



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OCT 16 1984

MEMORANDUM FOR: Thomas M. Novak, Assistant Director for Licensing, Division
of Licensing

FROM: L. S. Rubenstein, Assistant Director for Core and Plant
Systems, Division of Systems Integration

SUBJECT: BEAVER VALLEY UNIT 2 APPEAL ISSUES - SPENT FUEL POOL HEAT
LOAD, AUXILIARY SYSTEMS BRANCH

In response to your memorandum dated October 11, 1984, the Auxiliary Systems Branch is providing the following discussion concerning the spent fuel pool cooling system and fuel pool heat load issue (Open Item #134) identified for appeal by the Beaver Valley Unit 2 applicant. As discussed previously with G. Knighton, DL and indicated in my note to you of August 1, 1984, we continue to believe that this issue does not warrant an appeal.

The spent fuel pool cooling system must satisfy the requirements of General Design Criterion 44 which states in part "The system safety function shall be to transfer the combined heat load of these structures, systems, and components (i.e., those important to safety) under normal operating and accident conditions." We therefore believe it is not only logical to assume a full spent fuel pool when calculating heat removal capability but that this is the assumption intended in order to demonstrate compliance with GDC 44. We understand the applicant's position to be that they have analyzed the spent fuel pool cooling system design capability for normal conditions based on the heat generated from 1-1/3 cores of successive refueling discharges as prescribed in the criteria of SRP Section 9.1.3 and on that basis comply with applicable regulations. As we indicated previously in the August 1, 1984 note, the SRP criteria is not correctly worded and will be revised in the future. However, it should be noted that SRP Section 9.1.3 also states that the spent fuel pool cooling system shall be capable of heat removal from a fully loaded pool which for Beaver Valley Unit 2 is 1088 fuel assemblies, considerably more than 1-1/3 cores.

As we indicated in the August 1, 1984 note, it is our opinion that no safety significant issue exists in regard to this open item. We believe that the spent fuel pool cooling system will be found acceptable assuming a heat load based on a full storage pool. However, since the applicant has yet to demonstrate this, we offer the applicant two alternatives as follows:

1. Revise the FSAR to incorporate a spent fuel pool cooling system normal heat removal analysis assuming the pool is full of successive refueling discharges in order to assure compliance with GDC 44 for the present design, or

Contact:
J. Wermiel
X29462

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[Signature]

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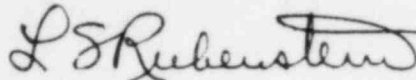
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2. Since the current FSAR heat load analysis is for no more than 1-1/3 cores, propose a technical specification or accept a license condition for storage of no more than this amount of fuel as no analysis for safe storage of greater than this amount has been presented. When the applicant chooses to store greater than ~~1-1/3~~ cores, an appropriate license amendment would be required along with the required supporting analysis.

As previously stated, we believe an appeals meeting on this issue is unnecessary. We are available to discuss this further.



L. S. Rubenstein, Assistant Director
for Core and Plant Systems
Division of Systems Integration

cc: R. Bernero
D. Eisenhut
O. Parr
G. Knighton
J. Wermiel
B. K. Singh
R. Anand
M. Ley