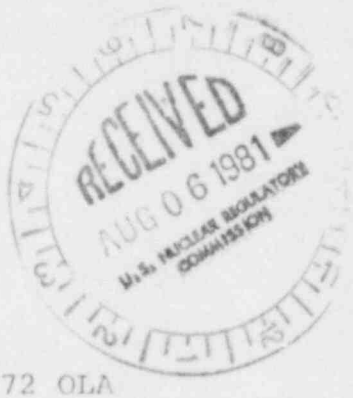

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

THE NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF PUBLIC SERVICE ELECTRIC & GAS COMPANY, et al	:	Docket No. 50-272 OLA (Spent Fuel Pool)
(Salem Nuclear Generating Station, Unit 1)	:	INTERVENOR, TOWNSHIP OF LOWER ALLOWAY CREEK'S PETITION IN SUPPORT OF REVIEW OF THE DECISION AND ACTION OF THE ATOMIC SAFETY & LICENSING APPEAL BOARD (10 CFR 2.786)

SUMMARY OF ALAB DECISION

Insofar as the Township of Lower Alloway Creek (TOLAC) is concerned, the decision of the Atomic Licensing Appeals Board:

(1) Affirmed the Order denying TOLAC's motion for further analysis of the propagation of oxidation to older fuel in the event of a gross loss of water from the pool,

(2) Dismissed the exception that the granting of the license would be a major commission action and therefore there would be a requirement for an environmental impact statement under the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C., §4321, et seq, and

(3) Dismissed the exception that the findings of the Atomic Safety and Licensing Board were against the weight of the evidence.

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MATTERS OF FACT AND LAW RAISED
BEFORE THE ATOMIC LICENSING APPEALS BOARD

Exception #1 before the Atomic Licensing Appeals Board raised the issue of whether further analysis could predict more precisely whether oxidation could propagate to older fuel and that calculations for such analysis could be performed. (Initial Decision, page 39, line 1: Tr. 1483). Intervenor TOLAC, made a motion that the additional analysis should be performed and the motion was denied by the Atomic Safety & Licensing Board. (Tr. 1493, line 4) (ALAB Decision, July 17, 1981, page 31, line 7, et seq.)

Exception #5 raised the point that it was error to hold that the license amendment requested by the applicant was not a major commission action significantly affecting the quality of the human environment. The Intervenor raised the issue that the license amendment required an environmental impact statement under NEPA of 1969, 42 U.S.C. §4321, et seq., and the larger issue that the Nuclear Regulatory Commission (NRC) in combination with nuclear plant licensees has created the national policy of long term storage at-reactor-sites without preparing a generic environmental impact statement in violation of the requirements of NEPA, 42 U.S.C. §4332 (2)(c)(i) thru (v).

Exceptions #2, #3, and #4, deal with the Initial Decision of the Atomic Safety & Licensing Board being against the weight of the evidence introduced by TOLAC. Under 10 CFR, §2.786 (4)(ii), it does not appear that the Commission would grant a Petition for Review since the intervenor TOLAC would have to prove that the Decision of the Atomic Safety and Licensing Appeal Board was clearly

erroneous and contrary to the resolution that very same issue by the Atomic Safety and Licensing Board.

THE DECISION OF THE ATOMIC LICENSING APPEALS BOARD WAS IN ERROR

POINT I. (EXCEPTION #1) - TOLAC'S MOTION FOR ADDITIONAL ANALYSIS SHOULD HAVE BEEN GRANTED AND THE MATTER SHOULD BE REMANDED TO THE ATOMIC SAFETY & LICENSING BOARD.

It is contended that the Atomic Safety & Licensing Board committed factual and legal error in rejecting the testimony of Dr. Alan S. Benjamin of Sandia Laboratories that further analysis could predict more precisely whether oxidation could propagate to older fuel and that calculations for such analysis could be performed. TOLAC made a motion that the additional analysis should be performed and the motion was denied by the Atomic Safety & Licensing Board. (Tr. 1493, line 4). (See Initial Decision, page 39, line 1:Tr.1483).

There is authority that additional evidentiary hearings should be ordered where there are unresolved issues. This occurred In The Matter of Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2) Docket Nos. 50-282 and 50-306, August 11, 1975, ALAB-284. In this case several unresolved issues including condensate demineralization, detectible leakage before tube failure, sufficiency of Eddy current surveillance, monitoring of secondary water chemistry and tube plugging criteria - were cause for reopening the record and ordering an additional evidentiary hearing.

Apparently, the Atomic Safety & Licensing Board reached the conclusion that even though Dr. Benjamin testified that further analysis could predict more precisely whether oxidation would

propagate to older fuel, that such an analysis was not necessary in that the radioactive releases from older fuel would not be significant in comparison to radioactive releases from recently discharged fuel. While this may be true, Dr. Richard E. Webb's testimony on radioactive releases as well as the offered testimony of Dr. Frankhauswer was excluded by the Atomic Safety & Licensing Board. More important, the critical question as to whether the radioactive releases in an enlarged pool would be greater than the radioactive releases in the pools originally designed remains unanswered.

The Atomic Licensing Appeals Board should have remanded the case to the Atomic Safety and Licensing Board and directed that the record be reopened and a further evidentiary hearing should be ordered to take place so that the analysis indicated by Dr. Benjamin will be performed. (See Initial Decision, page 39).

The Atomic Licensing Appeals Board apparently reached the conclusion that the Intervenor TOLAC had a "heavy burden" of convincing the Atomic Safety and Licensing Board and the Atomic Licensing Appeals Board that a propagation analysis would have made a relevant contribution to the Board's resolution of the gross loss of water question. This conclusion is rather interesting when one considers that the Atomic Safety & Licensing Board struck all of applicants testimony on the gross loss of water question

in that it was not responsive. (12 NRC at 451; ALAB Decision of July 17, 1981 at page 30, following footnote 23). The effect of the Atomic Licensing Appeals Board Decision is to create the impression that an applicant can file totally unresponsive testimony to a legitimate and serious question raised by an Atomic Safety and Licensing Board, and still obtain the amendment that is requested by the applicant. Moreover, the impression is clearly created that the Nuclear Regulatory Commission staff witness, Mr. Pasedag carried the ball for the applicant since the effect of the applicant's testimony being stricken as unresponsive, was that the applicant filed no testimony whatsoever in response to the Board's question even though ordered to do so. It would seem that some of the characterizations engaged in by the Atomic Licensing Appeals Board in respect to testimony offered by TOLAC are unfair and unwarranted since TOLAC could have relied entirely on cross-examination in respect to the Board's question and not produced any direct testimony. TOLAC was not the applicant. Instead, TOLAC offered extensive direct testimony on the question raised by the Atomic Safety and Licensing Board. TOLAC considers the characterization that intervenors had a "heavy burden" to be in error. Certainly, the burden of the intervenor TOLAC in respect to the Board question was no greater than that of the applicants.

Apparently, the Atomic Licensing Appeals Board at pages 31 and 32, of the Decision of July 17, 1981, consider that Mr. Pasedag's testimony put to rest the question as to whether there

would be radioactive releases if in fact there were fires (oxidation) spreading to older fuel. The Atomic Licensing Appeals Board dismisses the testimony of Dr. Webb which is treated in footnote 25, on page 32 of the Decision of July 17, 1981, as not probative since Dr. Webb was unable to describe a mechanism for the release of the radioactivity from the pool and relate his testimony to the presence of older spent fuel in the pool. It is also true that the Atomic Safety and Licensing Board in paragraph 75 at page 70 of the Initial Decision disparaged the testimony of Dr. Webb. However, Dr. Webb's qualifications and testimony are part of the record. The testimony is extensive and difficult to parse. However, taken in its totality, the testimony does raise the spectre of serious consequences in the event of a gross loss of water accident in the pool. Apparently, both Dr. Benjamin and Dr. Webb agree that additional analysis is required. For purposes of this Petition, the Commission must ask itself whether it will allow the Board's question to be answered only by Mr. Pasedag. There is no doubt that Mr. Pasedag and Dr. Webb have considerable disagreement as to the consequences of a zirconium fire in the spent fuel pool. Apparently, Mr. Pasedag is of the opinion that there could not be any significant radioactive releases from the old fuel. Dr. Webb was of the opinion that there would be considerable releases of cesium and strontium (Tr. 1702, 1731 - 2.

The Atomic Licensing Appeals Board is of the opinion that Prairie Island, ALAB-284, involved more difficult and highly technical safety issues requiring resolution and is not on point in respect to the unresolved safety questions that TOLAC contends surround the Board's question concerning a gross loss of water

accident in the spent fuel pool. Tolac respectfully disagrees. In fact, at page 70, footnote 46 of the Initial Decision of the Atomic Safety and Licensing Board it was observed that the Board's question involved complicated physical processes and in fact, Dr. Benjamin initially expressed an opinion that propagation of fire in the spent fuel pool was more probable than not. It is true, that this opinion was changed as detailed in footnote 46, however, the very candor with which the Atomic Licensing and Safety Board credits Dr. Benjamin should certainly carry through, and additional analysis of the question of propagation of fire in the spent fuel pool should be more thoroughly studied both as to its probability of occurrence and the consequences of radioactive release. The record below falls far short of resolving the Board's own question in respect to this serious matter involving public health and safety.

POINT II. THE ENLARGEMENT OF THE SPENT FUEL POOL AT SALEM 1 AND CONSEQUENTLY AT SALEM 2 ALONG WITH THE EXPANSION OF SPENT FUEL POOLS AT PRACTICALLY EVERY NUCLEAR POWER PLANT OPERATING IN THE UNITED STATES CONSTITUTES MAJOR COMMISSION ACTION SIGNIFICANTLY AFFECTING THE QUALITY OF HUMAN ENVIRONMENT AND THERE HAS BEEN NO GENERIC ENVIRONMENTAL IMPACT STATEMENT PURSUANT TO THE REQUIREMENTS OF 42 U.S.C. 4332 (2)(c)(i) thru (v).

Either through intention or inadvertence, the NRC has developed a masterful strategy for avoiding the requirements of NEPA, 42 U.S.C. §4332 (2)(c)(i) thru (v).

NUREG-0575, volume 1 "Final Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel"(August, 1979) discusses alternatives at Section 3.0, page 3-1. Significantly, the away-from-reactor alternative is not given a NEPA type analysis although the away-from-reactor concept is given tangential mention at pages 3-8 and 3-9.

TOLAC contends that the NRC is obligated to give away-from-reactor storage a detailed NEPA analysis as an alternative to increasing at-reactor storage capacity. This has not been done by the NRC.

In it's announcement dated September 15, 1975, the Commission stated its position that, in the public interest, there would be no deferal of licensing actions on the individual expansion of at-reactor spent fuel storage capaicty while the Final Generic Environmental Impact Statement (NUREG-0575) was being prepared. As of January, 1979, 39 applications to expand capacity were approved and 65 applications were filed. There is no doubt we now have what may be a final solution to the spent fuel storage problem. The failure of NUREG-0575 to adequately consider the away-from-reactor alternative violates NEPA. The fact that the NRC attempts to say that at-reactor storage is only interim storage and not permanent disposal is merely an opinion that may have no foundation in reality. The long absence of any orders for light water nuclear power plants may very well mean the end of the first genre of nuclear power plants in the United States.

Even though the Commission has initiated a proceeding to review the basis for confidence for safe waste disposal or terminal disposal which will eventually be available, this does not alleviate the potential for serious accidents occuring at nuclear plants during the period of time prior to an eventual solution to the safe and permanent disposal of spent nuclear fuel.

In the past, the NRC has been fond of applying NEPA's "rule of reason" as to the possible consequences of actions that must be considered. The "rule of reason" was first enunciated in NRDC v. Morton, 148 U.S. App. D.C. 5, 458 F2d (1972) quoted with

with approval Vermont Yankee Nuclear Corp. v. NRDC, 435 U.S. 519, 538-39 (1978) and Kleppe v. Sierra Club, 427 U.S. 390 410n21(1976). That rule requires a federal agency to direct its environmental inquiries as to events that are "reasonably probable" and not "theoretically possible". Using that rule, it has been justified that it is only theoretically possible that no site fuel repositories would be available for storage of spent fuel and that it is reasonably probable that such facilities would be available. The same rule should also be applied to accident hazards. Since it has now admitted that Three Mile Island was a Class 9 Accident, we are no longer dealing with theoretical possibilities of serious accidents at nuclear plants - instead we are dealing with reasonably probable accidents that will occur in the future.

The NRC should: 1) require the applicant to thoroughly evaluate the alternative of an away-from-reactor storage facility on the grounds that such a facility would be inherently more consistent with the public health and safety in that if there were an accident at Salem Unit 1 or Unit 2 of serious proportions, large amounts of older spent fuel - still containing long-lived radionuclides - would not be involved in the accident if they were stored away-from-reactor, and 2) the NRC should initiate an Environmental Impact Statement prepared under NEPA dealing with the alternatives of away-from-reactor storage as opposed to at-reactor storage.

COMMISSION REVIEW SHOULD BE EXERCISED

This case involves an important matter that could significantly affect the environment, the public health and safety and involves an important procedural issue and question of public policy.

Respectfully submitted,

CARL J. VALORE, SPECIAL NUCLEAR COUNSEL
FOR THE TOWNSHIP OF LOWER ALLOWAY CREEK

August 3, 1981

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

THE NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF PUBLIC SERVICE ELECTRIC & GAS COMPANY, et al	:	Docket No. 50-272 OLA (Spent Fuel Pool)
(Salen Nuclear Generating Station, Unit #1)	:	

CERTIFICATE OF SERVICE

I hereby certify that copies of Intervenor, Township of Lower Alloway Creek's Petition in Support of Review of the Decision and Action of the Atomic Safety & Licensing Appeal Board pursuant to 10 CFR 2.786, in the above captioned proceedings have been served on the following by deposit in the United States mail, first class, at the Northfield, N.J. post office, this 3rd day of August, 1981.

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Washington, D.C., 20555

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