

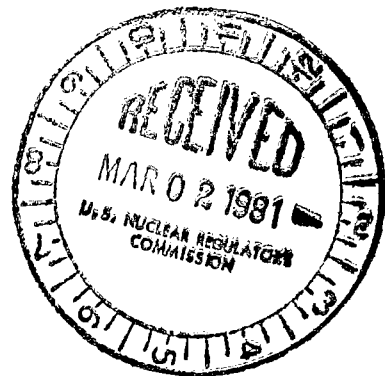
UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of )  
 )  
PUBLIC SERVICE ELECTRIC & )  
Gas Company )  
 )  
(Salem Nuclear Generating )  
Station, Unit No. 1) )

Docket No. 50-272  
Proposed Issuance of  
Amendment to Facility  
Operating License No. DPR-70

NRC STAFF BRIEF IN OPPOSITION TO  
EXCEPTIONS OF THE TOWNSHIP OF LOWER ALLOWAYS CREEK  
AND OF ALFRED C. AND ELEANOR G. COLEMAN



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February 27, 1981

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter	)	
PUBLIC SERVICE ELECTRIC & GAS COMPANY	)	Docket No. 50-272
(Salem Nuclear Generating Station, Unit No. 1)	)	Proposed Issuance of Amendment to Facility Operating License No. DPR-70

NRC STAFF BRIEF IN OPPOSITION TO  
EXCEPTIONS OF THE TOWNSHIP OF LOWER ALLOWAYS CREEK  
AND OF ALFRED C. AND ELEANOR G. COLEMAN

I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.762(b), the Staff of the Nuclear Regulatory Commission (Staff) hereby opposes the exceptions filed by the Township of Lower Alloways Creek (the Township) on November 4, 1980. The Staff also hereby opposes the exceptions filed by Alfred C. and Eleanor G. Coleman (the Colemans) on November 11, 1980. For the reasons set forth below, the Staff concludes that the decision of the Atomic Safety and Licensing Board (Licensing Board) in the above-captioned proceeding should be affirmed.

II. STATEMENT OF FACTS

The proceeding below concerned the application of Public Service Electric & Gas Co. (Licensee) for an amendment to the operating license for Salem Nuclear Generating Station, Unit 1 (Salem 1). This amendment changes the

technical specifications for the facility to increase the spent fuel pool capacity from 264 to 1170 spent fuel assemblies.

A Notice of Proposed Issuance of Amendment to Facility Operating License was published in the Federal Register on February 8, 1978. 44 Fed. Reg. 5443. In response to this notice the Township of Lower Alloways Creek, the Sun People, and Alfred C. and Eleanor G. Coleman filed timely petitions for leave to intervene under 10 C.F.R. § 2.714. The State of New Jersey requested leave to participate as an interested state pursuant to 10 C.F.R. § 2.715(c). At the Special Prehearing Conference held on May 18, 1978, the State of Delaware also requested leave to participate as an interested state. New Jersey and Delaware were granted interested state status, and the petitions of the Township and the Colemans were granted by the Licensing Board. Licensing Board Orders dated April 26, 1978, and May 24, 1978. The petition of the Sun People for leave to intervene was denied. Order Following Special Prehearing Conference (May 24, 1978).

The Township through its counsel filed approximately 11 contentions, two of which were admitted by the Licensing Board. Memorandum and Order at 3

(April 26, 1978). <sup>1/</sup> The Colemans originally filed some 20 contentions. Later these contentions were reduced in number by counsel retained to represent them to 13 contentions. Three of these contentions were admitted by the Licensing Board as matters in controversy in this proceeding in its Order Following Special Prehearing Conference. The Colemans filed a Motion for Reconsideration with regard to a fourth contention. This motion was later granted by the Licensing Board and Colemans' Contention No. 13 was admitted as a matter in controversy in

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<sup>1/</sup> The Township's contentions which were admitted were Contention No. 1 and Contention No. 3.

Contention No. 1 states:

"The Licensee has not considered in sufficient detail possible alternatives to the proposed expansion of the spent fuel pool. Specifically, the Licensee has not established that spent fuel cannot be stored at another reactor site. Also, while the GESMO proceedings have been terminated, it is not clear that the spent fuel could not by some arrangement with Allied Chemical Corp. be stored at the AGNS Plant in Barnwell, South Carolina. Furthermore, the Licensee has not explored nor exhausted the possibilities for disposing of the spent fuel outside of the U.S.A."

Contention No. 3 states:

"While the Licensee has requested increased spent fuel storage capacity at its Salem Unit 1 it has not limited the use of such storage facility to fuel removed from Salem Unit 1. Storage of spent fuel from other units on or off Artificial Island, therefore is a possibility and such storage creates many hazards not analyzed by the Licensee in its application. Included among these hazards are those created by unloading spent fuel casks."

The remaining contentions were rejected by the Licensing Board on various grounds. Memorandum and Order at 3-4 (April 26, 1978).



this proceeding. Memorandum and Order (July 18, 1978). <sup>2/</sup> Neither the State of New Jersey nor the State of Delaware filed any contentions.

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<sup>2/</sup> Colemans' contentions which were admitted were Contentions Nos. 2, 6, 9, and 13. The Board pointed out that Contentions Nos. 2 and 6 would be treated together. Order Following Special Prehearing Conference at 5 (May 24, 1978).

Contention No. 2 states:

"The Licensee has given inadequate consideration to the occurrence of accidental criticality due to the increased density or compaction of the spent fuel assemblies. Additional consideration of criticality is required due to the following:

- A. deterioration of the neutron absorption material provided by the Boral plates located between the spent fuel bundles;
- B. deterioration of the rack structure leading to failure of the racks and consequent dislodging of spent fuel bundles."

Contention No. 6 states:

"The Licensee has given inadequate consideration to qualification and testing of Boral material in the environment of protracted association with spent nuclear fuel, in order to validate its continued properties for reactivity control and integrity."

Contention No. 9 states:

"The Licensee has given inadequate consideration to alternatives to the proposed action. In particular, the Licensee has not adequately evaluated alternatives associated with the Nuclear Regulatory Commission adopting the 'no action' alternative for Licensee's application, which would implicate the following:

- a. expansion of spent fuel storage capacity at reprocessing plants;
- b. licensing of independent spent fuel storage installations;
- c. storage of spent fuel from Salem No. 1 at the storage pools of other reactors; and
- d. ordering the generation of spent fuel to be stopped or restricted (leading to the slow-down or termination of nuclear power production until ultimate disposition can be effectuated.)"

Contention No. 13 states:

(continued on next page)

On February 27, 1979, Licensee filed a Motion for Summary Disposition with regard to all of the Township's and the Colemans' contentions. This Motion was granted by the Licensing Board with respect to the Township's Contention No. 3 and the Colemans' Contentions Nos. 9 and 13. Order at 4, 12, 19 (April 30, 1979). <sup>3/</sup>

On April 18, 1979, the Licensing Board posed three questions to the Staff arising out of the Three Mile Island accident which occurred on March 28, 1979. <sup>4/</sup> One of the three questions was later withdrawn by the Board. A

2/ (Continued)

"The licensee has failed to give adequate consideration to the cumulative impacts of expanding spent fuel storage at Salem Nuclear Generating Station Unit 1 in association with the recently filed proposed amendment to the application for an operating license at the sister unit, Salem Unit 2. (See Amendment No. 42, Docket No. 50-311, filed April 12, 1978 which proposes modifications of spent fuel storage which the intervenor believes are similar in scope to the Salem Unit 1 application.). For example, the licensee assumes an increase in releases of Kr-85 by a factor of 4.5--due to the factor of 4.5 increase in spent fuel (Licensee's application at 10). A similar increase, absent exceptional controls, can be expected at Salem No. 2, resulting in a cumulative increase in Kr-85 emissions by a factor of 9--almost a full order of magnitude increase. (If similar spent fuel increases are postulated for the companion units, Hope Creek 1 and 2, now under construction, the cumulative increase could rise by a factor of 18, or almost two full orders of magnitude.)

3/ The Staff filed a Motion in support of Licensee's Motion for Summary Disposition which was rejected by the Board, since at that time the regulations did not provide for responses in support of motions for summary disposition. These regulations have since been amended to allow such responses. 10 C.F.R. § 2.749(a); 45 Fed. Reg. 68919 (Oct. 17, 1980).

4/ The Board later agreed that all parties to the proceeding could respond to these questions.

portion of the third question was the subject of objection by the Staff. NRC Staff Objection to Board Question (June 1, 1980). Additional questions were posed by the Licensing Board during evidentiary hearings and by order dated February 22, 1980.

Evidentiary hearings were held on the three remaining contentions on May 2-4 and on July 10-11, 1979. At the July 10-11 hearings, responses were also heard to the Board's Three Mile Island questions. <sup>5/</sup> More evidentiary hearings were held on April 28-30, 1980, concerning the Board's final question posed in its Order of February 22, 1980. <sup>6/</sup> At the end of the April 28-30 hearing, Licensee moved that the record be closed. This motion was granted by the Licensing Board. Order of May 9, 1980 at 2.

The Licensing Board issued its Initial Decision on October 27, 1980. In its decision the Board concluded that: (1) the issuance of this amendment was not a major Commission action significantly affecting the

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<sup>5/</sup> At the July 10-11 hearing an additional question relating to the Three Mile Island accident was posed by the Licensing Board. See Tr. 922-23. Responses to this question were filed by affidavit and no evidentiary hearings were held with regard to it.

<sup>6/</sup> This question stated:  
"In the event of a gross loss of water from the storage pool, what would be the difference in consequences between those occasioned by the pool with expanded storage and those occasioned by the present pool?"

quality of the human environment, and thus no environmental impact statement was required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321, et. seq. and Part 51 of the Commission's regulations; (2) there is reasonable assurance that the activities authorized by the requested amendment to the operating license can be conducted without endangering the health and safety of the public; (3) the activities authorized by the requested amendment to the operating license will be conducted in compliance with the Commission's regulations; and (4) the issuance of the requested amendment to the operating license will not be inimical to the common defense and security or to the health and safety of the public. Initial Decision at 41-44. The Licensing Board authorized the Director of the Office of Nuclear Reactor Regulation (NRR) to make the appropriate findings and to issue the requested amendment. Initial Decision at 44. Exceptions to this Initial Decision were filed by the Township on November 4, 1980, and by the Colemans on November 11, 1980. <sup>7/</sup> A brief in support of its exceptions was filed by the Township on December 4, 1980. The Colemans requested an extension of time until January 31, 1981, to file their brief. Licensee and Staff opposed such a lengthy extension, and the Appeal Board granted the Colemans until January 12, 1981 to file their brief. Memorandum and Order of the Appeal Board dated December 10, 1980. The Colemans filed their brief on January 13, 1981, and the Appeal Board

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<sup>7/</sup> The Colemans notified all parties at this time that they would no longer be represented by counsel and so would be conducting this appeal pro se.

accepted it. Order dated January 19, 1981. No stay was imposed, and the Staff issued Amendment No. 33 to Facility Operating License No. DPR-70 for Salem Nuclear Generating Station, Unit 1, on February 2, 1981.

### III. STATEMENT OF ISSUES

The issues presented by the Township and the Colemans to be considered on appeal are as follows:

1. Whether the Board was correct in its determination that the proposed action is not a major Federal action significantly affecting the quality of the human environment, and would not require the preparation of an environmental impact statement.
2. Whether the Board was correct in its procedural rulings concerning discovery, the admission of contentions and participation in the hearings.
3. Whether the Board correctly determined that no further analysis was required in order to answer Board Question No. 5.
4. Whether the Board, Licensee and Staff performed improper and inadequate analyses of the contents of the spent fuel pool.
5. Whether the Final Generic Environmental Impact Statement on Handling and Storage of Light Power Reactor Fuel (FGEIS) should have been introduced as evidence in this proceeding and examined.
6. Whether the Staff, the Licensee, and Licensing Board have an obligation to produce documents which are arguably relevant to the

subject matter of a proceeding, even though those documents are already available in the public document room.

#### IV. ARGUMENT

##### A. Standard of Review.

The Colemans question the standards to be applied in weighing the evidence. Intervenor, Alfred C. Coleman, Jr., and Eleanor G. Coleman's Exceptions And Appeal, Exception 12. (November 11, 1980). A Licensee is not obliged to meet an absolute standard. Rather Licensee is to provide "reasonable assurance" that the public health, safety, and environmental concerns are protected. Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-616, 12 NRC \_\_\_\_ (Oct. 2, 1980), slip op. at 3. The Licensee must demonstrate this "reasonable assurance" by the preponderance of the evidence.

The Colemans also claim that the Licensing Board's decision is not adequately justified. Brief in Support of Exceptions, Conclusion of law at 2 (January 13, 1981). Licensing Boards have an obligation to articulate in reasonable detail the basis for their determinations on the questions coming before them for decision. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-504, 8 NRC 406, 410 (1978). It is the general duty of Licensing Boards to insure that decisions and miscellaneous memoranda and orders contain a sufficient explanation of any ruling on a contested issue of law or fact to enable

the parties, and this Board on its own review, readily to apprehend the foundation of the ruling. Id. at 411. The Licensing Board here has done exactly that. A party wishing to challenge a licensing board's initial decision must file exceptions to that decision. 10 C.F.R. § 2.762(a). Each exception must state the single error of fact or law being asserted, and must specify the portion of the initial decision or earlier Board ruling to which the exception is addressed. Id. A brief in support of these exceptions must then be filed. Id. This brief must specify the precise portion of the record relied upon in support of the assertion of error. Id. See Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB573, 10 NRC 775, 805 (1979) It is not enough for a party merely to repeat its proposed findings. Black Fox, supra, at 805. Nor may a party file proposed findings in lieu of an appellate brief. Id. at n. 129. The Appeal Board has previously held that a brief in support of exceptions must show either that the record is inadequate to support the licensing board's findings, or that the licensing board misunderstood or ignored evidence pointing to a different conclusion. ALAB-616, supra, slip op. at 2.

In the present case the record does not demonstrate a need for the Appeal Board to either reject or modify the Licensing Board's findings. The Licensing Board's decisions in this proceeding have been well reasoned and well articulated. A basis has been provided by the Board for every ruling which has been made. The exceptions filed by the Township and the

Colemans do not point to any errors of the Licensing Board which would require reversal of its decision.

B. EXCEPTIONS OF THE TOWNSHIP OF  
LOWER ALLOWAYS CREEK

1. Exception No. 1 does not point to any error requiring reversal of the Licensing Board's decision in this matter.

The Township's first exception claims that the Board erred in not adopting the testimony of Dr. Allan S. Benjamin that further analysis could predict more precisely whether oxidation could propagate to older fuel in the spent fuel pool. Intervenor, Township of Lower Alloways Creek's Brief in Support of Exceptions at 1 dated December 4, 1980 (hereinafter Brief of Township).

By Order dated February 22, 1980, the Licensing Board posed a question to the parties concerning the difference in consequences between the present and expanded pool which would arise from a gross loss of water from the spent fuel pool. See n. 6, supra. Evidentiary hearings were held between April 28 and April 30, 1980, concerning the response to this question. Testimony was heard from the Staff and the Township.

During the hearing the Township made a motion that the hearing be continued until further analysis was conducted on the question of whether oxidation of the fresh fuel after a gross loss of water could propagate



to fuel four years old or older being stored in the pool. Tr. 1492. <sup>8/</sup>  
This motion was made after Staff witnesses Pasedag and Benjamin testified somewhat differently concerning their views about whether such propagation could occur. See, e.g., Tr. 1390-91, 1408-09. Dr. Benjamin had stated that he could not, without further study, rule out the possibility that oxidation could propagate to older fuel. Tr. 1390-91. Staff witness Pasedag, on the other hand, expressed it as his opinion that such propagation would not occur, or if it did, would occur to a very limited extent. Further Testimony of Walter F. Pasedag in Response to Board question No. 5 at 2, following Tr. 1387 (hereinafter Pasedag Further Testimony). The Township renewed its motion at the end of the hearing. Tr. 1801. The motion was denied by the Licensing Board in its Order of May 9, 1980.

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<sup>8/</sup> The Licensing Board ruled that the hearings could go forward, and informed the Township that it would treat their motion as a motion to require further information. Tr. 1495.

In its Initial Decision the Licensing Board found that no further analysis of propagation was necessary to answer the Board's question.

Initial Decision at 39. The Board stated:

"When we consider that Dr. Webb was unable to describe any credible mechanism for propagation despite a specific invitation to do so, and consider that a gross loss of water is in itself an event of very low probability, we do not believe that further study of propagation is necessary to answer our question. We are satisfied that in the event of a gross loss of water from the spent fuel pool, there would not be a great difference between the consequences occasioned by the proposed storage configuration and those occasioned by the present one."

Id. The Township takes issue with this finding. This exception is without merit.

The Township argues that the question whether radioactive releases in an enlarged pool would be greater than the radioactive releases in the pool as originally designed is still unanswered. Brief of Township at 2. For this reason the Township claims that further evidentiary hearings should be held on the subject, and that the Appeal Board should order the Staff to conduct further analysis of the propagation question. Id. at 4.

The Licensing Board based its finding that no further study of propagation was necessary to answer its question concerning the difference in consequences of the gross loss of water accident between the present and expanded pool on several factors. These are:

1. The inability of any party to the proceeding to identify a mechanism for the occurrence of a gross loss of water accident;

2. The inability of parties to identify a mechanism for the release of radioactive material from the spent fuel pool; and
3. The caliber of the evidence presented by the various witnesses who testified concerning the Board's question.

Initial Decision at 31-39.

The Township complains that the testimony of Dr. Fankhauser was excluded in its entirety by the Licensing Board and that portions of Dr. Webb's testimony were also excluded. The Township implies that this testimony referred to the question of whether releases of radioactivity from older fuel would be significant in comparison with releases from fresh fuel. Brief of Township at 2. However, the Board correctly found that Dr. Fankhauser's testimony was not sufficiently connected to the question of the difference in consequences between the present and enlarged pool in the event of a gross loss of water. Tr. 1376. The Township makes no attempt to show in what way the Board erred in this ruling. No connection is made by the Township between Dr. Fankhauser's testimony and the difference in consequences of an accident occurring in the present and proposed pool. Further, the Township makes no attempt to point to those portions of Dr. Webb's stricken testimony which would have dealt with this subject. <sup>9/</sup> In fact, Dr. Webb testified that he was unable to

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<sup>9/</sup> Various portions of Dr. Webb's testimony was stricken on the grounds of irrelevance, repetitiousness, and lack of connection to the Board's question. Tr. 1377-81; 1679-81.

analyze the possibility of propagation of oxidation in the present spent fuel rack design. Webb testimony, Part III of Supp. of April 8-9, 1980 to Feb. 27, 1979 testimony, at 1, following Tr. 1697. Dr. Webb did not testify that once a zirconium fire started, it could propagate nor did he identify what effect on such propagation the densification of storage would have. <sup>10/</sup> Initial Decision at 34.

The Township did not present any evidence nor did any other party which would identify a credible mechanism to trigger a gross loss of water accident in the first place. Dr. Webb's testimony is based on the assumption that the accident has happened and large amounts of radioactivity would escape from the pool. Initial Decision at 33; Tr. 1699-1702. The Staff testified that the accident it postulated for the Board's question was not a credible one. The Staff defined the hypothesis used in its analysis as:

"...a hypothetical, non-mechanistic, instantaneous loss of all cooling water in the present and expanded spent fuel pool combined with an inability, for unspecified reasons, of refilling the pool, or providing any other mode of cooling than natural (convective) air cooling." Direct Testimony of Walter F. Pasedag in Response to Board Question No. 5 at 3 (hereinafter Pasedag Direct Testimony), following Tr. 1387.

<sup>10/</sup> It was Dr. Webb's theory that a zirconium fire with flames jumping from spent fuel assembly to spent fuel assembly could occur in a spent fuel pool. See Webb Testimony, Part III of Supp. of April 8-9, 1980 to Feb. 27, 1979 testimony at 3, following Tr. 1697. Staff witnesses strongly disagreed with the theory. They testified that it would not be possible to have a fire in the traditional sense with flames in the spent fuel pool. Initial Decision at 37; Tr. 1393. Dr. Webb could not testify as to whether oxidation of the zirconium cladding, which became known as a "zirconium fire" during the hearing, could propagate to older fuel.

The Staff pointed out that it considered the largest "loss of water" accident which would occur at the Salem spent fuel pool to be one resulting in a maximum leak of 710 gpm. Pasedag Direct Testimony at 2. Staff testimony stated that any such leakage could be detected promptly and controlled. Id. The Staff based its conclusions on the previously reviewed design of the spent fuel pool. Id. at 1. The Township presented no evidence to contradict this portion of the Staff's testimony.

The Township attempts to support its exception by reference to a disagreement it perceives between Staff witnesses on whether oxidation could propagate to fuel four years old or older, rather than by any testimony on this subject by its own witness. The sole basis for its challenge to the Board's Initial Decision is a difference in opinion between the Staff witnesses concerning propagation of oxidation once the hypothetical, incredible event has occurred.

Dr. Benjamin, who acted as a consultant to Staff witness Pasedag with regard to some heat transfer matters, could not rule out the possibility that a rise in temperature could cause older fuel assemblies to oxidize. Tr. 1392, 1399; Initial Decision at 37. Both witnesses testified that calculations to form a solid conclusion concerning propagation of oxidation were outside the scope of the Staff's review of this application. Tr. 1391, 1418. However, Staff witness Pasedag testified

that it was his opinion that only limited oxidation might occur in the fuel four years old or older. If it did, he testified that such limited oxidation would not lead to a substantial release of fission products beyond those released from the freshly discharged fuel. Pasedag Further Testimony at 2. Mr. Pasedag stated that there were several factors which led him to the above conclusions. These factors include:

"...the decay of volatile fission products (other than Cs-137), the fact that the primary source of energy is external to the rods, the thermal insulating property of the zirconium oxide layer which would reduce heat conduction to the interior of the rod, and the formation of temperature gradients opposed to the direction of diffusion." Id. at 3.

The Board properly found the Staff's testimony on this matter persuasive. Initial Decision at 38.

The Township argues that a further analysis of propagation could more precisely predict whether oxidation would propagate to older fuel. The Township seems to say that the possibility of some more precision with regard to propagation raises this issue to an unresolved issue concerning which evidentiary hearings should be held. The case cited by the Township for this proposition is inapposite. In Northern States Power Co. (Prairie Island, Units 1 and 2), ALAB-284, 2 NRC 197 (1975) and its companion case Northern States Power Co. (Prairie Island, Units 1 and 2), ALAB-275, 1 NRC 523 (1975), the Appeal Board raised concerns about a supplemental initial decision in an operating license proceeding. In its decision the Licensing Board found that a particular method of

maintaining steam generator tube integrity was adequate even though actual reactor experience indicated that the method used did not prevent significant corrosion. The Appeal Board was concerned that a complex and highly technical safety issue was decided on an incomplete record. The Appeal Board cited as an example of this incompleteness the lack of availability of witnesses for cross-examination by the Board and parties. ALAB-284, supra, 2 NRC at 206. The Township has been unable to point to anyway in which the record before the Licensing Board in this proceeding was incomplete. The Township had every opportunity to present testimony on the loss of water accident, and the likelihood of such an accident at Salem. No evidence was presented on the subject either in Dr. Webb's direct testimony or on cross-examination. A Staff witness testified to his opinion concerning various aspects of the loss of water accident and was able to present a basis for his conclusions. The Board found this testimony persuasive and as discussed above, and in § IV.B.2, infra, gave a detailed explanation of why it did so. Therefore, the Board has provided a cogent, detailed explanation of its reasoning, and has left no gaps of the type referred to in the two Prairie Island decisions.

The Township is unable to point to any pertinent portion of its testimony which was ignored or erroneously construed by the Licensing Board. The Township merely wants an opportunity to participate in a re-litigation of an issue already litigated and decided by the Licensing Board. The Township has not demonstrated reversible error.

2. Township Exceptions Nos. 2, 3, and 4 do not point to any reversible error in the decision of the Licensing Board.

Township Exceptions Nos. 2, 3, and 4 claim error on the part of the Licensing Board in finding that (1) the consequences of a gross loss of water accident in the spent fuel pool would not be greater in the proposed storage configuration as contrasted with the original design; (2) the proposed increase in spent fuel storage capacity in Salem Unit 1 would not significantly increase the impact on the human environment in the event of a loss of water accident; and (3) there was a reasonable assurance that the activities authorized by the requested amendment to the operating license could be conducted without endangering the health and safety of the public. Brief of Township at 3. The Township claims that the Licensing Board's findings on these matters were against the weight of the evidence and the testimony of its witnesses Drs. Webb and Luchak. The Township gives as a basis for all of these exceptions its concern over a gross loss of water accident. These exceptions are without merit.

Exception No. 2 stated that:

"The conclusion that the consequences of a gross loss of water accident in the spent fuel pool would not be greater in the proposed storage configuration as



contrasted with the original design was in error both factually and legally." 11/

Intervenor, Township of Lower Alloways Creek's Exceptions and Appeal (November 4, 1980) at 2 (hereinafter Township Exceptions). The Township claims that the Board's finding is against the weight of the evidence. Id. As support for this claim, the Township refers to the testimony of Dr. George Luchak, a professor of Civil Engineering at Princeton University, on the consequences of an accident and the increase in these consequences because of the spent fuel pool expansion as "persuasive". Brief of Township at 3. Dr. Luchak's direct testimony regarding accident consequences was properly stricken by the Licensing Board, because Dr. Luchak was unqualified to testify on the matter. Tr. 913. Dr. Luchak testified that he had no knowledge of the design and operation of nuclear power plants in general, and of Salem in particular. Tr. 894-99.

Therefore, the Licensing Board's finding that he was unqualified to discuss accidents at nuclear power plants and their consequences is fully supported by the record in this proceeding. No reliance can, therefore, be placed on either Dr. Luchak's direct testimony or testimony given by

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11/ This exception somewhat mischaracterizes the conclusions actually reached by the Board which is:

"We are satisfied that in the event of a gross loss of water from the spent fuel pool, there would not be a great difference between the consequences occasioned by the proposed storage configuration and those occasioned by the present one."

him on cross-examination which relates to accidents and their consequences.

The Township complains that Dr. Webb's testimony was rejected as being "simply unsupported assertions". Brief of the Township at 3-4. The Board correctly pointed out that Dr. Webb made the unsupported assertion that a zirconium fire "could conceivably spread to old spent fuel." Initial Decision at 33. The Township claims that, since the Staff's testimony was also unsupported, it should not be entitled to any greater weight than that given to Dr. Webb's testimony. Brief of Township at 4. This argument is unfounded. On the particular point of whether a "zirconium fire" could propagate, the Staff's witness supported his conclusions. Pasedag Further Testimony at 2. In addition, it was not only this one instance of lack of support for a statement which led the Board to conclude that the Staff's, rather than Dr. Webb's testimony, was persuasive. The Board stated:

"When one views Dr. Webb's testimony as a whole, it is impossible to glean from it any clear picture either of a mechanism by which a large amount of radioactivity could escape from the pool, or the assumptions of fact which might be appropriate to such a mechanism." Initial Decision at 35.

In fact, Dr. Webb was unable to discuss the probability of either the occurrence of a loss of water accident in the spent fuel pool, or the probability of a large release of radiation from the spent fuel pool.

Tr. 1731. It was his theory that because such events were conceivable, they must be considered. Tr. 1723-31; 1769. The Licensing Board quite properly concluded that such testimony was unsuitable for assessing the probability that a serious accident could be caused by a substantial loss of water. Initial Decision at 35. The Board also concluded that Dr. Webb's testimony could not aid in determining whether the risk of the pool would substantially increase because of the proposed expansion. Id. Therefore, Dr. Webb's testimony in effect made no response to the question posed by the Board in its February 22, 1980, Memorandum and Order and was properly given little weight by the Licensing Board. Dr. Webb's testimony can in no way be said to provide the "preponderance of the evidence" needed by the Licensing Board to reach a conclusion contrary to that which it set forth in its Initial Decision.

Exception No. 3 states:

"The Initial Decision was in error both factually and legally in finding that the proposed increase in spent fuel storage capacity at Salem Unit #1 will not significantly increase the impact on the human environment in the event of a loss of water accident."

Township Exceptions at 2. <sup>12/</sup> Once again the Township states that the Board's finding was against the weight of the evidence of its witnesses. As stated above, the Township's evidence concerning a gross loss of water accident makes no showing concerning the differences in consequences from a gross loss of water accident between the present and proposed spent fuel pool. Therefore, it follows that the evidence presented by the Township cannot be used to make any finding that the impacts of the proposed action would represent a significant increase over those resulting from the present spent fuel pool. The Township unsuccessfully attempts to relate Dr. Luchak's theory concerning storage of spent fuel in dry, unpopulated areas to the consequences of a gross loss of water accident. Brief of Township at 3. The Township argues that this alternative was not adequately considered by the Licensee.

The Board found that Licensee had considered this alternative sufficiently, and gave numerous reasons for this conclusion. These reasons include:

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<sup>12/</sup> The portion of the Initial Decision cited by the Township as being erroneous is not related to the Board's decision on question No. 5 relating to a gross loss of water accident. Rather that conclusion is part of the Board's findings with regard to the Township's Contention No. 1. That contention deals with alternatives to the proposed action.

"...that construction and use of an ISFSI would be more costly than the proposed expansion at Salem, that it would produce environmental impacts as great or greater than the proposed expansion, that it would not reduce appreciably the risk or consequences of a gross loss of water in the spent fuel pool, and that it is unknown whether an ISFSI can or will be constructed in time to be available for storage of spent fuel from Salem Unit 1 when that storage is needed."

Initial Decision at 22. The Township does not take issue with any of these reasons. In addition whether an alternative to an action having no significant impact has been adequately considered by any party to the proceeding is irrelevant to the question of whether the action can be conducted without significantly increasing the impact of a nuclear facility on the surrounding environment.

Exception No. 4 states:

"The Initial Decision is in error in respect to paragraph 68 on page 44, to wit:

'There is reasonable assurance that the activities authorized by the requested amendment to the operating license can be conducted without endangering the health and safety of the public.'"

Township Exceptions at 2. Since this exception relies for support on the testimony of Drs. Webb and Luchak, it suffers the same fatal flaws as Exceptions Nos. 2 and 3. The evidence presented by these witnesses does not point to any credible mechanism for the occurrence of a gross loss of water accident. In addition, it does not establish either the differences in consequences from such an accident between the present and expanded pool and does not demonstrate a significant increase in environmental impacts from such an accident. Therefore, it does not

demonstrate that there is no reasonable assurance that the public health and safety will be protected. Though the Township argues that the testimony of its witnesses raised serious safety issues, it does not point to any place in the record where any such safety issues are described. The Township points to nothing in the record which factually supports the complaints of error contained in these three exceptions. Exceptions Nos. 2, 3, and 4, therefore, do not point to any reversible error on the part of the Licensing Board in this proceeding and should be denied.

3. The Board's finding that this action was not a major Commission action requiring an environmental impact statement under the National Environmental Policy Act of 1969 (NEPA) was correct.

The Township argues in its fifth exception that an environmental impact statement should have been prepared with regard to this spent fuel pool expansion application. This argument is untimely. There was no contention present in this proceeding that the proposed action would significantly affect the quality of the human environment, thus requiring an environmental impact statement in order to comply with the requirements of NEPA. The Township had ample opportunity to raise a NEPA contention throughout this rather lengthy proceeding. The Township failed to do so. The first time mention was made by the Township of NEPA requirements was in its proposed findings. Township proposed findings at 17. Beyond this general conclusion of law, the Township points to no

evidence in the record which supports its theory that this expansion in spent fuel pool capacity would indeed have a significant effect on the quality of the human environment. The Township's brief in support of its exceptions does not attempt to remedy this defect. Therefore, there is no basis on which to find reversible error in the Licensing Board's decision, and that decision on this matter should be affirmed.

Part 51 of the Commission's regulations implements the requirements of NEPA. 10 C.F.R. § 51.5(a) lists those actions requiring an environmental impact statement. A license amendment to modify a spent fuel pool is not one of those listed actions. Therefore, it is not necessary for the Staff to prepare an environmental impact statement in order to comply with the Commission's regulations. 10 C.F.R. § 51.5(b) is the section of the Commission's regulations which is controlling here. Under that section an environmental impact statement may or may not be required for a particular license amendment, depending on the significance of the affect of that amendment on the quality of the human environment. In order to determine the significance of a particular amendment, one must do an evaluation of its environmental impacts. If it is determined that

an EIS is unnecessary, the Staff will issue a negative declaration to that effect supported by an environmental impact appraisal. <sup>13/</sup>

Environmental impact appraisals have frequently been found appropriate in spent fuel pool licensing proceedings where it has been determined that the proposed action does not significantly affect the quality of the human environment. Portland General Electric Co. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263 (1979); Northern States Power Co. (Prairie Island, Units 1 and 2), ALAB-455, 7 NRC 41 (1978). Licensing Boards have made positive findings with regard to spent fuel pool modification requests in numerous instances. Commonwealth Edison Co. (Zion Station, Units 1 and 2), LBP-80-7, 11 NRC 245 (1980); Virginia Electric and Power Co. (North Anna Nuclear Power Station, Units 1 and 2), LBP-79-25, 10 NRC 234 (1979); Duquesne Light Co. (Beaver Valley Power Station, Unit 1), LBP-78-16, 7 NRC 811, 816 (1978). The Township has not made any factual showing which would have led this Board to reach any different conclusions than those reached in previous cases.

In the case of this particular spent fuel pool expansion amendment, the Staff's evaluation determined:

"We have reviewed this proposed facility modification relative to the requirements set forth in 10 C.F.R.

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<sup>13/</sup> There are certain actions which do not even require a negative declaration and environmental impact appraisal. See 10 C.F.R. § 51.5(d)(4).



Part 51 and the Council of Environmental Quality's Guidelines, 40 C.F.R. 1500.6 and have applied, weighted, and balanced the five factors specified by the Nuclear Regulatory Commission in 40 C.F.R. 42801 [sic]. We have determined that the proposed license amendment will not significantly affect the quality of the human environment and that there will be no significant environmental impact attributable to the proposed action other than that which has already been predicted and described in the Commission's Final Environmental Statement for the Facility dated April 1973. Therefore, the Commission has found that an environmental impact statement need not be prepared, and that pursuant to 10 C.F.R. 51.5(c), the issuance of a negative declaration to this effect is appropriate." Exhibit 6-C at 27.

The impacts of increased storage on certain plant systems, occupational exposures, and effluent releases to the environment were considered. See Exhibit 6-C. Alternatives to the proposed action were considered, although the Staff is not required to do so by the Commission's regulations. The Staff determined that the proposed action would not have a significant environmental impact, and that the alternatives considered either were too uncertain to be viable alternatives, or more costly than the proposed action. Exhibit 6-C at 12-20. Staff witnesses also testified at evidentiary hearings with respect to the alternatives considered. Tr. 993-1088; 1131-1161. The other contested issues in the proceeding centered around possible rack and Boral deterioration, and were not subjects treated in the EIA. Rather they were dealt with in the Staff's Safety Evaluation and additional testimony. Exhibit 6-B; Exhibit 7, and Exhibit 8. No evidence other than the Staff's EIA was presented to the Board relating to the incremental increase in environmental impacts from the proposed action. It is those incremental increases that the

Staff, and ultimately the Licensing Board, had to evaluate to determine whether this was an action which would require an EIS. ALAB-531 and ALAB-455, supra. The Licensing Board must make findings based on the evidence of record before it. Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-355, 4 NRC 397, 405 n. 19 (1976). The only evidence before it with respect to the incremental environmental impacts of the proposed action was the Staff's EIA. <sup>14/</sup> Therefore, the Township's argument that the Board committed factual and legal error in relying upon the Staff's EIA is without merit. The Board's finding with regard to the significance of this proposed action should be affirmed.

The Township also argues that the Licensing Board erred in relying on the Final Generic Environmental Impact Statement on Storage and Handling of Light Water Power Reactor Fuel (FGEIS). Brief of Township at 4. <sup>15/</sup> This argument misconstrues the record in this proceeding. The Licensing Board decision in no way indicates that any reliance at all was placed on that

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<sup>14/</sup> The evidence presented by the Township with regard to Board question No. 5 is inapposite here, since it was not the environmental consequences themselves which were the subject of that hearing, but the question of whether there would be a difference in such consequences between the present and expanded pool.

<sup>15/</sup> The Commission approved a "Notice of Finality" with regard to the FGEIS on February 18, 1981. This notice stated that the issuance of the FGEIS by the Office of Nuclear Material Safety and Safeguards constitutes final Commission action, and that the "five factors" need no longer be considered in individual licensing actions for the expansion of spent fuel pools. See Attachment A.

document. The FGEIS was not issued until August 1979, after the major portion of the evidentiary hearings in this proceeding had been completed. No party to the proceeding ever offered that document into evidence. The Board merely noted in its decision that the document had issued, and noted what that document had concluded. <sup>16/</sup> Initial Decision at 43. It never indicated that it had relied for its conclusion on a document never placed into evidence. Any complaints the Township may have concerning the contents of the FGEIS are inappropriately raised here, since this document is not in the record in this proceeding. Any objections the Township has to the Board's decision on the ground that this decision was based upon the FGEIS are without merit and should not be entertained by the Appeal Board.

In support of its fifth exception the Township also argues that both the Staff and the Licensing Board ignored the section 102(2)(C)(v) requirement of NEPA in permitting the expansion of the spent fuel pool for long-term storage of spent fuel at reactor sites. Brief of Township at 4-6. This argument is somewhat obscure, but insofar as the Staff can understand it, it reflects a basic misunderstanding of NEPA's Section 102(2)(C)(v) requirement.

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<sup>16/</sup> Of course had the Licensing Board wished to rely on the FGEIS in reaching its conclusions, it was free to take official notice of that document. However, the Board did not choose to do.

Section 102(2)(C)(v) states:

"[t]he Congress authorizes and directs that, to the fullest extent possible... (2) all agencies of the Federal government shall--(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on... (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(2)(C)(v).

According to this provision of NEPA, if this were a major Federal action significantly affecting the quality of the human environment, the Staff would have to discuss in its environmental impact statement any irreversible or irretrievable commitment of resources which would be involved in the spent fuel pool capacity expansion. 17/

No contention to the effect that this expansion involved an irreversible or irretrievable commitment of resources was ever raised by any party to the proceeding. As mentioned above, no evidence was presented by any party to this proceeding tending to show that the action involved here is a major Commission action significantly affecting the quality of the human environment. Therefore, the requirement to discuss any

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17/ In discussing one of the five factors which under the Commission's policy statement as set forth in 40 Fed. Reg. 42801 the Staff was then required to do, the Staff concluded in its EIA that indeed, the use of certain materials for rack construction did not represent an irreversible commitment of resources. Exhibit 6-C at 21. No evidence was presented to the contrary at any evidentiary hearings in this proceeding. As the Board noted in its Initial Decision, consideration of the five factors in this proceeding by the Staff was necessary since the FGEIS had not issued at the time the EIA was prepared.

irreversible or irretrievable commitment of resources involved in the proposed action is not triggered.

The two cases cited by the Township in support of its theory are inapposite. Both of these cases involved consideration of the back end of the uranium fuel cycle in the licensing of nuclear reactors. NRDC v. U.S. Nuclear Regulatory Commission, 547 F.2d 633 (D.C. Cir. 1976), rev'd sub nom Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519 (1978). This amendment is not equivalent to issuing an operating license for a nuclear reactor. As pointed out by the Appeal Board in Trojan, ALAB-531, supra, at 266, n.6. This amendment will not permit Salem to generate any more spent fuel than the plant was originally authorized to generate. Therefore, the holding in the Vermont Yankee case does not require either the preparation of an EIS or a discussion of whether there is an irreversible or irretrievable commitment of resources involved in the spent fuel pool capacity expansion at Salem Unit 1.

The Township has misconstrued what the Commission stated in its Federal Register notice initiating what is commonly known as the "waste confidence proceeding". The Township claims that this proceeding assumes that on-site storage for the period of the license has no environmental impact. No such inference can be drawn from this notice. The Commission specifically stated:

"During this proceeding the safety implications and environmental impacts of radioactive waste storage on-site for the duration of a license will continue to be subjects for adjudication in individual facility licensing proceedings." 44 Fed. Reg. at 61372, 61373 (Oct. 25, 1979).

This reflects a clear recognition by the Commission that there might indeed be impacts associated with individual licensing actions which must be evaluated. Therefore, the Township's statement with respect to the waste confidence proceeding is unfounded.

The Township's final statement in supporting its fifth exception is that Class 9 accidents are now reasonably probable to occur at a facility, due to the occurrence at Three Mile Island. Brief of Township at 7. There is no indication of how this view supports the Township's theory that an environmental impact statement is required in this case. The Licensing Board correctly found that a policy statement issued on June 13, 1980, 45 Fed. Reg. 40101, by the Commission does not apply in the instant proceeding, and that in any event there is enough evidence on this record to show that the only possible "Class 9" accident raised in this proceeding was adequately considered. Initial Decision at 43-44. The Township makes no attempt to contradict this finding, and the Township's statement cannot be said to point to any error on the part of the Licensing Board with regard to its treatment of "Class 9" accidents.

For the reasons set forth above, the Township's exceptions should be denied and the Licensing Board's decision should be affirmed.

C. Exceptions of Alfred C. and Eleanor G. Coleman

1. Appellants Colemans' brief is deficient in that it does not comply with 10 C.F.R § 2.762 of the Commission's regulations.

10 C.F.R. § 2.762(a) states:

"The brief shall be confined to a consideration of the exceptions previously filed by the party and, with respect to each exception, shall specify, inter alia, the precise portion of the record relied upon in support of the assertion of error."

On January 13, 1981, the Colemans filed a document entitled "Brief in Support of Exceptions". Within this document there are sections entitled "Findings of Fact", "Exceptions", and "Conclusions of Law". On June 23, 1980, Counsel for the Colemans filed a document entitled "Intervenors Colemans' Proposed Findings of Fact and Conclusions of Law on their Contentions 2 and 6, Board Question 5 and Away-From-Reactor Alternatives." The Licensing Board issued its decision in October 1980 taking into account these proposed findings.

The Staff views the Colemans document of January 13, 1981, as an attempt to substitute new findings for those filed by the Colemans' counsel.

Though the Colemans in the portion of the document entitled "Exceptions" refer back to their findings of fact as support for their exceptions, they make no attempt to show in what respect each "finding of fact" is related to each exception. In addition, an examination of the "findings of fact" reveals that they are markedly deficient in citations to the record which would lend any support to the complaints listed in these findings. There is also no indication of how these findings relate to the findings previously filed by the Colemans' counsel. In many instances, as the Staff will point out below, these findings and the exceptions they are said to support bear no relationship whatever to the original proposed findings filed in June 1980. The Staff concludes that the Colemans exceptions are without merit and provide no basis upon which the Licensing Board's well reasoned and well articulated Initial Decision should be reversed.

## 2. Statement of Issues.

The Staff has determined that the Colemans' brief addresses the following issues:

1. Whether the Board was correct in its procedural rulings concerning discovery, the admission of contentions, and participation in the hearings (Findings of Fact 1, 2, 3, 4, and 5; Exceptions 4, 7 and 10; Conclusion of Law D).
2. Whether the Board, Licensee, and Staff performed improper and inadequate analyses of the contents of the spent fuel pool (Findings



of Fact 7, 8, 10, and 11; Exceptions 1, 2, 3, 6, 8, 9, and 12; Conclusion of Law C).

3. Whether the FGEIS should have been introduced as evidence in this proceeding and examined (Findings of Fact 2 and 6; Exception 11; and Conclusion of Law B).
4. Whether the Staff, the Licensee, and the Licensing Board have an obligation to produce documents which are arguably relevant to the subject matter of a proceeding, even though those documents are already available in the public document room (Findings of Fact 6, 7, and 9; and Exception 11).
5. Whether this proposed action requires the preparation of an environmental impact statement (Exception 10 and Conclusion of Law A).

The Staff will address each of these issues. Exception No. 4 of the Colemans' original exceptions does not fall within any of the above-mentioned issues. In fact, it has never been briefed. Exceptions not briefed may be disregarded. Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-270, 1 NRC 473 (1975). The Colemans have replaced it with another Exception No. 4 in their brief. Brief in Support of Exceptions, Exceptions at 1 (hereinafter Brief of Colemans). The Staff will address the latest Exception No. 4. It should be noted that several of the original exceptions are worded differently from the exceptions appearing in the Colemans' brief. Exceptions Nos. 6, 10, and 11. The

Staff will respond to the exceptions as stated in the Colemans' brief of January 13, 1981.

3. The Board was correct in its procedural rulings concerning discovery, the admission of contentions, and participation in the hearings.

As far as discovery is concerned, the Colemans claim that the Board disallowed certain of the Colemans' interrogatories. Brief of Colemans, Finding of Fact at 4. This complaint first ignores the limited nature of this proceeding, and the responsibility of intervenors in NRC proceedings to comply with the Commission's Rules of Practice. On December 11, 1978, the Licensee filed objections to certain of the Colemans' interrogatories and a motion for a protective order. <sup>18/</sup> As the Board noted in its January 29, 1979 Order granting a portion of Licensee's motion, the Colemans never responded to Licensee's original motion. This means that no attempt was made to establish the relevance of their interrogatories to the matters in controversy. They now complain of the Licensing Board's ruling but still make no showing of how the disputed interrogatories either were relevant to matters in controversy, or could reasonably be expected to lead to admissible evidence on those matters. The statement that answers to these questions might "protect the public

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<sup>18/</sup> In its Motion Licensee objected to certain interrogatories as being irrelevant to the matters in controversy in this proceeding.

health and safety" does not make the showing required by § 2.740(b)(1) of the Commission's regulations. 19/

The Colemans also complain of Board rulings which limited the contentions admitted as matters in controversy in this proceeding, although they do not specify exactly which contentions they believe should have been admitted. Brief of Colemans, Findings of Fact at 1-2. Finding of fact No. 1 and Exception No. 10 20/ complain that the Licensing Board should have considered the storage of spent fuel at Salem Unit 1 for a period longer than the duration of Salem's license. Brief of Colemans, Findings of Fact at 1; Exceptions at 2. Finding of fact No. 1 states that the original license for Salem Unit 1 was issued under a belief that permanent off-site storage would be available. This complaint is not related to any of the issues in controversy in this proceeding. No attempt is made by the Colemans to show how their perceived AEC justification for allowing the original storage of spent fuel on site affects the correctness of the Board's decision in this case. The Board

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19/ If the Colemans intend to challenge § 2.740(b)(1), this is not the forum to do so.

20/ Exception No. 10, as stated in the Colemans' brief is different from the exception which was filed on November 11, 1980. That original exception merely stated:

"The Board erred in its Conclusion of Law stating, '...is not a major action significantly affecting the quality of human environment. Therefore, it does not require the preparation of an Environmental Impact Statement...'"

Intervenors, Alfred C. Coleman, Jr. and Eleanor G. Coleman's Exceptions and Appeal at 5.

in its Order Following Special Prehearing Conference rejected a contention by the Colemans concerning permanent waste disposal on the ground that consideration of storage beyond the duration of the operating license is expressly precluded by the decision of the Appeal Board in Prairie Island, ALAB-455, supra. Order Following Special Prehearing Conference at 8 (May 24, 1978). 21/

The Colemans moved for reconsideration by the Board of its decision with respect to Contention No. 7, because of the intervening decision of the Court of Appeals for the D.C. Circuit in State of Minnesota v. NRC, 602 F.2d 412 (1979). Motion for Reconsideration (June 25, 1979). The Motion for Reconsideration was properly denied by the Licensing Board in its Memorandum and Order of February 22, 1980 at 1-3. It was denied on the grounds that to reinstate this contention would be to contravene Commission policy as set forth in a Federal Register notice of proposed rulemaking on storage and disposal of nuclear waste dated October 25, 1979.

In its notice of proposed rulemaking the Commission stated that in its generic proceeding the Commission will:

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21/ The contention in question in that Order was contention No. 7 which asserts that Licensee has given inadequate consideration to storage of spent fuel in the pool beyond the duration of the operating license.

- "(1) reassess its confidence that safe off-site disposal of radioactive waste from licensed facilities will be available;
- (2) determine when any disposal or off-site storage will be available; and
- (3) if disposal or off-site storage will not be available until after the expiration of the licenses of certain nuclear facilities, determine whether the waste generated by those facilities can be safely stored on-site until such disposal is available."

44 Fed.Reg. 61372, 61373 (October 25, 1979). If the Licensing Board were to admit a contention which directly deals with the subject of this generic proceeding it would be contradicting the policy of the Commission as specifically set forth in this Federal Register notice. Contention No. 7 was, therefore, properly excluded from this proceeding.

Finding of fact No. 2 is a general complaint that the issues discussed in this proceeding were limited by the Licensing Board. In a well reasoned Order following the special prehearing conference held in 1978, the Licensing Board set forth its reasons for rejecting certain of the Colemans' contentions. <sup>22/</sup> The Colemans make no attempt to point to the specific contentions which they think should have been admitted by the Licensing Board as matters in controversy in this proceeding. The only general statements made which seem to refer to a contention were the

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<sup>22/</sup> The Colemans point out that their counsel amended their petition, reducing the number of their contentions. This fact is irrelevant to the Licensing Board's action in this proceeding. Brief of Colemans, Findings of Fact at 1. Such a complaint must rest between the Colemans and their counsel of that time.

statements in Findings of Fact No. 1 referring to permanent storage of spent fuel. The Colemans also made reference to the storage of spent fuel at Hope Creek Units 1 and 2. Brief of Colemans, Exceptions at 2. This statement could relate to their contention No. 13 which was properly the subject of a Licensing Board order granting Licensee's Motion for Summary Disposition. Order at 12-19 (April 30, 1979). This general statement does not constitute a challenge to the Licensing Board's summary disposition ruling. The Colemans allege no facts which would in any way support their Contention No. 13.

The Colemans next state that their participation in these hearings was limited by the Licensing Board in two ways. First, they say that they were precluded from elaborating their concerns by the Board's failure to compel the testimony of Licensee's employee Mr. Robert M. Crockett or his designee. Finding of Fact No. 3, Conclusion of Law D. Second, the Colemans say that their participation in the hearing process was limited by the Licensing Board's failure to inform them of their "rights". They gave as an example of such a failure their opinion that they were excluded from the in camera session of the hearing held to discuss proprietary information. Finding of Fact No. 4. These claims of error on the part of the Licensing Board are unfounded. Finding of fact No. 3 is a complaint by the Colemans that they were precluded from elaborating their concerns due to the Licensing Board's exclusion of a document known as "the Crockett letter", and by the Licensing Board's "sanctioning" of

the exclusion of Mr. Crockett or his designee from testifying. Brief of Colemans, Findings of Fact at 3. This finding misstates the situation as it exists, and is without merit. The Crockett letter was marked for identification as an exhibit in this proceeding. Tr. 399. The Colemans' statement that the State of New Jersey offered the Crockett letter into evidence is incorrect. The State expressed its intention to offer the Crockett letter as direct testimony. Tr. 373. However, to the Staff's knowledge, this document was never offered into evidence by any party. The document was, however, used by at least one intervenor in the proceeding on cross-examination. Tr. 785-88. Nothing precluded the Colemans from examining the Licensee's witnesses on the Crockett letter. The Colemans made no attempt to require the presence of Mr. Crockett himself or his designee at the hearing. Therefore, their complaints now concerning this document are without merit. The proposed findings filed by counsel for the Colemans do not place reliance on the "Crockett letter." The Colemans claim in this finding of fact that their constitutional right to due process was violated because they were excluded from the in camera session. This complaint is also without merit. By Order dated January 25, 1979, setting forth the procedures for handling the information considered to be proprietary, intervenor Colemans' counsel was named as a person authorized to receive proprietary documents. Protective Order at 1-2 (January 25, 1979). In addition the Licensing Board stated that by written request, additional people could be authorized to receive proprietary information. Id. at 5-6. The Staff

does not believe that the Colemans ever made such a request. The Colemans do not point to any place in the record which stated that they were to be excluded from the in camera session. Their counsel was present, as was a consultant engaged for the purposes of this proceeding. There is no indication in the record that they requested to be present at the hearing. Since they were represented by counsel, it must be assumed that their counsel informed them of their "rights" in this matter. In addition, the Board's Order of January 25, 1979, clearly set forth the undertaking whose signature would be required to gain access to the proprietary information and in camera session. Any complaint by the Colemans with regard to this matter should have no affect on the Appeal Board's affirmance of the Licensing Board's decision. 23/

The Colemans' last procedural complaint is that the Board ignored some questions posed by a limited appearee. Finding of Fact No. 5. As the rules of the Commission provide, limited appearees are not parties to a proceeding. 10 C.F.R. § 2.715(a). Questions raised<sup>2</sup>by limited appearees do not automatically become matters in controversy in a proceeding. In the present case, the Board received the above-mentioned limited appearance statement, and included it in the record of the proceeding.

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23/ It should also be noted that the Licensee's witnesses reviewed the in camera transcript, and stated on the record that all but two pages of that transcript could be made public. Tr. 704-05. This means that the Colemans indeed had as much access as anyone present in the in camera session to the information elicited during that session.



Letter from Gary L. Milhollin, Licensing Board Chairman, to Mr. Michael DiBernardo (May 15, 1979). The Colemans made no attempt to raise these issues at the time their counsel filed proposed findings. Nor did they raise these issues themselves during this rather lengthy proceeding. A review of Mr. DiBernardo's questions shows that they are primarily concerned with aspects of criticality and spent fuel cooling capability. There is also a question concerning the possible loss of water from the spent fuel pool. Criticality and spent fuel cooling capability are addressed by the Staff in its Safety Evaluation. Exhibit 6-B at 2-1 to 2-5. The loss of water potential from the spent fuel pool was a specific Board question, and was the subject of an evidentiary hearing. Therefore, any claim that the Board ignored Mr. DiBernardo's questions is unfounded.

This finding of fact also makes reference to an incident which occurred at the Turkey Point facility in 1972. This issue was never raised by the Colemans during the proceeding. In addition, no attempt is made here to demonstrate how this experience would be relevant to an expansion of the Salem spent fuel pool. For example, the Colemans make no showing as to how the spent fuel pools at the two facilities are similar. This matter therefore is not relevant to any portion of the Licensing Board's decision. For the reasons set forth above, the Board's procedural rulings regarding discovery, the admission of contentions, and the participation of Appellants Colemans in this hearing should be upheld.

4. The Board, Licensee and Staff performed proper and adequate analyses of the contents of the spent fuel pool.

The Colemans' major complaint is that the Staff, the Licensee, and, ultimately the Licensing Board, performed an inadequate analysis of the contents of the Salem Unit 1 spent fuel pool. Findings of Fact 7, 8, 10, and 11; Exceptions 1, 2, 3, 6, 8, 9, and 12. The Colemans base this complaint on their view that special circumstances exist with regard to the Salem spent fuel pool. See, e.g., Exceptions 3 and 9. The Colemans claim that certain facts were ignored by the Licensing Board in its Initial Decision relating to the contents of the spent fuel pool. See, e.g., Exceptions 1 and 2. As support for their exceptions they refer back to Findings of Fact Nos. 3 through 11. A review of these findings of fact demonstrates that Findings Nos. 3, 4, 5, 6, and portions of Finding No. 7, relate to procedural matters rather than to the contents of the Salem spent fuel pool. These findings of fact are discussed in § IV.C.3 and § IV.C.6 of this document.

Findings of Fact Nos. 7, 10 and 11; Exceptions Nos. 2, 8, and 9; and Conclusion of Law C are all concerned with the Board's findings with respect to its question No. 5. This question concerned a gross loss of water accident in the spent fuel pool. The Colemans claim that the Board erred in not considering the known contents of the spent fuel pool, exception No. 2, and in not requiring further analysis of the propagation of oxidation. Exception No. 9. The Colemans also now claim that an

incomplete drainage of the spent fuel pool should have been considered in addition to a complete drainage of the pool. Finding of Fact No. 7. The Staff in responding to the Board's question defined a gross loss of water as:

"...a hypothetical, non-mechanistic, instantaneous loss of all cooling water in the present and expanded spent fuel pool combined with an inability, for unspecified reasons, of refilling the pool, or providing any other mode of cooling other than natural (convective) air cooling." Pasedag Direct Testimony at 3.

At the April hearing, the Board indeed did discuss briefly an incomplete drainage of the spent fuel pool. Tr. 1428-33. More importantly, however, the Colemans had ample opportunity to raise this issue at the April hearings. In addition, they also do not show how a lack of discussion of the accident they now hypothesize represents error on the part of the Licensing Board in its conclusions reached on question No. 5.

The Colemans claim that the Board erred in accepting Mr. Pasedag's testimony concerning propagation of oxidation rather than requiring further analysis of the subject is identical to the claim of the Township in its Exception No. 1. The Staff has fully responded to this claim in § IV.B.1, supra, and will not repeat its response here. It need only be repeated here that the Board clearly articulated its reasons for not believing that further analysis was required in order to satisfactorily answer its question. The Colemans make no attempt to show why the Board's reasoning on this matter was incorrect. Therefore, there is no

justification for requiring reversal of the Licensing Board's Initial Decision with respect to Board question No. 5.

Findings of Fact 8 and 11 concern criticality in the spent fuel pool, and degradation of the Boral material in the spent fuel racks. Finding of fact No. 8 merely states that account should have been taken of realistic operating conditions at Salem Unit 1. The Colemans do not point to any particular conditions which would result in a conclusion different from that reached by the Licensing Board. They merely quote pages from the Draft Generic Environmental Impact Statement on Storage and Handling of Light Water Power Reactor Fuel, NUREG-0404, which infer that the proposed action here does not comply with that document. NUREG-0404 is not in the record of this proceeding, and is not relevant here. The proposed action has been evaluated by the Staff in its Safety Evaluation and Environmental Impact Appraisal. The criticality aspects of the center-to-center spacing of 10.5 inches were evaluated in the Safety Evaluation and discussed at the evidentiary hearings. Exhibit 6-B at 2-1 to 2-3; Tr. 652-657. This finding makes no showing of how either the Staff's or Licensee's analysis was inadequate, or of how the statements quoted from the NUREG documents require reversal of the Board's conclusions with regard to Colemans' Contentions Nos. 2 and 6. As far as the issue of decay heat removal is concerned, the Colemans never raised this issue at any time during the proceeding. Therefore, this finding in

its entirety does not point to any reversible error on the part of the Licensing Board.

The first portion of finding of fact No. 11 concerns Boral and the effect of its possible corrosion on criticality. This subject was raised in the proposed findings filed by the Colemans' counsel, and so is a proper issue before this Board. The Colemans fail to demonstrate any errors in the Board's Initial Decision regarding their contentions 2 and 6. These contentions deal with the possibility of rack or Boral degradation. See n. 2, supra. The Licensing Board's findings on these contentions are clearly set forth at pages 5 to 16 of the Initial Decision.

The Colemans, after naming the manufacturers of the racks and Boral materials, and after stating that the Exxon company is responsible for the design of the racks, imply that there is a difference of opinion between the Staff and Licensee regarding criticality in the spent fuel pool. Brief of Colemans, Findings of Fact at 14, n. 16. No such difference exists. The Staff in its Safety Evaluation concluded that the Licensee's analysis was compatible with calculations done by the Staff using methods other than those employed by the Licensee. Exhibit 6-B at 2-2. The Colemans seem to believe that, irrespective of whether Boron is present in the spent fuel pool water, there must be Boron present in the spent fuel racks. Brief of Colemans, Finding of Fact at 14. This is not the position taken either by the Staff or the Licensee. The Staff

pointed out that its calculations, as were the Licensee's, were conducted assuming new fuel and unborated spent fuel pool water. Exhibit 6-B at 2-2. The record shows no disagreement between the Staff and Licensee as to whether, with Boron in the pool water, all Boral in the racks could be lost without resulting in criticality.

The Colemans' next concern is that there will be some massive degradation of Boral should the storage cells leak, allowing the water to come into contact with the Boral sheets. Brief of Colemans, Finding of Fact at 14-16. Both the Staff and the Licensee testified that the neutron absorption capability of the Boral would not be impaired by degradation of the Boron in the Boron carbide matrix. Exhibit 8; Exhibit 5; In camera, Tr. 17. The Staff testified that even if water were to reach the Boral plates, the Boron carbide matrix would not dissolve. Affidavit of John R. Weeks at 2, following Tr. 652. According to the Staff's witness, what would occur would be some pitting corrosion at the points where the Boral came into contact with the stainless steel. Id. When the pitting progressed into the Boral, the B<sub>4</sub>C particles would remain impressed in the aluminum-oxide and hydrogen corrosion products. Id. at 1. The Staff testified that indeed, Boral has proven to be inert when placed in environments containing much stronger acids than those found in the spent fuel pool at Salem Unit 1. Tr. 664. Therefore, the Staff did not view the possibility of massive Boral degradation as significant, and the

Board correctly found the Staff's and Licensee's testimony to be persuasive on this matter.

In addition, the Licensee has agreed to perform a surveillance program using sample materials in the spent fuel pool. Tr. 497-499; Exhibit 2 at 6. The Staff testified that this program would be an adequate one to detect rack deterioration over time and to keep track of corrosion. Tr. 695. The Licensee has also increased the quality assurance program to check for leak tightness of the fuel storage cells in an attempt to avoid the problems mentioned which have recently occurred at other facilities. Tr. 443, 457. It is Licensee's position that there is assurance that 95% of the cells will be leak tight and they have a 95% confidence level in this assumption. Exhibit 2 at 4. Licensee also pointed out that, in the event there was some leakage in a particular cell, the worst consequence would be the loss from service of that storage cell. Exhibit 2 at 5. The Staff testified that it did not consider the swelling of unvented fuel storage cells as a safety problem but rather as an operational problem, and thus did not impose a requirement upon the Licensee to vent its storage cells. Tr. 711. The capability to vent in the event of swelling is acceptable. Tr. 695; Initial Decision at 15. The Colemans have not pointed to any reason why this position would constitute reversible error.

The Colemans criticize the use of extrapolation to determine corrosion rates of various materials. Brief of Colemans, Findings of Fact at 15-16. The Staff testified that traditionally corrosion rates follow a straight line plot on a semi-logarithmic scale. Tr. 693. The uncontradicted evidence is that such semi-logarithmic extrapolation might even be overconservative. Tr. 694. The Licensee also testified that its one-year program yielded semi-logarithmic evidence. In camera, Tr. 40; Tr. 565. The Board quite properly found that no basis has been established for the allegation that inadequate consideration has been given to deterioration of the rack structure, or the Boral plates to be used as neutron absorbers. Initial Decision at 16.

The Colemans argue that certain reportable occurrences cited by them would have had some effect on the Staff's conclusions presented to the Board had they been considered. They do not mention what these reportable occurrences concern. A review of the cited reports leads the Staff to conclude that they have no relevance to any of the matters in controversy which were before the Licensing Board, and do not point to any errors in that Licensing Board's Initial Decision.

Finding of fact No. 10 refers to a small leak experienced in the Salem spent fuel pool in January 1980. The Licensee made the Board and parties



aware of this leak. <sup>24/</sup> While the Colemans' counsel wrote a letter to the Board asking certain questions concerning this leak, he made no attempt to have these questions included as issues in the proceeding. The Colemans did not raise this issue in their proposed findings filed on June 23, 1980. They now attempt to raise the issue of this leak for the first time, but do not show how the presence of the leak of approximately 1.9 gallons per hour relates to any matters treated in the Board's Initial Decision.

Exception No. 7 relates to a response given by the Staff to two Board questions. These questions related to the effect of the TMI accident on the TMI-2 spent fuel pool, and the effect that such an accident occurring at Salem would have on the Salem spent fuel pool. Brief of Colemans, Exceptions at 1-2. No proposed finding was submitted with regard to these Board questions by the Colemans' counsel. In an attempt to aid the Board the Staff introduced into evidence certain charts indicating radiation levels at various points in the TMI-2 auxiliary building at various times after the accident. Exhibit 12, Tr. 1338. No party objected to their admission. The Board's findings with respect to its questions are found at pages 26 to 31 of its Initial Decision. They found that the testimony of the Staff and Licensee adequately responded

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<sup>24/</sup> The Licensee forwarded to the Board both a press release on this subject, and the Licensee event report which followed. Letter to the Board from M. J. Wetterhahn dated February 20, 1980.

to their concerns. Id. at 31. There is no indication of how much reliance the Board placed on Exhibit 12 for its conclusions. In any event, the Colemans do not now point to any way in which the Licensing Board has erred in its conclusions, merely because it considered this evidence. <sup>25/</sup> For the reasons set forth above it must be concluded that the Staff's and Licensee's analyses were adequate, and that the Licensing Board correctly made such a finding.

5. The FGEIS should not have been either introduced into evidence or examined in this proceeding.

The Colemans claim in Findings of Fact 2 and 6, Exception 11, and Conclusion of Law B that the FGEIS should have been introduced into evidence in this proceeding, and that all parties should have had an opportunity to discuss its contents. As mentioned in § IV.B.3 supra, the FGEIS was not issued until August 1979, after the major portion of the evidentiary hearings were completed. The document was provided to the Board and parties. See § IV.C.6, infra. The Colemans never sought to either introduce the FGEIS into evidence, or to request hearings on the contents of that document. Having failed to raise the question of the role of the FGEIS in this proceeding before the Licensing Board, they are prohibited from doing so on appeal. Moreover, the Staff did not rely on the FGEIS for its evaluation but rather wrote a Safety Evaluation and

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<sup>25/</sup> It should be noted that the statement quoted by the Colemans made by Barry Smith is a statement of counsel and not testimony of a Staff witness.

Environmental Impact Appraisal specifically related to the Salem facility. For these reasons, the absence of this document is not grounds for reversal of the Licensing Board's decision, and this is not the appropriate forum for a challenge to the contents of the FGEIS.

6. Neither the Staff, the Licensee nor the Licensing Board have an obligation to make documents available to parties which are already available in the public document room.

The Colemans claim that approximately nine documents were not made available to them either by the Staff or the Licensee. Findings of Fact Nos. 6, 7, and 9; Exception No. 11. They mention that they found these documents in the local public document room. The Colemans first claim that the FGEIS was neither made available to them nor marked as an Exhibit in this proceeding. Findings of Fact No. 6; Exception No. 11. The FGEIS was forwarded by the Staff to the Board and parties by letter dated October 31, 1979. As stated in § IV.C.5, supra, no one ever attempted to introduce the FGEIS into evidence. Therefore, the Board's conduct in not marking that document as an exhibit was quite correct.

The Colemans make the same two complaints with regard to a letter issued by Brian Grimes on April 14, 1978. This document was placed in the public document room. It should be noted that this letter was issued prior to the admission of the Colemans as a party to the proceeding. There is no indication that they ever requested this document. Since it

was located in the public document room it has been freely available to them during this entire proceeding. Since no one ever attempted to introduce the Grimes document into evidence, the Board was quite correct in not marking it as an exhibit.

The Colemans' last complaint that they were not provided with a copy of the Licensee's instruction procedures. Brief of Colemans, Findings of Fact No. 6. The Licensee was required to submit these procedures to the Staff in the Staff's Safety Evaluation. Exhibit 6-B at 2-5.<sup>26/</sup> Counsel for Licensee sent a letter to the Board on December 13, 1980, which specifically stated that copies of the installation procedures would be made available upon request. This letter was served upon all parties to the proceeding. In addition, as noted by the Colemans, a copy of those installation procedures was placed in the local public document room. No requests for the procedures were made by any party.

The Colemans also claim that the Staff did not consider the contents of a letter sent by counsel for Licensee to their counsel. They never attempted to bring this letter to the attention of the NRC. It is the Staff's understanding that the letter was sent after the close of the

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<sup>26/</sup> This requirement was imposed upon the Licensee in the event that the reracking would have to be done after the first refueling outage. The first refueling occurred in April 1979. Therefore, the installation procedures were submitted as required. It should be noted that an additional refueling has taken place. See amendment No. 33 to Facility Operating License DPR-70 (February 2, 1981).

record in this proceeding. In addition, the Colemans make no attempt to show how this letter would in anyway change the conclusions of the Staff and does not refer at all to what effect the existence of the document would have on the Licensing Board's conclusions.

In Finding of Fact No. 7, the Colemans claim that the SANDIA report was withheld from the parties. Brief of Colemans, Findings of Fact at 8. The SANDIA report was transmitted to the Board and parties with the Staff's testimony on Board question No. 5 dated April 10, 1980.<sup>27/</sup>

Finding of Fact No. 9 again complains that certain letters from the Licensee to the Staff were not made available to all of the parties. Both letters were, in fact, placed in the local public document room. The second of the two mentioned letters is dated after the close of the record in this proceeding. The Colemans though referring to a change in the information between July 1979 and September 1980, make no showing as

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<sup>27/</sup> The SANDIA report was not introduced into evidence. However, Dr. Benjamin the author of that report, was a Staff witness at the hearing and the report was used in cross-examination of Staff witnesses by the Board and parties. Tr. 1425.

to how the change in the number of fuel assemblies in the spent fuel pool affects any of the issues which were before the Licensing Board.<sup>28/</sup>

In addition, the Colemans' use of the Federal Register notice in their brief indicates that the document was indeed available to them in the local public document. See Brief of Colemans, Findings of Fact at 1. NUREG-0404 was available to all parties during the hearing since it was issued in 1978.

Even in the face of a formal discovery request for the production of documents, the Staff is under no obligation to provide them to an individual party. Rather the Staff is only required to make them available for inspection and copying in the public document room. See 10 C.F.R. §§ 2.744 and 2.790(a); Pennsylvania Power and Light Company (Susquehanna Steam Electric Station, Units 1 and 2), LBP-79-31, 10 NRC 597, 605 (1979). To the Staff's knowledge the Colemans never requested copies of the documents listed in their findings of fact and exceptions. Since the Colemans indicate that they have found the above-mentioned documents in the local public document room the Commission's regulations do not impose any further obligation on the Staff. In addition, the

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<sup>28/</sup> The amendment issued by the Staff on February 2, 1981, is accompanied by a Safety Evaluation discussing the impact of the sixty-four new assemblies in the spent fuel pool on the occupational exposures to be received from the reracking. The Safety Evaluation also expresses Staff approval of the installation procedures to be used by the Licensee. The Staff concludes that the presence of sixty-four more fuel assemblies in the spent fuel pool does not change its conclusions as expressed in the Safety Evaluation issued on January 15, 1979. Amendment No. 33, Safety Evaluation at 4 (February 2, 1981).

Colemans have not indicated how the failure to provide them with personal copies of documents affects the Board's conclusions as set forth in its Initial Decision. Therefore, this complaint does not constitute reversible error.

7. The proposed action is not a major Federal action significantly affecting the quality of the human environment and, therefore, does not require the preparation of an environmental impact statement.

The Colemans claim that the proposed spent fuel pool capacity expansion is a major Commission action significantly affecting the quality of the human environment requiring the preparation of an environmental impact statement. Conclusion of Law A. Conclusion A now requests preparation of an environmental impact statement on this license amendment application. This was not a contention in the proceeding, and the Colemans show no factual reason why this amendment would have a significant effect on the quality of the human environment. Findings of Fact Nos. 3 through 11 do not support this conclusion of law. <sup>29/</sup> The Licensing Board's finding is based on a careful examination of the evidence in the entire record before it, and is thoroughly explained. This finding should be affirmed.

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<sup>29/</sup> A similar exception was raised by the Township of Lower Alloways Creek, and is discussed in greater detail at § IV.B.3, supra.

8. The Licensing Board's incorrect statement as to Licensee's interest in other reactors does not require reversal of the Initial Decision.

Exception No. 5 claims that Licensee owns interest in nuclear facilities other than Salem. This exception, while factually correct, makes no reference to a reversible error committed by the Licensing Board. There is no evidence of record that Licensee owned an interest in any nuclear facilities other than Hope Creek. Though the Peach Bottom facility was mentioned, no indication was given of Licensee's interest in that facility. Tr. 1156. Therefore, the Board's statement on p. 24 of the Initial Decision concerning Licensee's interest in other facilities was not in error based on the record before the Board. The Staff notes that Licensee has confirmed that it owns an interest in Peach Bottom Units 2 and 3. Licensee's Response to the Briefs in Support of Exceptions of Lower Alloways Creek Township and Mr. and Mrs. Alfred C. Coleman, Jr. at 58. There is no indication that the Licensing Board's statement on p. 24 of its Initial Decision influenced the Licensing Board's conclusion with regard to alternatives to the proposed action. The Board found that:

"...the proposed increase in spent fuel storage capacity at Salem Unit 1 will not significantly increase the impact on the human environment caused by the Salem 1 reactor. We also conclude that storage outside the United States or at an existing independent spent fuel storage installation is not available, that construction of such an installation by the Licensee would not be an alternative preferable to the proposed increase, and neither would storage of spent fuel from Salem 1 at Salem 2 or at another reactor, if another reactor were available."



Therefore, though the Board may have made a factual misstatement it would not require reversal of the Licensing Board's decision.

CONCLUSION

For the reasons set forth above, the Staff concludes that the exceptions filed by the Township of Lower Alloways Creek and by Alfred C. and Eleanor G. Coleman do not provide any basis for a reversal of the Licensing Board's decision in this matter. Therefore, the exceptions should be denied, and the Initial Decision should be affirmed.

Respectfully submitted,



Janice E. Moore  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 27th day of February 1981

## NUCLEAR REGULATORY COMMISSION

(Project No. M-4)

Notice of Finality of Commission Action With Regard to Final Generic  
Environmental Impact Statement on Handling and Storage of Spent Light  
Water Power Reactor Fuel (NUREG-0575).

The Nuclear Regulatory Commission hereby gives notice that the issuance of the Final Generic Environmental Statement on Handling and Storage of Spent Light Water Power Reactor Fuel (NUREG-0575), prepared by the Nuclear Regulatory Commission's Office of Nuclear Material Safety and Safeguards, represents final Commission action with respect to that document.

A notice of the availability of NUREG-0575 was published in the Federal Register on August 22, 1979. 44 FR 49317.

The Commission published notice of its intent to prepare the Generic Environmental Statement of September 16, 1975. 44 FR 42801. In that notice, the Commission stated that it had "also given careful consideration to the question whether licensing actions intended to ameliorate a possible shortage of spent fuel storage capacity ... should be deferred pending completion of the generic environmental impact statement." The Commission stated that it had "concluded that there should be no such general deferral, and that those related licensing actions may continue during the period required for preparation of the generic statement, subject to certain conditions." The Commission's notice went on to set forth a five-factor test against which proposed interim actions were to be evaluated.

Relying in part on the GEIS, the Commission finds that providing greater capacity for spent fuel storage is in the public interest. The safety of individual proposals must, of course, be determined case by case.


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The completion and publication of the Final Generic Environmental Statement means that the five-factor test set out in the 1975 Federal Register notice is no longer applicable to proposed licensing actions relating to spent fuel handling and storage. This action does not affect any other requirements which may exist to address specific environmental and safety issues for individual licensing action.

Copies of the Final Statement may be purchased from the National Technical Information Service, Springfield, Virginia 22161, as follows:  
Volume 1 -- \$7.25 -- Executive Summary and Text; Volume 2 -- \$11.75 -- Appendices; Volume 3 -- \$12.00 -- Comments on the Draft Statement and Staff Responses; microfiche -- \$3.00 per volume.

Dated at Washington, D.C., this 3 day of February, 1981.

For the Nuclear Regulatory Commission.

  
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SAMUEL J. CHILK  
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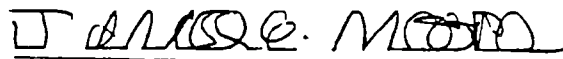
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