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July 1, 1987

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION '87 JUL -6 P4:24

Before the Atomic Safety and Licensing Appeal Board

In the Matter of	)	
	)	
Vermont Yankee Nuclear	)	
Power Corporation	)	Docket No. 50-271-OLA
	)	
(Vermont Yankee Nuclear	)	
Power Station)	)	

ON APPEAL PURSUANT TO 10 CFR § 2.714a  
FROM A PREHEARING CONFERENCE ORDER,  
LBP-87-17, MAY 26, 1987

BRIEF OF THE NEW ENGLAND COALITION  
ON NUCLEAR POLLUTION

Contention 1

The spent fuel pool expansion amendment should be denied because, through the necessity to use one train of the reactor's residual heat removal system (RHR) in addition to the spent fuel cooling system in order to maintain the pool water within the regulatory limits of 140°F, the single failure criterion as set forth in the General Design Criteria, and particularly Criterion 44, will be violated. The Applicant has not established that its proposed method of spent fuel pool cooling ensures that both the fuel pool cooling system and the reactor cooling system are single failure proof.

a. Neither Collateral Estoppel Nor Res Judicata Bars Litigation of This Contention

Applicants do not dispute the truth of the facts asserted in support of this contention; that is, that the core residual heat

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(decay heat) removal system ("RHR") will be required in addition to the spent fuel pool cooling system in order to maintain the water in the spent fuel pool within allowable limits for a minimum of 21 days after placement into the pool of a normal 1/3 core discharge.<sup>1</sup> Transcript of Prehearing Conference Apr. 21, 1987, P. 89. Hereinafter "Tr." (One train to cool the spent fuel of RHR can also be used for up to seven (7) days during plant operation should the spent fuel pool cooling system be out of service. Tr. 72-73, 79,80.) It is NECNP's contention that use of the core decay heat removal system to cool the spent fuel pool is a violation of the single failure criterion because this "sharing" of RHR means that both the pool cooling system and the reactor cooling system cannot be single failure proof. See "New England Coalition on Nuclear Pollution's Response to Board Order of February 27, 1987: Statement of Contentions and Standing," March 30, 1987, pp. 6-8. (Hereinafter "NECNP Statement of Contentions"). Tr. 54-55, 76-77.

Applicant argues that use of the RHR was sanctioned by the 1977 license amendment and that this issue is therefore barred because it was within the scope of the 1977 proceeding. Brief of Applicant, p. 14ff.

A complete and recent statement of NRC law on the subject of collateral estoppel follows:

Just as in the judicial context, the purpose of collateral estoppel in administrative proceedings is to prevent

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<sup>1</sup> Using a different calculational method, the staff estimates that RHR will be required for 42 days. Tr. 89.

continuing controversy over matters finally determined and to save the parties and boards the burden of relitigating old issues. Therefore, as the Commission has stated, "an operating license proceeding should not be utilized to rehash issues already ventilated and resolved at the construction permit stage.

Our cases indicate that, in order for the doctrine to apply, the individual or entity against whom the estoppel is asserted must have been a party, or in privity with a party, to the earlier litigation. The issue to be precluded also must be the same as that involved in the prior proceeding and this issue must have been actually raised, litigated, and adjudged. Additionally, the issue must have been material and relevant to the disposition of the first action, so that its resolution was necessary to the outcome of the earlier proceeding. Even when these requirements are met, however, the doctrine must be "applied with a sensitive regard for any supported assertion of changed circumstances or the possible existence of some special public interest factor in the particular case."

Carolina Power and Light Co., et. al. (Shearon Harris Nuclear Power Plant), ALAB-837, 23 NRC 525, 536-537 (1986), emphasis added.

By contrast, the issue raised by NECNP here has never been raised or decided in any previous proceeding, nor does Applicant contend that it has. Therefore, this issue is not barred by collateral estoppel.

What Applicant actually seeks is establishment of a radical new principle: that any issue arguably within the scope of a previous hearing, but not raised previously, is forever foreclosed from litigation. See Brief of Applicant, June 10, 1987, p. 14-15. There is no NRC precedent nor any other law presented



by the Applicant which supports such a ruling.<sup>2</sup> Indeed, such a principle would make the carefully balanced definition of collateral estoppel reflected in the Shearon Harris case, supra, a nullity.

Even were collateral estoppel to otherwise apply, substantially and materially changed circumstances exist with regard to the necessary use of the RHR system to cool the spent fuel pool. As the Licensing Board discusses in detail, the SER for the 1977 amendment<sup>3</sup> portrayed the RHR system as necessary only in the unlikely or abnormal event of a need to discharge "larger than normal" batches of fuel. LBP-87-17, Sl.Op. at 13-17. The Applicant asserted in its 1977 expansion application that the additional heat load associated with that amendment "is within the capacity of the existing cooling system." Id at 15.

Now, by contrast, it is stated that the RHR system is needed, along with the spent fuel cooling system, for some as yet undetermined period of time after each discharge in order to keep the pool water below allowable limits. See NECNP Statement of

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<sup>2</sup> The cases cited by Applicant involve the question of whether the scope of a hearing notice on an operating license application is broad enough to allow litigation of impacts of construction. Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-804, 20 NRC 848, 870-871 (1984) Even to this question, the Appeal Board gave a qualified "yes," if there have been "some actual changes in connection with the facility as it was contemplated at the time of issuance of the construction permit ..." Id. at 871.

<sup>3</sup> The public and the Boards are entitled (indeed, have no choice but) to rely upon the staff's SER as a statement of the manner in which safety issues were considered and resolved. Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760, 775 (1977).

Contentions, pp. 6-8. While "the system" may be "the system," as asserted by the Applicant (Tr. 65), the available evidence indicates that this latest amendment requires the system to be used in a different fashion. The RHR system has been approved for use as a core heat removal system. In 1977 the NRC noted its use as a cooling water source for the abnormal situation of a full core discharge in the spent fuel pool. It has not, insofar as the SER fairly shows, been reviewed or approved for use as a necessary, routine part of the spent fuel pool cooling system needed after every discharge. In any case, this is surely not the appropriate factual situation for the Appeal Board to accept the Applicant's invitation to radically broaden the doctrine of collateral estoppel.

b. The Question of Applicability of the Single Failure Criterion is a Merits Issue

The Applicant claims that the single failure criterion does not apply because it is not contained in GDC 61, appearing instead in GDC 44.<sup>4</sup> Brief of Applicant, p. 19. This is said to flow from unspecified "fundamental principles" of statutory construction. We are aware of no principle of statutory construction suggesting that all requirements applying to a system need be aggregated in one rule.

As the Applicant acknowledges, the Standard Review Plan specifies the applicability of the single failure criterion to

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<sup>4</sup> GDC 44 applies to systems "to transfer heat from structures, systems and components important to safety..." Applicant does not appear to argue that the spent fuel pool is not important to safety.

the spent fuel pool cooling systems.<sup>5</sup> Brief of Applicant at 19-20. Moreover, the documents thus far generated in this case purport to apply the single failure criterion to this application. See NECNP Statement of Contentions, p. 6 and citations therein. Under these circumstances, Applicant's challenge to the applicability of the single failure criterion is a merits, not a threshold, issue.

c. The Licensing Board Did Not Exceed Limitations On Its Sua Sponte Authority

Applicant's sole objection here is that the Licensing Board changed the contention to substitute 140°F (the currently applicable fuel pool bulk temperature limit) for 150°F (the temperature limit contained, presumably erroneously, in the Applicant's documents). The Staff apparently takes the position, not known to NECNP when the contention was drafted that the current SRP provision governs. Tr. 73-74. This objection is frivolous. The issue of the ability of the cooling system to meet applicable limits was raised by NECNP, not the Board. It is surely well within the Board's discretion to make the instant change. Eg. General Public Utilities Nuclear Corp., LBP-86-10, 23 NRC 283 (1986).

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<sup>5</sup> While not a rule, the Standard Review Plan is strong evidence of the Commission's interpretation of its rules.



Contention 2

The proposed amendment would create a situation in which consequences and risks of a hypothesized accident (hydrogen detonation in the reactor building) would be greater than those previously evaluated in connection with the Vermont Yankee reactor. The risk is sufficient to constitute the proposed amendment as a "major federal action significantly affecting the quality of the human environment" and requiring preparation and issuance of an Environmental Impact Statement prior to approval of the amendment. This contention combines the risk aspects of UCS Contention 5 and Massachusetts Contention 1. LBP-87-17, p. 19ff.

a. The Existence of an Environmental Assessment is not a Jurisdictional Prerequisite to Admission of a NEPA Contention

NRC rules implementing the National Environmental Policy Act ("NEPA"), 10 C.F.R. § 51.21, require the preparation of an environmental assessment for all licensing actions except those identified as requiring an Environmental Impact Statement (listed in 10 C.F.R. § 51.20(b) or categorically excluded in § 51.22(c). Spent fuel pool expansions are listed as neither categorically excluded or automatically included.<sup>6</sup> The Staff states that it is preparing an environmental assessment, to be forthcoming on or

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<sup>6</sup> Although it did not make the claim in its original objections to the parties' contentions (See Licensee's Response to Contentions of New England Coalition on Nuclear Pollution, April 9, 1987), Applicant now argues that the categorical exclusion covering "no significant hazards consideration" amendments applies to this case. NECNP responds below to this argument.

after July 1, 1987. Tr. 91-92. The environmental assessment is required to contain a brief discussion of the need for and alternatives to this proposed amendment and the environmental impact of the proposal and the alternatives. 10 C.F.R. § 51.30. This document forms the basis of the decision whether or not to prepare a full Environmental Impact Statement. 10 C.F.R. § 51.31.

Applicant claims that Contention 2 is inadmissible because the issuance of the Staff EA is "a jurisdictional prerequisite" to the admission of a contention that an EIS is required. Brief of Applicant, p. 22. This is said to follow from the ruling in Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 466-67 (1982)). According to Applicant, the specificity requirements governing contentions cannot as a matter of law be met until the staff has issued its EA. Applicant's Brief, p. 24. Should the Applicant be correct, of course, the staff could, as a matter of law, preclude litigation of relevant issues by not issuing or by delaying issuance of its EA. We would have then, the legal equivalent of "gotcha!"

That was not the result intended by the Commission in Catawba, nor would it be permissible under judicial precedent:

...no procedural requirement can lawfully operate to preclude from the very outset a hearing on an issue both within the scope of the petitioner's interest and germane to the outcome of the proceeding. If it had that effect, the requirement would not merely be patently unreasonable but, as well, would render nugatory Section 189a hearing rights.

Duke Power Co., supra, 16 NRC at 469. See also Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983).



The courts have likewise made it clear that NRC rules may not operate to prevent the litigation of issues material to licensing. Union of Concerned Scientists v. NRC, 735 F.2d 1437 (D.C. Cir. 1984).

It should also be noted that NECNP Contention 5 as drafted objected to the lack of an environmental assessment. As noted above, NRC rules require EA's to discuss, in brief, the same subjects as EIS's. The nonexistence of this document is the ultimate "deficiency." Thus, even were the lack of an EA to be a jurisdictional bar to a contention calling for an EIS, it could not bar a contention calling for an EA.

There can be no serious question but that NECNP and Massachusetts have stated a contention with the requisite specificity and factual basis, nor, other than asserting this purported "jurisdictional" bar, does Applicant maintain that the contention lacks specificity or basis. See NECNP Statement of Contentions, pp. 2-4, reasserted in NECNP Contention 5; New England Coalition on Nuclear Pollution's Response to Objections to Contentions, April 16, 1987, pp. 2-4; LBP-87-17, supra, Sl.Op. at 26-27. The contention is admissible.

b. Spent Fuel Amendments are not Categorically Excluded from the Requirement to Prepare an Environmental Assessment

The Applicant now claims that this amendment is categorically excluded from those actions requiring an Environmental Assessment because it involves "no significant hazards consideration," Brief of Applicant, p. 24. This argument, too, was not previously raised in its objections to contentions.

While apparently conceding that Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2) CLI-86-12, 24 NRC 1 (1986), holds that the need for an EIS is a case-by-case determination in spent fuel pool cases, Applicant claims that it is open in each case to determine whether a categorical exclusion exists. Brief of Applicant, p.25.

This argument lacks basic logical coherence and conflicts with prevailing precedent. If the need for an EIS is to be determined case-by-case, the mechanism provided in the rules for generating the information needed to make that decision is an environmental assessment. 10 C.F.R. §§ 51.30, 51.31. An action cannot logically be both categorically excluded and open to case-by-case determination.

Moreover, the question of whether this amendment can be said to involve "no significant hazards considerations" is before the Commission. NECNP has provided extensive technical and legal comments showing that a significant hazards consideration is posed here.<sup>7</sup> 51 Fed. Reg. 47,324, Dec. 31, 1986. The Board is precluded from making that determination. LBP-87-17, Sl.Op. at 6.

Finally, the finding of a categorical exclusion would be inconsistent with the Court of Appeals holding in San Luis Obispo Mothers for Peace v. NRC, 799 F.2d 1268 (9th Cir. 1986), empha-

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<sup>7</sup> See "New England Coalition on Nuclear Pollution's Supplemental Response to Vermont Yankee Spent Fuel Pool Expansion Request, 51 Fed. Reg. 22,245." September 19, 1986, attached for the Appeal Board.

sizing the "Congressional directive that doubts be resolved in favor of a prior hearing and that the NRC staff not prejudge the merits of a proposed license amendment." Id. at 1271. Should Applicant's position that the amendment is categorically excluded be adopted, there would be no hearing at all, either before or after the proposed action. Such a result would be manifestly inconsistent with the San Luis Obispo case, supra.

Applicant's next, inter-related issue, can be similarly disposed of. Applicant contends that there is no increased public risk associated with this amendment. Brief of Applicant, pp. 25-26. First, it asserts, as if it were undisputed, that the placement of 40% more rods in the pool, in much tighter configuration, could not increase the probability of an accident. NECNP has asserted facts tending to show the contrary - that the action will increase the probability of a self-sustaining fire in the spent fuel pool. NECNP has described the circumstances which might lead to such a fire (NECNP Statement of Contentions, pp. 1-4) and presented evidence, including the most recent report by NRC's major contractor on this issue, showing that packing the fuel more tightly increases this probability.<sup>8</sup> Indeed, as noted by NECNP, Brookhaven National Laboratory, after what we believe to be the most extensive study done to date on this subject, has recommended that NRC preclude storage of freshly discharged fuel (defined as discharged within 2-3 years) in densely packed racks

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<sup>8</sup> See New England Coalition on Nuclear Pollution's Response to Objections to Contentions, April 16, 1987, pp. 2-4 and n.1.



such as those proposed to be used here.<sup>9</sup> In addition, NECNP has alleged that the need to use of the core decay heat removal system (RHR) to cool the pool increases the probability of an accident. NECNP Statement of Contentions, pp. 6-8.

Moreover, NECNP has also alleged that the other half of the risk equation, the consequences of a spent fuel pool accident, would be increased by storing over 40% more fuel in the pool. NECNP Statement of Contentions, p. 1-6. Applicant's response to this is a logical circumlocution: a) every spent fuel pool amendment increases risk, b) the need for an EIS is a case-by-case determination, ergo: the increase in risk from a spent fuel amendment cannot require an EIS. Brief of Applicant, p. 26.

One cannot so easily evade the need to determine on a case-by-case factual basis, based on the evidence available and presented to the Board, whether the increased risk associated with this amendment is significant. Had the Commission intended to make the generic factual determination that actions such as this do not pose the possibility of increased risk, it would have been required to propose a rule to that effect, provide opportunity for comment and support any rule promulgated with facts and sufficient rationale. Such factual determinations cannot be made by fiat. See Minnesota v. NRC, 602 F.2d 412, 417-418 (D.C. Cir. 1979); NRDC v. NRC, 547 F.2d 633, reversed on other grounds Vermont Yankee Nuclear Power Corp., 435 U.S. 519, 98 S.Ct. 1197

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<sup>9</sup> Id. The Brookhaven report was sent to the parties via Board Notification BN-87-05.

(1978). Instead of making a generic finding, the Commission has explicitly made consideration of such factual issues a case-by-case determination. NECNP has presented sufficient grounds as a threshold matter to go forward with this determination.

Contention 3

The Applicant has failed to submit an adequate analysis of alternatives to the proposed action, as required by §§ 102(2)(C) and 102(2)(E) of the National Environmental Policy Act, 42 U.S.C. §§ 4332(C) and 4332(E), and implementing NRC regulations or guidelines. Specifically, the Applicant has failed to analyze adequately the alternatives of (1) dry cask storage and (2) independent pool storage. Both of these alternatives are available options and provide obvious safety advantages over the instant proposal.

Applicant's argument on this contention is a variation on the "gotcha!" theme discussed above. In short, Applicant argues that since the NRC has the legal obligation under NEPA to consider environmental impact and alternatives, only a deficiency in the NRC's analysis can provide the basis for a contention. And, since the NRC staff has yet done no analysis, there can be no deficiency and hence, no contention. Brief of Applicant, p. 27.

The argument overlooks the fact that the absence of an environmental assessment is the ultimate "deficiency" in the staff's analysis. NECNP and Massachusetts have alleged the availability of specific alternatives which do not pose the risks associated with the Applicant's proposal and which are feasible and available. (Contrary to the Applicant's "consideration" of

alternatives, at least one has been licensed. NECNP Statement of Contentions, p. 10; Tr. 102-109. There can be no serious question but that NECNP and Massachusetts have stated a contention with adequate specificity and basis.

Since the Staff has not yet done its EA, the Board redrafted this contention to reference the deficiency in the Applicant's submittal. LBP-87-17, Sl.Op. at 34-38. It is NECNP's belief that the contentions as originally drafted, referencing the NRC's failure to meet its legal obligation, were also acceptable formulations. In any case, the salient facts are that NEPA, as implemented by 10 C.F.R. Part 51, imposes conditions on the approval of this proposal. Among those conditions are that environmental impacts and alternatives be considered, at least in an Environmental Assessment. 10 C.F.R. §§ 51.30, 51.31. NRC's failure to meet its legal obligations for licensing clearly provides grounds for a contention. See Union of Concerned Scientists v. NRC, 735 F.2d 1437 (D.C. Cir. 1984).

The Board Did Not Exceed Its Discretion

The Applicant here aims a general broadside at the Board's decision. Brief of Applicant, pp. 28-30. Its complaints are largely frivolous; a Board is not precluded from doing research or making the self-evident observation that staff determinations to be made later would be subject to challenge when made. Id. at 28.<sup>10</sup> The redrafting of contentions done by this Board is well

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<sup>10</sup> NECNP disputes Applicant's citation to pp. 35 and 37 of LBP-87-17 as demonstrating the Board's "excus[ing] admitted deficiencies."



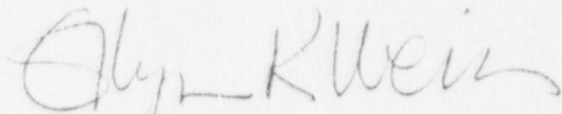
within the discretion normally exercised by Licensing Boards.  
E.g. General Public Utilities Nuclear Corp. (Three Mile Island  
Nuclear Station, Unit 1), LBP-86-10, 23 NRC 283 (1986).

The Applicant has pointed to no issue accepted by the Board  
for litigation in this hybrid proceeding that was not fairly  
raised by the intervenors with sufficient specificity and basis  
provided by them. Its complaint is basically that its objections  
failed to prevail.

Conclusion

For the reasons given, NECNP urges the Appeal Board to deny  
this Appeal.

Respectfully submitted,



Ellyn R. Weiss  
HARMON & WEISS  
2001 "S" Street, N.W.  
Suite 430  
Washington, D.C. 20009  
(202) 328-3500

Counsel for NECNP

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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OFFICE OF THE CHIEF OF  
DOCKETING & SERVICE  
BRANCH  
Docket No. 50-271-OLA

CERTIFICATE OF SERVICE

The undersigned certifies that on, July 1, 1987, "On Appeal Pursuant To 10 CFR 2.714a From A Prehearing Conference Order, LBP-87-17, May 26, 1987, Brief Of The New England Coalition On Nuclear Pollution" were served on the following parties to this case by hand and/or overnight mail; as designated below:

Charles Bechhoefer, Chairman  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Glenn O. Bright  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dr. James H. Carpenter  
Atomic Safety and Licensing Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Secretary of the Commission  
Attn: Docketing and Service Section  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

\*Christine N. Kohl, Chairman  
Atomic Safety and Licensing Appeal Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

George Dean, Esq.  
Assistant Attorney General  
Commonwealth of Massachusetts  
Department of the Attorney General  
One Ashburton Place  
Boston, MA 02108

Daniel J. Mullett, Esq.  
Vermont Department of Public Service  
120 State Street  
Montpelier, VT 05602

Ann Hodgdon, Esq.  
Office of the General Counsel Bethesda  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Diana Sidebotham  
R.F.D. #2  
Putney, Vermont 05346

Thomas G. Dignan, Esq.  
Ropes & Gray  
225 Franklin Street  
Boston, MA 02110

\*Gary J. Edles  
Atomic Safety and Licensing Appeal Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

\*Howard A. Wilber  
Atomic Safety and Licensing Appeal Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Geoffrey M. Huntington, Esq.  
Office of the Attorney General  
Environmental Protection Agency  
State House Annex  
25 Capitol Street  
Concord, NH 03301-6397

\* by hand

  
Ellyn R. Weiss