

July 2, 2004

Mr. G. Peterson  
Vice President  
McGuire Nuclear Station  
Duke Energy Corporation  
12700 Hagers Ferry Road  
Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 AND 2 - REQUEST FOR  
ADDITIONAL INFORMATION RE: CONTAINMENT DIVIDER BARRIER  
INTEGRITY (TAC NOS. MB9523 AND MB9524)

Dear Mr. Peterson:

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated June 3, 2003, you submitted an application for an amendment to the operating license for McGuire Nuclear Station, Units 1 and 2. The amendment would modify Technical Specification (TS) 3.6.14 to allow a pressurizer hatch to be open for up to six hours to facilitate future inspections and maintenance. The current TS limits the pressurizer hatch open time to one hour. The NRC staff has reviewed your submittal and has determined that additional information is required. Our questions are provided in the Enclosure. We discussed these questions with your staff on June 16, 2004. Your staff indicated that a response could be provided within 30 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 No. 50-369 and 50-370

Enclosure: Request for Additional Information

cc w/encl: See next page

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REQUEST FOR ADDITIONAL INFORMATION  
ON CONTAINMENT DIVIDER BARRIER INTEGRITY AMENDMENT REQUEST  
MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

1. Attachment 3 to the submittal, dated June 3, 2003, states the following:

A McGuire engineering calculation was performed to ensure that the drop of the largest pressurizer hatch plug on the pressurizer enclosure roof or operating floor, and a drop of the polar crane load block onto the operating floor would not damage any equipment, components, or systems necessary for safe shutdown. . . . Based on this calculation, the operating floor and the pressurizer enclosure roof can withstand a drop of the largest pressurizer enclosure hatch plug or the polar crane load block. Subsequently the heavy load drop analysis was revised to ensure the calculation enveloped the case of the largest pressurizer hatch plug dropping back into the hole.

- a. Describe the assumptions and methodology used in the above revised calculation for the NRC staff's review.
  - b. Explain how the load drop analysis conforms to the NUREG-0612, Appendix A guidelines for analysis of postulated load drops. Specifically, address NUREG-0612, Appendix A, Section 1, Items 1, 3, 6, and 7.
  - c. NUREG-0612, Appendix A, Section 2, Item 1 recommends that the impact loads should include the load, the crane load block, and other lifting apparatus. However, your analysis involves dropping of the largest pressurizer hatch plug and the polar crane load block *separately* on structures. Explain how you determine consequences of a postulated load drop involving a drop of the load, the crane load block, and other lifting apparatus *together* on structures.
2. Explain how you satisfy the following of NUREG-0612: (1) general guidelines in Section 5.1.1 and (2) guidelines on minimizing the possibility of failing safe shutdown equipment as a result of a load drop in Section 5.1.5.
  3. You have stated it may be necessary to enter the pressurizer cavity to perform inspections and maintenance requiring the hatch to be opened longer than one hour during plant operation. Provide details on situations that would require the hatch to be opened for up to six hours as proposed in this amendment.
  4. Describe applicable regulations and requirements concerning the containment and pressurizer hatch and how the proposed change will not affect conformance with these requirements.

Enclosure

McGuire Nuclear Station

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