

April 21, 2004

Mr. G. R. Peterson, Vice President  
McGuire Nuclear Station  
Duke Energy Corporation  
12700 Hagers Ferry Road  
Huntersville, NC 28078

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 AND 2 - REQUEST FOR  
ADDITIONAL INFORMATION FOR THE PROPOSED AMENDMENTS  
CONCERNING SPENT FUEL ASSEMBLY STORAGE (TAC NOS. MC0945  
AND MC0946)

Dear Mr. Peterson:

By letter dated September 29, 2003, you submitted a request for amendments to the Technical Specifications for McGuire Nuclear Station, Units 1 and 2, concerning spent fuel assembly storage. Enclosed is a request for additional information (RAI) related to the Boral neutron poison material that we need to continue our review. Mr. Norman Simms of your staff has indicated that the response to this RAI will be provided within 45 days of the date of this letter.

If you have any further questions on this matter, please call me at (301) 415-1388.

Sincerely,

*/RA/*

James J. Shea, Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-369 and 50-370

Enclosure: As stated

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NAME	JShea	CHawes	JNakoski
DATE	4/20/04	4/19/04	4/21/04

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REQUEST FOR ADDITIONAL INFORMATION RELATED TO  
SPENT FUEL ASSEMBLY STORAGE - SEPTEMBER 29, 2003, AMENDMENT REQUEST  
MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

1. The NRC staff notes that the defined Region 1 of the spent fuel pool was reracked without prior NRC approval utilizing a Boral neutron poison material. Therefore, the NRC staff requests a discussion of the procedures and tests used to ensure that the Boral panels in the racks have the minimum Boron-10 (B-10) loading assumed in the analyses.
2. Recently, incidents of Boral blistering have been reported and the impact on the expected performance of this material is not yet known. Therefore, the NRC staff requests the licensee to implement a technical specification (TS) Boral coupon surveillance program to ensure consistent material performance assumed in its analyses. This program should monitor the physical and chemical properties of Boral over time and include the following:
  - description of the coupons used (e.g., from the same lot as the panels);
  - technique for measuring the initial B-10 content of the coupons;
  - frequency and its justification
  - tests to be performed on coupons (e.g., weight measurement, measurement of dimensions (length, width and thickness), and B-10 content).

In addition, please inform the NRC staff in writing if the coupons reveal a change in material performance from that assumed in the analyses.

Enclosure

McGuire Nuclear Station

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