

Docket Nos.: 50-369  
and 50-370

MAR 05 1986

Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
Duke Power Company  
422 South Church Street  
Charlotte, North Carolina 28242

Dear Mr. Tucker:

Subject: Environmental Assessment - McGuire Nuclear Station, Units 1 and 2

Enclosed for your information is a copy of the "Notice of Environmental Assessment and Finding of No Significant Impact" related to your September 24, 1985, and February 14, 1986, requests for exemption from the requirements of Appendix J to 10 CFR Part 50 concerning performance of the local leak rate test.

The Notice has been forwarded to the Office of the Federal Register for publication.

*for*  
Sincerely,  
Original signed by:  
D. Hood  
B. J. Youngblood, Director  
PWR Project Directorate #4  
Division of PWR Licensing-A

Enclosure: As stated

cc w/enclosure: See next page

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Mr. H. B. Tucker  
Duke Power Company

McGuire Nuclear Station

cc:

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UNITED STATES NUCLEAR REGULATORY COMMISSION

7590-01

DUKE POWER COMPANY

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-369 AND 50-370

NOTICE OF ENVIRONMENTAL ASSESSMENT

AND FINDING OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of partial exemption from the requirements of Appendix J to 10 CFR Part 50 to Duke Power Company (the licensee) for the McGuire Nuclear Station, Units 1 and 2, located in Mecklenburg County, North Carolina.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Actions: Section III C.2(a) of Appendix J to 10 CFR 50 which addresses the test pressure to be used in the performance of local leak rate tests provides: "Valves, unless pressurized with fluid (e.g., water, nitrogen) from a seal system, shall be pressurized with air or nitrogen at a pressure of Pa." The proposed exemption from Section III C.2(a) would allow performance of the local leak rate test for the ice condenser refrigeration system without draining the glycol from the seats of the diaphragm valves at the mechanical containment penetrations. The proposed exemption and the bases thereto, are in accordance with the licensee's letters dated September 24, 1985 and February 14, 1986.

The Need for the Proposed Actions: The proposed exemption would reduce the downtime for the ice condenser refrigeration system, which maintains the temperature and mass of the ice bed at acceptable levels. The exemption would also reduce the amount of toxic waste (approximately 200 gallons of

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glycol for each McGuire unit) which might otherwise require disposal.

Environmental Impacts of Proposed Actions: The proposed exemption would provide for the substitution of an alternate test for the mechanical containment penetration diaphragm valves in the ice condenser refrigeration system. The proposed test procedure includes a glycol leakage rate acceptance criterion on those diaphragm valves of zero indicated leakage (not including instrument error). We find that a valve meeting a zero leakage criterion using glycol would allow no leakage of containment atmosphere. If the leak rate using glycol should be found to be greater than zero, the penetration would then be fully drained and the valves leak tested in accordance with Appendix J. Thus, performing the local leakage rate test on these penetrations without fully draining them would not compromise containment integrity. Plant operation with the exemption would be at least as safe as requiring compliance with the leak testing requirement of the regulations. The probability of an accident would not be increased and the post-accident radiological releases would not be greater than previously determined, nor would the proposed exemption otherwise affect radiological plant effluents, nor result in any significant occupational exposure. Likewise, the exemption would not adversely affect non-radiological plant effluents or have other adverse environmental impact. Therefore, the Commission concludes that there would be no significant radiological or non-radiological environmental impacts associated with the proposed exemption.

Alternative to the Proposed Actions: Because we have concluded that there would be no significant adverse environmental impact associated with the proposed exemption, any alternative to this exemption would have either no

environmental impact or greater environmental impact.

The principal alternative would be to deny the requested exemption. Such action would not reduce environmental impacts of plant operation but would increase the amount of toxic waste (glycol) requiring disposal. Also, denial of the exemption would require the ice condenser refrigeration system to be down for 24 to 36 hours which has a potential negative impact on the mass of ice in the ice bed.

Alternative Use of Resources: This action does not involve the use of resources not previously considered in connection with the "Final Environmental Statement Related to Operation of McGuire Nuclear Station," dated April 1976.

Agencies and Persons Consulted: The NRC staff reviewed the licensee's requests that support the proposed exemption. The NRC staff did not consult other agencies or persons.

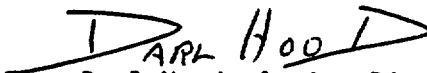
FINDING OF NO SIGNIFICANT IMPACT

Based upon the foregoing environmental assessment, we conclude that the proposed exemption will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed exemption.

For further details with respect to the proposed actions, see the licensee's requests for exemption dated September 24, 1985, and February 14, 1986, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C., and at the Atkins Library, University of North Carolina, Charlotte (UNCC Station), North Carolina 28223.

Dated at Bethesda, Maryland, this 4<sup>th</sup> day of March 1986.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink that reads "DARL HOOD". The signature is stylized, with a large, sweeping "D" and "H".

Darl Hood, Acting Director  
PWR Project Directorate #4  
Division of PWR Licensing-A, NRR