License Termination Plan. Accordingly, CAN’s request for hearing and petition to intervene should have been denied.

¹ “Memorandum and Order (Granting Hearing Request),” LBP-04-27 (slip op. November 22, 2004) (“Memorandum and Order”).

Respectfully submitted,

A handwritten signature in black ink that reads "David A. Repka". The signature is written in a cursive style with a long horizontal line extending to the right.

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COUNSEL FOR YANKEE ATOMIC
ELECTRIC COMPANY

Dated in Washington, District of Columbia
This 2nd day of December 2004

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MEMORANDUM OF LAW IN SUPPORT OF YANKEE ATOMIC ELECTRIC COMPANY
APPEAL FROM ORDER GRANTING HEARING REQUEST

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TABLE OF AUTHORITIES

CASES

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“Maine Yankee Atomic Power Company, Docket No. 50-309, Maine Yankee Atomic Power Station, Lincoln County, Maine,” 62 Fed. Reg. 15,769 (April 1, 2003).18

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MEMORANDUM OF LAW IN SUPPORT OF YANKEE ATOMIC ELECTRIC COMPANY
APPEAL FROM ORDER GRANTING HEARING REQUEST

I. INTRODUCTION

On November 22, 2004, the Atomic Safety and Licensing Board (“Licensing Board”) in this matter issued a Memorandum and Order granting a hearing and admitting three contentions proposed by the Citizens Awareness Network (“CAN”).¹ Pursuant to 10 C.F.R. § 2.311(c), Yankee Atomic Electric Company (“Yankee”) hereby appeals that decision on grounds that CAN’s proposed contentions should not have been admitted.

This proceeding relates to Yankee’s application for Nuclear Regulatory Commission (“NRC”) approval of a License Termination Plan (“LTP”) for the Yankee Nuclear Power Station (“YNPS”), located at Rowe, Massachusetts. CAN filed six proposed contentions, one of which was previously nullified by the Commission’s prior decision in this proceeding.²

¹ “Memorandum and Order (Granting Hearing Request),” LBP-04-27 (slip op. November 22, 2004) (“Memorandum and Order”).

² *Yankee Atomic Electric Company* (Yankee Nuclear Power Station LTP), CLI-04-28 (slip op. October 7, 2004).

The remaining five contentions predominantly raise issues related to groundwater contamination at the YNPS site. The Licensing Board's Memorandum and Order admitted three contentions, all as essentially raising one issue regarding the adequacy of the characterization to date at YNPS, and the lack of a groundwater remediation plan in the LTP. Yankee concludes that the common issue accepted by the Licensing Board should not have been accepted as a matter of law, and therefore concludes that the hearing request should have been denied. The Licensing Board's decision misapplies the Commission's regulations on LTP approval and would effectively defer a hearing until license termination, contrary to the clear intent in the regulations. The Licensing Board's decision also misapprehends Yankee's argument and does not adequately apply the Commission's threshold standards for admissibility of contentions.

II. STATEMENT OF THE CASE

A. Statement of Facts

YNPS last produced electricity in 1991 and Yankee made a formal shutdown decision for the plant in 1992. Since that time, a substantial amount of decommissioning work has been completed at the site. That work includes site characterization, as well as dismantlement and remediation. With the time for site release approaching, Yankee filed its LTP in accordance with 10 C.F.R. § 50.82(a)(9), on November 24, 2003.³ In addition, Yankee prepared and submitted to the NRC, on January 21, 2004, a detailed Historical Site Assessment ("HSA"), which is the basis for the site classification described in the LTP.⁴

³ B. Wood to NRC (Document Control Desk), "Submittal of Yankee Nuclear Power Station's License Termination Plan and Proposed Revision to Possession Only License," BYR-2003-080, dated November 24, 2003.

⁴ J.A. Kay to NRC (Document Control Desk), "Historical Site Assessment," BYR-2004-004, dated January 21, 2004. Yankee recently filed Revision 1 of the HSA. J.A. Kay to NRC (Document Control Desk), "Submittal of Revision 1 of the Historical Site Assessment for YNPS," BYR-2004-113, dated September 30, 2004.

Yankee has also provided additional information and supplemented its LTP application several times, including reports on the YNPS groundwater monitoring program and sampling results. For example, Yankee has submitted an annual hydrogeologic report for 2003 groundwater investigations⁵ and interim hydrogeologic reports.⁶ Yankee also submitted responses to NRC Requests for Additional Information (“RAIs”) related to groundwater issues on August 3, 2004.⁷ On September 2, 2004, Yankee submitted to the NRC draft Revision 1 of the LTP, incorporating into the LTP text the responses to the NRC Staff RAIs, as well as other changes.⁸ Yankee has sent copies of this correspondence directly to CAN when it was filed with the NRC. Many of these documents are also available on the Yankee public web site.

Yankee’s LTP and related hydrogeologic reports provide a site characterization related to groundwater, including specific data related to tritium contamination identified by ground and well water monitoring and figures showing the monitoring wells and the extent of the tritium plume (Figures 2-7 and 2-8). As shown in Table 2-7 of the LTP, in one well location

⁵ YA-REPT-00-004-04, “Hydrogeologic Report of 2003 Supplemental Investigation, Yankee Nuclear Power Station, Rowe, Massachusetts,” prepared by David Scott, Hydrogeologist, dated March 15, 2004, and submitted to the NRC under cover letter from B. Wood (BYR-2004-023), dated March 16, 2004.

⁶ Yankee submitted interim groundwater data to the NRC on May 19, 2003 (“Groundwater Data for YNPS,” BYR 2003-039) and on January 20, 2004 (“Groundwater Sampling Results for YNPS,” BYR 2004-005). A corrected third quarter report, incorporating figures in color, was submitted to the NRC on February 2, 2004.

⁷ See G. van Noordennen to NRC (Document Control Desk), “Responses to Requests for Additional Information — YNPS License Termination Plan (LTP),” dated August 3, 2004 (BYR 2004-073).

⁸ G. van Noordennen to NRC (Document Control Desk), “Draft Revision 1 to the Yankee Nuclear Power Station’s License Termination Plan,” BYR-2004-092, dated September 2, 2004. More recently, Yankee submitted the formal LTP Revision 1. J.A. Kay to NRC (Document Control Desk), “Submittal of Revision 1 of Yankee Nuclear Power Station’s License Termination Plan (LTP),” BYR-2004-133, dated November 19, 2004.

(MW-107C) near the Spent Fuel Pool/Ion Exchange ("SFP/IX") Pit (out of over 50 well locations that existed at that time), Yankee measured tritium in groundwater greater than 45,000 pCi/L. This value exceeds the Environmental Protection Agency ("EPA") Maximum Contaminant Level ("MCL") for tritium in drinking water. (The MCL is 20,000 pCi/L.) This information has also been reflected in Yankee's hydrogeologic reports.

Based on the groundwater characterization, Yankee's LTP addresses the plans to address groundwater prior to license termination. Specifically, Section 2.7.3 of the LTP (at page 2-21) describes the groundwater monitoring program at YNPS and the procedures for ground and well water monitoring; radiochemical data quality assessment; the site characterization and site release quality assurance ("QA") program plan for sample data quality; and groundwater level measurements and sample collection. Section 2.7.4 of the LTP (at page 2-21) reflects the elevated tritium shown in Table 2-7 and addresses the ongoing groundwater investigations to be carried out as part of license termination activities:

The preliminary assessment of the groundwater and soil data indicate that the only radionuclide identified in migration towards the Sherman Dam area is tritium. Some of the new wells had tritium concentrations that were in excess of what had been measured for existing wells and in one case greater than the EPA standard for tritium in drinking water. This indicates that the plume may have a more complicated flow path than previously considered. The YNPS QA program has been adjusted to account for this new information.

Although this new information shows concentrations in excess of the EPA drinking water standard, the dose consequence is insignificant and does not change the strategy for going forward towards [final status survey]. Groundwater investigations will continue in November 2003 and quarterly thereafter. Additional wells are planned for Spring 2004.

Accordingly, assessments of the tritium contamination continue as part of the ongoing decommissioning process. However, both the contamination to be addressed and the plan going forward for doing so are clearly identified in the LTP.

The YNPS groundwater monitoring program is, by necessity, investigative and is performed in an iterative fashion. As noted in the LTP, groundwater samples are collected from monitoring wells and analyzed for a broad suite of radionuclides. The well-drilling campaigns are based on geologic formations. An interim report and an annual hydrogeologic report are made available to the public stakeholders on a semi annual basis. In the Yankee hydrogeological report submitted to the NRC on March 16, 2004, Yankee's hydrogeologist clearly concluded (at pages 22-23):

Tritium is the only plant-related radionuclide detected in ground water at the Yankee Rowe site. The data indicate that tritium levels have declined substantially in the shallow aquifer over the period of record. Tritium concentrations exceed the MCL in a relatively small area in the glaciolacustrine sediments that lie beneath the shallow aquifer. The data indicate that this area is localized and within about 100 feet (laterally) of the SPF/IX Pit complex. The dose associated with the tritium in the groundwater is low. On this basis, the corresponding risk to human health and the environment also appears to be low. . . .

Results of the drilling and sampling program in 2003 have greatly increased our understanding of tritium contamination in groundwater at the site. The results also provide a thorough and comprehensive basis for understanding the hydrogeology at YNPS. However, refinement of the conceptual site model for YNPS has highlighted a few areas where additional investigation of the groundwater system is necessary. This work is needed to validate our analysis of current conditions and to confirm our speculation that the richest part of the plume has been described.

We propose that additional drilling and sampling be considered in order to confirm the source(s) of tritium, and to further define the hydrogeologic features determining the fate and transport of groundwater contamination at the site.

In Yankee's August 3, 2004 RAI responses, in response to Question 52 (at page 17), Yankee again elaborated on the current status (emphasis added):

Maps showing the plan-view configuration and concentration of a tritium plume in the shallow aquifer in July and November 2003 are included as Figures 15 and 16 in YA-REPT-00-004-04. Similar maps for the tritium

plume in the intermediate depth aquifer in July and November 2003 are provided in Figures 18 and 19 of the same report. Figures 5, 6, 7, and 8 of that report are cross sections showing the known extent and concentration of tritium vertically, in both the shallow and intermediate depth aquifers. . . .

Drilling of additional monitoring wells to further delineate the horizontal and vertical extent of the identified tritium plumes began June 22, and is expected to continue through the summer of 2004. Testing of the hydraulic conductivity of selected aquifers will take place later in 2004 into 2005, when demolition activities currently underway at the site are completed, and access can then be gained to those areas of interest that are currently unavailable.

The LTP also provides a clear basis and prerequisite for license termination — compliance with the EPA MCL. As stated in the LTP, Section 5.6.3.2.4 (at page 5-45):

Assessments of any residual activity in groundwater at the YNPS will be via groundwater monitoring wells. The monitoring wells installed at the site will monitor groundwater at both deep and shallow depths. Section 2.7 describes the groundwater monitoring to be conducted.

The data collected from the monitoring wells, across multiple aquifers, will be used to ensure that the concentration of well water available, based upon the well supply requirements assumed in Section 6 for the resident farmer, is below the EPA MCLs. This will ensure that the dose contribution from groundwater is a small fraction of the limit in 10 CFR 20.1402.

In Yankee's August 3, 2004 responses to the groundwater RAIs, in response to Question 53 (at page 18), Yankee also stated to the NRC that the "presumed source of tritium in ground water was one or more leaks in the SFP/IX Pit complex" and that, following draining of the pool in June 2003, "there are no sources of tritium-contaminated water that could contribute to an ongoing source of ground water contamination."⁹ Yankee has also specifically confirmed

⁹ Section 2.7.3 of Revision 1 of the LTP also reflects Yankee's current view that it "appears likely that leaks from the SFP/IX Pit complex were a source of tritium in the ground water at Rowe." Section 2.7.4 of that revision reflects the additional activities that have commenced to address identified data gaps: additional wells, transducers added

in an April 27, 2004 supplemental letter to the NRC on the LTP, in response to an NRC Staff RAI, its commitment that prior to license termination the ongoing assessments will demonstrate that groundwater measurements meet the EPA MCL (20,000 pCi/L).¹⁰ That correspondence included a calculation to demonstrate that the “resident farmer” dose due to groundwater containing tritium at the EPA MCL would be 0.77 mrem/year — a small fraction of the 25 mrem/yr site release dose limit in 10 C.F.R. § 20.1402.

Finally, as is required, the LTP (Section 4) includes plans for site remediation for contamination identified. Section 4.2.3 specifically addresses surface and groundwater and concludes: “[C]haracterization data available to date indicated that no remediation of surface or ground water will be required to meet the site release criteria.” Although not stated in that discussion, this conclusion is premised on the expectation of natural radiological attenuation, to be confirmed by the groundwater monitoring program described in the LTP.

B. Course of Proceeding

CAN filed its request for hearing and petition to intervene on August 20, 2004. CAN’s standing was not contested.¹¹ CAN proposed six contentions for hearing and Yankee opposed admission of all six contentions.¹² The Licensing Board held a prehearing conference

to selected wells to facilitate synoptic measurements, and a rain gauge to monitor rainfall levels.

¹⁰ James A. Kay to NRC, “Technical Report — Dose Due to Tritium in Groundwater for the YNPS License Termination Plan (LTP),” BYR 2004-043, dated April 27, 2004.

¹¹ “Citizen Awareness Network’s Request for Hearing, Demonstration of Standing, Discussion of Scope of Proceeding and Contentions,” dated August 20, 2004.

¹² “Answer of Yankee Atomic Electric Company to Citizens Awareness Network’s Request for Hearing and Petition to Intervene,” dated September 14, 2004.

call to discuss the question of admissibility of the contentions on November 8, 2004, and issued its Memorandum and Order on November 22, 2004.

Three of CAN's proposed contentions are relevant to this appeal. All are supported by, and essentially paraphrase, a declaration by Robert Ross, a hydrogeologist. For convenience, the three relevant contentions are recited below:

Contention 2

The LTP should not be approved at this time because Yankee Atomic has failed to provide documentation of the source, cause, and remediation of the current high levels of tritium contamination in the ground water or site, in violation of 10 C.F.R. Part 20, Subpart E, § 50.52, § 50.82. The samples collected in 2003 following the draining and emptying of the fuel pool still show an extremely high concentration of tritium (e.g., >45,000 pCi/L in monitoring well MW-107C). The LTP does not resolve the question as to whether this high level of contamination was previously overlooked or whether it relates to a new or recent release connected with work on the fuel pool in 2003. A supplemental Environmental Report and supplemental EIS should be prepared to explain the source and cause of the contamination, demonstrate that it is contained within the site, and provide a plan for cleaning up the contamination.

Contention 3

The LTP should not be approved at this time because Yankee Atomic has failed to adequately characterize several possible contaminated zones within the ground water under the site in violation of 10 C.F.R. Part 20, Subpart E and the requirements of 10 C.F.R. § 50.82. Without adequate characterization, there can be no assurance that the LTP will adequately safeguard public health by demonstrating compliance with 10 C.F.R. Part 20 standards.

Contention 4

The LTP should not be approved at this time because it does not completely characterize the vertical extent of subsurface soil contamination beneath facility structures in violation of 10 C.F.R. Part 20 and § 50.82. This is significant because without immediate characterization of the likely source area(s) of subsurface soil contamination beneath facility structures Yankee Atomic Electric Company cannot assure adequate protection of human health and that of nearby sensitive receptors under the LTP's site characterization as required by 10 C.F.R. Part 20 and § 50.82.

Relying on a Commission decision¹³ in a proceeding on a prior license termination plan for YNPS (an LTP that was later withdrawn), the Licensing Board first considered Contention 2. The Licensing Board observed that “[o]bviously, it would be far preferable for CAN to ventilate its tritium contamination concerns following the completion of the ‘ongoing process’ of site characterization and the development of remediation measures determined to be necessary on the basis of the characterization.” Memorandum and Order, slip op. at 6 (emphasis in original). However, the Licensing Board also observed that the Commission’s regulations do not afford a hearing opportunity at license termination. Therefore, it concluded, any tritium contamination concerns must be raised and addressed in connection with the LTP. *Id.* at 6-7. The Licensing Board went on to describe Yankee’s groundwater characterization as “incomplete” and to conclude, purportedly based upon the licensee’s own admission, that there is not “assurance at this point that remediation of the tritium contamination will not be required.” *Id.* at 8. The Licensing Board found that Contention 2 “is admissible insofar as it challenges the LTP on the ground that it does not fulfill the requirements of 10 C.F.R. § 50.82.” *Id.* (footnote omitted).

With respect to Contentions 3 and 4, the Licensing Board recapitulated similar arguments to those made for Contention 2. The Licensing Board concluded:

Once again, what CAN is asserting is that there has not been the complete site characterization that it believes the regulations require be included in the LTP. We do not understand the Licensee to dispute that the characterization has not been completed. Nor could it. Apart from the emphasis in its response upon the ongoing nature of the characterization process, Part 2 of the LTP, entitled “Site Classification,” contains a mixture of historical and survey data and then identifies continuing activities, including in Section 2.8 “Continuing Characterization Activities.” That being so, the challenge to the now combined third and

¹³ *Yankee Atomic Electric Company* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185 (1998).

fourth contentions squarely presents the same issue that was raised by the second contention: namely, whether the LTP had to contain a full site characterization, combined with any plans for remediation that might be required as a result of the characterization.

Id. at 10. Accordingly, the Licensing Board admitted Contentions 3 and 4. By the terms of the Memorandum and Order, these two contentions are “combined” with each other. They also, according to the Licensing Board, raise the same issue admitted under Contention 2. However, it is not clear whether all three contentions are combined, whether only one issue is admitted, or whether issues ancillary to the issue alluded to by the Licensing Board, but nevertheless arguably raised in any of Contentions 2, 3, or 4, have survived. The Licensing Board did not provide a re-framed, admitted contention. Contentions 2, 3, and 4, therefore, are in their entirety the subject of this appeal.

III. ISSUE PRESENTED

Whether the Licensing Board erred in LBP-04-27 in admitting Contentions 2, 3, and 4 (or some combined subset thereof), and therefore in granting CAN’s hearing request and petition to intervene.

IV. STANDARD OF REVIEW

The Commission’s regulations, 10 C.F.R. § 2.311(c), provide that: “An order granting a petition to intervene and/or request for hearing is appealable by a party other than the requestor/petitioner on the question as to whether the request/petition should have been wholly denied.” The Commission will review, *de novo*, the question as to whether the admitted contentions meet the admissibility threshold set forth in 10 C.F.R. § 2.309(f)(1). In addition, as a matter of policy, the Commission has clearly expressed its intention to “exercise its inherent

supervisory authority” in particular proceedings¹⁴ and has emphasized that it will “take action in individual proceedings, as appropriate, to provide guidance to the boards and parties and to decide issues in the interest of a prompt and effective resolution of the matters set for adjudication.”¹⁵

V. ARGUMENT

A. The Commission’s Regulations Establish a Clear Process, with a Hearing Opportunity Limited to the License Termination Plan Methodology

In 1996 the Commission substantially revised its regulations on decommissioning and license termination.¹⁶ Under the revised regulations in 10 C.F.R. § 50.82, NRC approval of a decommissioning plan is no longer required after a licensee permanently ceases operation of a nuclear reactor facility. Instead, the licensee must file a number of reports, including a Post-Shutdown Decommissioning Activities Report (“PSDAR”). The PSDAR is not subject to NRC approval and does not involve a hearing opportunity. After the PSDAR is filed and an NRC public meeting is held, the licensee is authorized to begin major decommissioning activities. Although YNPS was shut down prior to the new rule, and a decommissioning plan was once proposed for NRC approval, Yankee transitioned the YNPS decommissioning to the revised rules. Since the plant last produced electricity, over 13 years have passed and a substantial amount of decommissioning has been accomplished. Yankee presently projects completion of demolition and final status surveys by the end of calendar 2005.

¹⁴ *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 20 (1998).

¹⁵ *Id.* at 25.

¹⁶ *Final Rule*, “Decommissioning of Nuclear Power Reactors,” 61 Fed. Reg. 39,278 (July 29, 1996)

As recognized by the Licensing Board, the Commission's rules now require — at least two years prior to license termination — an LTP. Based on the decommissioning project schedule, Yankee filed its LTP in November 2003. Section 50.82(a)(9)(ii) specifically provides that an LTP 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;
- (f) An updated site-specific estimate of remaining decommissioning costs; and
- (g) A supplement to the environmental report, pursuant to § 51.53, describing any new information or significant environmental change associated with the licensee's proposed termination activities.
- (h) Identification of parts, if any, of the facility or site that were released for use before approval of the license termination plan.

In addition, consistent with 10 C.F.R. § 50.82(a)(10), Yankee's November 24, 2003 LTP filing included a proposed license amendment to incorporate new license conditions documenting the NRC's approval of the LTP and governing future changes to the LTP.

Inherently, the Commission's regulations recognize that site decommissioning work will not be complete at the time an LTP is submitted. The regulations contemplate that an LTP establish a *process* leading to license termination. With respect to approval of the LTP, Section 50.82(a)(10) specifically provides (emphasis added):

If the license termination plan demonstrates that the remainder of decommissioning activities will be performed in accordance with the regulations in this chapter, will not be inimical to the common defense and security or to the health and safety of the public, and will not have a significant effect on the quality of the environment and after notice to

interested persons, the Commission shall approve the plan, by license amendment, subject to such conditions and limitations as it deems appropriate and necessary and authorize implementation of the license termination plan.

Only after completion of the activities described in the LTP will the NRC authorize license termination. See 10 C.F.R. § 50.82(a)(11). Final radiation surveys and associated documentation (described in the LTP) must demonstrate that the facility and site have met the criteria for decommissioning in 10 C.F.R. Part 20, Subpart E. See 10 C.F.R. §§ 20.1401, *et seq.*

In adopting the current regulatory scheme governing the decommissioning and license termination process, the Commission made clear that the LTP was a mechanism whereby the licensee would describe only the proposed activities remaining to permit license termination. In fact, as explained in the NRC's Standard Review Plan ("SRP"), the level of detail in the LTP will vary depending on the nature of activities *remaining* to be performed:

Because the LTP must be submitted two years or more prior to license termination, the level of detail required to be submitted in the LTP will vary depending on when the licensee submits the LTP. The information submitted in the LTP should reflect the current status of the decommissioning at the facility.¹⁷

In the rulemaking for the LTP regulation the Commission also specifically indicated that:

A licensee wishing to terminate its license would submit a license termination plan for approval similar to the approach that is currently required for a decommissioning plan. However, the plan would be less detailed than the decommissioning plan required by the current rule, because it would not need to provide a dismantlement plan, and could be as simple as a final site survey plan.

61 Fed. Reg. at 39280. Thus, to the extent decommissioning activities necessary to terminate the license remain to be performed, the LTP will describe those remaining activities consistent with the terms of 10 C.F.R. §50.82(a)(9). At bottom, the Commission expects that such activities will

not be complete at the time of LTP submittal or approval because NRC approval is based on the determination that the “remainder of decommissioning activities *will be* performed in accordance with the regulations....” 10 C.F.R. § 50.82(a)(10)(emphasis added).

Under this clear approach, the hearing opportunity associated with decommissioning is not at the front-end, prior to any decommissioning as it was under the old rule. Likewise, however, the hearing opportunity is not at the back-end (*i.e.*, at license termination). The hearing opportunity is connected to the LTP, as the Licensing Board itself emphasized. Memorandum and Order, slip op. at 6. Accordingly, the scope of the hearing opportunity is *not* project completion and license termination. The opportunity for hearing is expressly limited to “NRC’s decision regarding the licensee’s *proposed* termination activities....” 61 Fed. Reg. at 39289 (emphasis added).¹⁸ Indeed, in the *Yankee* case cited by the Licensing Board, CLI-98-21, the Commission itself stated:

The LTP stage, in other words, 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.

Yankee, CLI-98-21, 48 NRC 185, 206-207. The issue for hearing in the present case, therefore, is whether the LTP provides the methodologies that will be used to perform, as necessary, remediation activities of residual radioactivity and the criteria to demonstrate compliance with the radiological criteria for license termination provided in 10 C.F.R. § 20.1402 — including the dose limit of 25 mrem/yr to the average member of the critical group at the site and the ALARA (as low as reasonably achievable) objective.

¹⁷ Standard Review Plan for Evaluating Nuclear Power Reactor License Termination Plans,” NUREG-1700, Rev. 1 (March 2003), at page 4 (“NUREG-1700, Rev. 1”).

¹⁸ *See also* 61 Fed. Reg. at 39292 (“...the license termination plan is less complex than a decommissioning plan and covers the remainder of activities requiring completion to terminate the license, other than dismantlement activities.”)

To be clear, the LTP (and the hearing) follows a substantial amount of site characterization and decommissioning work. Indeed, this is particularly true for YNPS, where the LTP follows plant shutdown by many more years than has been the case for other nuclear plants in the decommissioning process. The Licensing Board, however, bristles at the constraints of the regulations, citing its preference that concerns be raised at the end of the process:

Obviously, it would be far preferable for CAN to ventilate its tritium contamination concerns following the completion of the “ongoing process” of site characterization and the development of any remediation measures determined to be necessary on the basis of the characterization. As the Commission has squarely stated, however, such an opportunity will not be available to CAN. Once the LTP receives approval, the further activities of the Licensee leading to the termination of its Yankee Rowe license will be beyond scrutiny in an adjudicatory proceeding at the behest of CAN or any other member of the public.

Memorandum and Order, slip op. at 6. While the Licensing Board here acknowledges that there is no hearing opportunity subsequent to the LTP, it fails to recognize that LTP implementation and license termination are subject to ongoing NRC oversight through the inspection and enforcement process, with the opportunity for public input inherent in that process. The Licensing Board’s logic also leads it to incorrectly conclude that not enough has been completed to date at YNPS to allow a meaningful challenge to the LTP methodology.

The Licensing Board’s logic threatens to stand the Commission’s regulations on their head. The nature of site characterization is such that characterization will likely continue until the final status survey and NRC approval of license termination. At the LTP stage, there can be no expectation that all characterization (*i.e.*, all monitoring and surveys) will be complete. Indeed, NRC guidance addressing the characterization requirement in the LTP does not call for LTP site characterization to be final or to be the final say on determining and addressing site contamination and remediation. In particular, that guidance provides that at the LTP stage:

. . . site characterization should be *sufficiently detailed* to provide data for planning further decommissioning activities as well as the final survey program.¹⁹

Further, the NRC Standard Review Plan notes that:

Site characterization information is provided to determine the extent and range of radioactive contamination on site, including ... ground water (sic). On the basis of the site characterization, the licensee designs final radiation surveys to evaluate all areas in which contamination previously existed, remains, or has the potential to remain.²⁰

As part of the review, the NRC staff should review the licensee's *site characterization plans* and site records (required under 10 CFR 50.75(g)).²¹

And, while the SRP notes at one point that the characterization should be "complete,"²² it is clear from the guidance that the NRC expects licensees to provide sufficient information at the LTP stage regarding characterization such that it is "complete" for purposes of determining the overall scope of contamination for assessing future plans, but it is not expected that all characterization be completed. In fact, as discussed below, NRC practice clearly contemplates ongoing characterization beyond the approval of the LTP.

Groundwater in particular is an excellent example of why the LTP characterization information need not, and likely cannot, be final when the LTP is submitted at least two years before expected license termination. Notably, in the Environmental Assessment

¹⁹ Regulatory Guide 1.179, "Standard Format and Content of License Termination Plans for Nuclear Power Reactors," January 1999, at 3 (emphasis added). *See also* NUREG-1700, Rev. 1, Section 2, "Site Characterization - Acceptance Criteria," at 9 ("The LTP site characterization should be sufficiently detailed . . .").

²⁰ NUREG-1700, Rev. 1, Section 2, "Site Characterization" at 8.

²¹ *Id.* (emphasis added).

²² *Id.*

("EA") for the Haddam Neck LTP the NRC accepted that groundwater characterization remained ongoing, finding that:

Groundwater beneath the [Haddam Neck Plant] has been affected by boron, tritium, and strontium-90 releases. The boron and tritium contamination is attributed, in part, to leakage from the refueling water storage tank (RWST). A contaminated groundwater plume extends from the RWST south to wells adjacent to the Connecticut River. The locations of the core and bottom of the boron/tritium plume are not known. Groundwater concentrations of tritium as high as 5,137 Becquerels per liter (Bq/L) [138,700 picocuries per liter (pCi/L)] performed in 1999 (Reference Malcolm Pirnie, 1999). Since then, there has been a trend of decreasing tritium concentrations.

Additional groundwater characterization is being performed by the licensee to determine the nature and extent of potential groundwater contamination.²³

In fact, the Staff acknowledged the essential, ongoing, iterative nature of the overall groundwater monitoring process, noting that:

The licensee *will* use a series of surveys and a final status survey to demonstrate compliance with Part 20, Subpart E....Planning for the final status survey involves an *iterative* process that requires appropriate site classification (on the basis of the potential residual radionuclide concentration levels relative to the DCGLs) and formal planning using the [Data Quality Objectives] process.²⁴

The NRC approved the Haddam Neck LTP and issued the Safety Evaluation and license amendment reflecting such approval on November 25, 2002.²⁵

²³ "Connecticut Yankee Atomic Power Company; Haddam Neck Plant; Environmental Assessment and Finding of No Significant Impact," 67 Fed. Reg. 67,212, 67,214 (November 4, 2002).

²⁴ *Id.* at 67216 (emphasis added).

²⁵ "Connecticut Yankee Atomic Power Company; Docket No. 50-213, Haddam Neck Plant, Middlesex County, Connecticut," 67 Fed. Reg. 78,526 (December 24, 2002).

Similarly, in the Maine Yankee matter, the NRC approved²⁶ the LTP (Revision 3) while site characterization, including groundwater monitoring, was ongoing. The approved LTP described the status of the site characterization process at that point, noting that:

A site radiological characterization was performed to support decommissioning planning during November 1997 through March 1998. This resulted in GTS Duratek's "Characterization Survey Report for the Maine Yankee Atomic Power Plant." Following the initial characterization effort, additional data was required and collected (referred to as "continuing characterization"), as discussed in Section 2.1. The additional ("continuing") characterization will continue to be performed as required during the term of the decommissioning project. The site characterization results have been and will be used to identify areas of the site that are likely to require remediation, to plan remediation strategies, and to support final status survey and dose assessment activities.²⁷

With respect to groundwater, the LTP described the discovery of tritium in the groundwater and indicated that additional monitoring would continue to determine whether "there was evidence of plant-derived tritium contamination in the groundwater."²⁸

The Licensing Board's reading that the NRC regulations require characterization to be final at the time of LTP consideration and approval simply fails in the face of practice and reality. The Licensing Board's logic artificially equates ongoing or future site characterization to the characterization to be included in the LTP under 10 C.F.R. § 50.82(a)(9)(ii)(A). This logic would allow a petitioner to *always* assert that the LTP is inadequate, simply because characterization work remains to be accomplished. The Licensing Board's logic would push the

²⁶ The NRC approved the Maine Yankee LTP on February 28, 2003. "Maine Yankee Atomic Power Company, Docket No. 50-309, Maine Yankee Atomic Power Station, Lincoln County, Maine," 62 Fed. Reg. 15,769 (April 1, 2003).

²⁷ Thomas L. Williamson to NRC, "Revision 3, Maine Yankee's License Termination Plan," dated October 15, 2002 (MN-02-048), Attached LTP, Rev. 3 at Section 1.5.2, "Site Characterization," p. 1-9 (<http://www.maineyankee.com> (select public information, document room)).

²⁸ *Id.* at Section 2.4.12, "Surface and Groundwater," p. 2-42.

hearing opportunity — and, more importantly, completion of the hearing — until *after* the LTP has been fully implemented and acceptable results have been demonstrated. The Licensing Board’s approach is contrary to the process clearly established in the regulations.²⁹

B. The Licensing Board Misconstrued the Licensee’s “Thesis”

In its September 14, 2004 answer to the proposed contentions, Yankee undeniably challenged CAN’s proposed contentions as exhibiting a common, recurring flaw. Those contentions — particularly Contentions 2, 3, and 4 — fault the YNPS LTP because the processes described in the LTP have not been completed. CAN draws upon the characterization data *provided by Yankee* in the LTP and other supporting documents to state that there is tritium to be addressed. The contentions then do not challenge the adequacy of the LTP methodology or the groundwater acceptance criterion proposed therein. Rather, the contentions — to the extent they raise any specific issues at all — are directed at remaining activities that have not been completed and argue that the LTP is inadequate for this reason.

For example, Contention 2 focuses on the alleged need for documentation of the “source, cause, and plan for remediation” for tritium. The relief requested is a “supplemental Environmental Report and supplemental [Environmental Impact Statement] to demonstrate that it is contained within the site” and a “plan for cleaning up the contamination” (the latter point is addressed in Section V.C below). The contention and supporting bases, however, raise no specific issues regarding the LTP groundwater monitoring methodology. In fact, the contention

²⁹ Since groundwater monitoring is an ongoing activity by its nature, the Licensing Board’s logic would establish a regulatory “do-loop” delaying approval of the LTP, and thereby delaying license termination. If an LTP characterization is incomplete so long as groundwater monitoring continues, the LTP could not be approved. An LTP therefore could not be submitted until all groundwater attenuation/remediation and final monitoring has been completed. And license termination would be constrained to follow submittal of the LTP (at least two years prior) and any LTP hearing.

and bases raise no issues beyond what is known — that tritium is present and must be monitored in accordance with the procedures outlined in the LTP. But this is simply stating the obvious.

Contention 3 asserts that Yankee has failed to adequately characterize several possible contaminated zones. However, this contention is again premised on data taken from the LTP and does not raise any issue that is being ignored. As part of the ongoing license termination process described in the LTP, Yankee installs wells methodically, based on prior completed wells and analytical results. Yankee has completed the 2004 well-drilling campaign. An interim report is being prepared and the next comprehensive hydrogeologic report is planned for early 2005. The contention focuses on a 2003 “snap shot” of an ongoing process, as documented in the prior reports. The declaration does not challenge the LTP methodology or site release criteria; it merely asserts the fact that no permanent wells were installed in certain areas at the time of the 2003 campaign in certain specific locations. There is no showing that this makes the *plan* inadequate.

Contention 4 faults the completeness of the characterization of “subsurface soil contamination beneath facility structures.” Again, this simply is a general demand for “immediate characterization” of these areas, without any recognition that this is work that is identified in the LTP and must be completed prior to license termination — in accordance with specified methodologies, surveys, and acceptance criteria. Subsurface soil contamination areas were identified and categorized in the LTP based on the site event history and surveys, including areas that are underneath buildings or structures. Although some areas known to be impacted are undergoing further investigation, the processes, and the results and activities undertaken to date, have been described (*see, e.g.*, Section 2.6 and Appendix 2B), with the area for subsurface sampling and final status surveys clearly delineated (Figure 2-6). Further, subsurface soil under

facility structures obviously cannot be finally surveyed and remediated until structures are removed. Section 5.6.3.2.2 of the LTP discusses the Yankee final status survey plan for residual radioactivity in subsurface soils — including soil underneath structures such as building floors/foundations. As described there (at page 5-43), this will be an ongoing process as part of license termination activities, largely because activities cannot be completed until structures are removed:

. . . the assessment of subsurface soil contamination is not currently complete. Soil in difficult access areas such as under buildings will be deferred until later in the decommissioning process. As a part of [final status] survey planning, borehole logs will be reviewed, when available.

The LTP discussion in this section goes on to explain the final status survey methodology and instrumentation, and the application of the derived concentration guideline levels (“DCGLs”) to assure compliance at the time of license termination with the NRC’s Part 20 site release criteria. The dose model used to calculate the DCGLs is further described in Section 6 of the LTP. None of this information in the LTP is directly referenced or challenged in the proposed contention.

Yankee’s overarching point for all three of these proposed contentions is that the contentions do not challenge the *plans* in the LTP. The contentions do not raise any issues more concrete than the assertion that certain work needs to be completed prior to license termination. The Licensing Board, in its Memorandum and Order, completely mischaracterizes Yankee’s “thesis” and misconstrues Yankee’s position as an acknowledgement that the “characterization” to date is inadequate:

. . . acceptance of the Licensee’s thesis would make a mockery of the opportunity for a hearing that ostensibly had been provided to CAN by the *Federal Register* notice. For at bottom when taken in the context of CLI-98-21, that thesis came down to this: CAN cannot raise any questions regarding tritium contamination at this point. This is because the characterization of the scope and significance of that contamination is still ongoing, with the consequence that the matter and nature of possibly necessary remediation measures is likewise beyond present determination.

Once that characterization has been completed, however, CAN will not have an opportunity to be heard regarding the results of the characterization in terms of the need for remediation of the tritium contamination.

Memorandum and Order, slip op. at 6-7. This conclusion, however, is inaccurate and erroneous.

First, Yankee has never maintained that CAN cannot raise any questions regarding tritium concentration at this point. Indeed, the LTP addresses both the fact of contamination and the plan going forward. CAN undoubtedly, for the reasons discussed above, can raise issues related to the LTP approach to groundwater or subsurface soil contamination. In fact, to the extent it has issues, it *must* do so “at this point.” However, in accordance with the Commission’s clear regulations, any issues for hearing must relate to the *plan*, not to the satisfactory implementation of the plan. Yankee’s actual position (“thesis”) is that CAN’s contentions do not meaningfully challenge the *plans* in the LTP. CAN simply cites a tritium issue that is not in dispute, and vaguely avers that Yankee has not finalized its groundwater (and subsurface soil) assessments.³⁰

Second, Yankee has never acknowledged that the characterization to date is incomplete. In fact, the LTP and HSA include a substantial characterization of the site, including groundwater. The Licensing Board equates ongoing characterization work (which is expected and unavoidable) with the characterization required under 10 C.F.R. § 50.82(a)(9)(ii). The Licensing Board infers that, because further characterization will be conducted, the LTP characterization is “incomplete” and therefore, at least arguably, defective under the regulation.

³⁰ Yankee’s argument is not, as also suggested by the Licensing Board, that contentions are precluded so long as characterization is ongoing. As discussed above, groundwater characterization will be ongoing through license termination. CAN’s contentions are not precluded on that basis. They are precluded because they do not address the methodology in the LTP (as discussed above) and because they lack basis (as discussed further below).

The Licensing Board's approach ignores the LTP itself. It also ignores the reality of both the regulatory process (which requires a hearing on a plan) and the reality of decommissioning (which always involves ongoing characterization work), as discussed above. Certainly, Yankee does not admit that the characterization is inadequate to meet the requirements for an LTP and does not accept that the proposed contentions and bases are sufficient to establish genuine disputes regarding the LTP characterization.

In its Memorandum and Order, slip op. at 7, the Licensing Board suggests that, somehow, Yankee's argument would make "a drastic change" in Section 50.82(a)(9)(ii) and "in its facial meaning." Nothing, however, could be further from the truth. Yankee maintains that the regulatory process must be followed precisely as it is written and precisely as was intended when it was enacted. The LTP provides a methodology for ongoing decommissioning leading to *license termination*. A hearing on the LTP must focus on the *license termination methodologies*. The Licensing Board deftly re-characterizes Yankee's argument as suggesting that under the regulations an LTP must include "simply a methodology for a site characterization." *Id.* Again, Yankee suggests no such thing. Yankee's LTP and HSA provide a site characterization, not simply a methodology for a site characterization.

Finally, the Licensing Board concludes:

The short of the matter thus is that, by its own admission, because the site characterization remains incomplete the Licensee is unable to state with assurance at this point that remediation of the tritium containment will not be required. Yet, in addition to the characterization of the site, the LTP must contain any remediation plans found to be necessary in order to address the contamination disclosed during the characterization activities. *See pp. 2-3, supra.*

Memorandum and Order, slip op. at 10. In this passage the Licensing Board raises the issue of remediation plans. As discussed above, Yankee's LTP concludes that no remediation plans will

be necessary for tritium-contaminated groundwater to satisfy the criteria for site release. The LTP also includes very specific remediation plans for subsurface soil contamination. The Licensing Board ignores the LTP groundwater conclusion and the LTP subsurface soil survey plans, and simply asserts that Yankee's conclusion regarding groundwater remediation is premature. The proposed contentions themselves do not provide any data other than Yankee's own data. The proposed contentions also do not challenge Yankee's conclusion, based on calculations, that the contribution to dose of groundwater with tritium attenuated to the EPA MCL will not be significant. Therefore, there is no basis for the Licensing Board's suggestion that the licensee is unable to state with assurance that remediation of the tritium contamination will not be required. The licensee has stated, precisely, that it *has* that assurance. And there is no basis offered in the contention for the assertion that the LTP must contain remediation plans where none is required. Thus, the Licensing Board's logic is fundamentally flawed based upon a misunderstanding of Yankee's position.

C. Contentions 2, 3, and 4 Do Not Challenge the LTP and Do Not Establish Genuine Disputes on Material Issues

As discussed in Yankee's September 14, 2004 answer, CAN's proposed contentions also must be assessed against the Commission's criteria for admissibility of contentions. To be admissible in NRC licensing proceedings, proposed contentions must satisfy 10 C.F.R. § 2.309(f)(1), which states that a petitioner must provide:

- (i) a *specific statement of the issue of law or fact* to be raised or controverted;
- (ii) a brief explanation of the *basis* for the contention;
- (iii) a demonstration that the issue raised in the contention is *within the scope of the proceeding*;

- (iv) a demonstration that the issue raised in the contention is *material* to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) a concise statement of the *alleged facts or expert opinions which support the petitioner's position on the issue* and on which the petitioner intends to rely at hearing, together with references to the *specific sources and documents* on which the petitioner intends to rely to support its position on the issue; and
- (vi) sufficient information to show that a *genuine dispute exists with the applicant on a material issue of law or fact*. This information must include references to *specific portions of the application* (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, *the identification of each failure and the supporting reasons for the petitioner's belief*.

10 C.F.R. § 2.309(f)(1) (emphasis added). These regulations specifically “incorporate the longstanding contention support requirements of former 10 C.F.R. § 2.714 — no contention will be admitted for litigation in an NRC adjudicatory proceeding unless these requirements are met.” See *Final Rule*, Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,221 (Jan. 14, 2004).

The Commission has emphasized that its rules on admission of contentions establish an evidentiary threshold more demanding than a mere pleading requirement and are “strict by design.” *Dominion Nuclear Conn. Inc.* (Millstone Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001). The rules require precision in the contention pleading process and require that a proposed contention have plausible and relevant factual support. The rules provide that if the contention and supporting material fail to demonstrate a genuine dispute as required by Section 2.309(f)(vi), the presiding officer must refuse to admit the contention. See also *Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 & 3), CLI-91-12, 34

NRC 149, 155 (1991) (citing *Final Rule*, Rules of Practice for Domestic Licensing Proceedings — Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989)).

Additionally, the petition must demonstrate that the issue raised by each contention is within the scope of the proceeding and is material to the findings the NRC must make to support the granting of a license. See *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 164 (2000). Similarly, under longstanding Commission precedent, proposed contentions must fall within the scope of the issues set forth in the notice of hearing. See *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), LBP-90-6, 31 NRC 85, 91 (1990) (citing *Pub. Serv. Co. of Ind., Inc.* (Marble Hill Nuclear Generating Station, Units 1 & 2), ALAB-316, 3 NRC 167, 170 (1976)). In this case, as described above, the issue is approval of the LTP, not license termination.

If the above standards are applied to the three contentions admitted by the Licensing Board, the contentions must be rejected. The contentions fail to specify the portions of the LTP specifically in dispute, fail to establish (with basis) the existence of genuine disputes, and fail to raise matters that are material to an LTP approval or for which relief in this proceeding would be available.

Contention 2, as discussed above, challenges the sufficiency of the documentation of the source, cause, and plan for remediation of the observed tritium in groundwater reported by Yankee. In this regard, however, the contention does not acknowledge any of the specific sections of the LTP, HSA, or other supporting documents that address the scope of tritium in groundwater and the methodology for ongoing monitoring. Contrast 10 C.F.R. § 2.309(f)(1)(vi)

(a contention must include references to specific portions of the application that are being challenged). It should be rejected for this reason alone.

Additionally, the Licensing Board has equated Contention 2 to a challenge to the groundwater characterization. However, in merely citing the tritium data point from well MW-107C, the contention in fact does not identify any particular dispute regarding the characterization. As discussed above, maps showing the plan-view configuration and concentration of the tritium plume are included in the Yankee hydrogeologic reports submitted to the NRC. The proposed contention does not provide any independent basis for asserting that this characterization of the extent of tritium contamination is inadequate. At bottom, it fails to establish a genuine dispute on a material issue.

Further, the contention — as actually written — first focuses on the “source” and “cause” of the tritium in the groundwater. This issue too is specifically addressed in the LTP and supporting hydrogeologic submittals. The contamination is credited to leaks in the SFP/IX Pit, and Yankee has reported that, following the draining of the SFP in 2003, there are no longer any sources of tritium-contaminated water that could contribute to ongoing contamination. None of this is meaningfully challenged in the contention or bases. The contention asserts that the “LTP does not resolve the question as to whether this high level of [tritium] contamination was previously overlooked or whether it relates to a new or recent release connected with work in the fuel pool in 2003.” However, nothing in the contention establishes why that speculation is valid. Moreover, nothing in the contention establishes why that speculation is even relevant to an LTP that presumes the existence of the contamination.

Finally, the contention asserts that the LTP fails to include a “plan for remediation” or “a plan for cleaning up the contamination.” As noted above, this is an aspect of

the contention ultimately seized upon by the Licensing Board. However, again, this contention simply fails to acknowledge what is in the LTP — a plan for monitoring groundwater through the remainder of the license term, acceptance criteria for site release (based on attenuation), and a conclusion that further remediation is not expected to be necessary. The contention includes no basis to assert that (1) the ongoing monitoring is inadequate, (2) the acceptance criteria are insufficient to assure compliance with NRC site release criteria, or (3) remediation will in fact be required. The contention challenging the sufficiency of the plans for remediation is, therefore, quite literally, baseless. The contention does not engage the technical merits of the application, is conclusory at best, and should not be admitted.

Contention 3 suffers from similar flaws. The contention asserts that Yankee has not “adequately” characterized several possible contaminated zones. The basis provided by CAN cites groundwater data from Yankee’s reports (the MW-107 and the MW-104 series wells) and vaguely argues that “[r]eview of the geologic cross-section and ‘undisturbed ground water’ samples indicates several possible contaminated zones that were not fully characterized.” The focus in the supporting declaration (§ 15) appears to be on certain sandy layers, where “no permanent monitoring wells were installed.” The contention again, however, does not identify any radiological contamination that is being ignored. It again does not challenge the groundwater monitoring methodology or the site release criteria in the LTP. It merely asserts that there were no permanent monitoring wells installed at specific locations at the time of the 2003 well-drilling campaign referenced in the documents. This is an inadequate basis to establish a genuine dispute with respect to approval of an LTP methodology.

As discussed above, the Commission’s regulatory process dictates that an LTP approval will be anticipatory. The LTP is submitted some time after decommissioning has

begun (and, in the case of YNPS, a substantial time after decommissioning began). However, it is not submitted at the very end of the process. Therefore, more work — including more groundwater monitoring wells — will ordinarily remain to be installed. Proposed Contention 3 does no more than pick locations where there were no monitoring wells. It does not establish that such wells are necessary or that they would not be drilled under the Yankee program, if they prove necessary. The contention does not provide a basis to conclude that continued license termination activities, conducted in accordance with the LTP, would not satisfy the NRC's requirements for release of the site and termination of the license. Therefore, the contention should not be admitted.³¹

Contention 4 is the subsurface soil contention. CAN argues that the LTP is inadequate because, as framed in the supporting basis, contamination beneath facility structures “appears” not to have been “fully characterized.” This contention and basis too fail to identify any specific section or particular methodology of the LTP that is being challenged. *Contrast* 10 C.F.R. § 2.309(f)(1)(vi) (a contention must include references to specific portions of the application that are being challenged). It also fails to establish a genuine dispute on a material issue.

As discussed above, the LTP specifically addresses residual radioactivity in subsurface soils — particularly soils under structures or foundations. As previously noted, Section 2.6 of the LTP describes the continuing investigation of subsurface contamination. Figure 2-6 specifically illustrates “the locations where targeted subsurface investigations will be performed” (Section 2.6, at page 2-19). As is clear from that figure, the work must await

³¹ Contention 3 is akin to a hypothetical contention that would claim an LTP is inadequate because a contaminated structure, identified in the LTP, has not been decontaminated and demolished. Contention 4 almost *is* that hypothetical contention.

demolition and removal of structures in order for there to be physical access for final subsurface soil investigation. Section 5.6.3.2.2 explains the final status survey plan for residual radioactivity in subsurface soils, to be completed as structures, building floors, and foundations are removed. The proposed Contention 4 is a highly generalized assertion that again fails to engage the *plans* and *methodology* of the LTP. Therefore, it is beyond the scope of a hearing on an LTP approval and fails to establish a genuine dispute. Contention 4 should be rejected.

VI. CONCLUSION

For the reasons stated above, Memorandum and Order LBP-04-27 should be reversed. Contentions 2, 3, and 4 should not be admitted and the request for hearing/petition to intervene should be denied.

Respectfully submitted,



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Dated in Washington, District of Columbia
This 2nd day of December 2004

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of:)

YANKEE ATOMIC ELECTRIC)
COMPANY)

(Yankee Nuclear Power Station))

License Termination Plan)

Docket No. 50-29

CERTIFICATE OF SERVICE

I hereby certify that copies of "NOTICE OF APPEAL BY YANKEE ATOMIC ELECTRIC COMPANY," "MEMORANDUM OF LAW IN SUPPORT OF YANKEE ATOMIC ELECTRIC COMPANY APPEAL FROM ORDER GRANTING HEARING REQUEST," and "MOTION FOR STAY OF PROCEEDING" in the captioned proceeding have been served on the following by deposit in the United States mail, first class, this 2nd day of December, 2004. Additional e-mail service, designated by *, has been made this same day, as shown below.

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