

September 14, 1999

Mr. H. B. Barron  
Vice President, McGuire Site  
Duke Energy Corporation  
12700 Hagers Ferry Road  
Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 AND 2 RE: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT RELATED TO ISSUANCE OF EXEMPTIONS TO THE OPERATING LICENSES (TAC NOS. MA5411 AND MA5412)

Dear Mr. Barron:

Enclosed is a copy of an "Environmental Assessment and Finding of No Significant Impact" related to your request for exemption dated April 20, 1999. The exemption would exempt McGuire Nuclear Station, Units 1 and 2, from certain requirements of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix A, General Design Criterion 57, regarding isolation of main steam branch lines penetrating the containment. This assessment has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by:  
Frank Rinaldi, Project Manager, Section 1  
Project Directorate II  
Division of Licensing and Project Management  
Office of Nuclear Reactor Regulation

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Docket Nos. 50-369 and 50-370

Enclosure: Environmental Assessment

cc w/encl: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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A handwritten signature in cursive script, appearing to read "Frank Rinaldi".

Frank Rinaldi, Project Manager, Section 1  
Project Directorate II  
Division of Licensing and Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-369 and 50-370

Enclosure: Environmental Assessment

cc w/encl: See next page

McGuire Nuclear Station

cc:

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UNITED STATES NUCLEAR REGULATORY COMMISSIONDUKE ENERGY CORPORATIONDOCKET NOS. 50-369 AND 50-370MCGUIRE NUCLEAR STATION, UNITS 1 AND 2ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of exemptions from Facility Operating Licenses Nos. NPF-9 and NPF-17, issued to Duke Energy Corporation (the licensee), for operation of the McGuire Nuclear Station, Units 1 and 2, located in Mecklenberg County, North Carolina.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action:

The proposed action would exempt McGuire Nuclear Station, Units 1 and 2, from certain requirements of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix A, General Design Criterion (GDC) 57, regarding isolation of main steam branch lines penetrating the containment. The proposed action is in response to the licensee's application dated April 20, 1999.

The Need for the Proposed Action:

The licensee requested an exemption from GDC 57 for Containment Penetrations M261 and M393. GDC 57 imposes isolation requirements on lines that penetrate primary reactor containment and are neither part of the reactor coolant pressure boundary nor connected directly to the containment atmosphere. These are penetrations on main steam branch lines. These lines penetrate the containment and are not part of the reactor coolant pressure

boundary or connected directly to the containment atmosphere. Outside of containment, these lines branch into various separate, individual lines before reaching the respective main steam isolation valves. From each of these main steam lines, one branch supplies main steam to the turbine-driven auxiliary feedwater (TDCA, using the licensee's abbreviation) pump.

Valves SA-1, SA-2, SA-77, and SA-78 are locally operated, locked open, manual gate valves. Valves SA-5 and SA-6 are stop check valves. All of these valves are located in the branch lines that supply main steam to the TDCA. Valves SA-1, SA-2, SA-77, and SA-78 are required to be open, and SA-5 and SA-6 are required to be capable of opening for Engineered Safety Features (ESF) operations of the TDCA pump by Technical Specifications (TS). The TDCA is also part of the ESF. Valves SA-1, SA-2, SA-77, and SA-78 are not identified as Containment Isolation Valves in the TS or the Updated Final Safety Analysis Report, but perform that function. To comply literally with GDC 57, the licensee would have to add motor operators to valves SA-1, SA-2, SA-77, and SA-78, such that they become automatic or capable of remote operation. The licensee has requested an exemption from literal compliance with GDC 57. The licensee would rely instead on manual action to close the valves SA-1, SA-2, SA-77, and SA-78, or valves SA-5, and SA-6. The time needed to do so has been factored into the accident analyses. Further, the applicable design-basis accident scenarios and consequences continue to be bounding.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed action and concludes that there is no significant environmental impact if the exemptions are granted. No changes will be made to the as-built design, and existing applicable procedures at the two units at the McGuire Nuclear Station will remain the same.

The proposed action will not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does not involve any historic sites. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

Accordingly, the Commission concludes that there are no significant environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the "no action" alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Impact Statement related to the McGuire Nuclear Station.

Agencies and Persons Contacted:

In accordance with its stated policy, on September 13, 1999, the staff consulted with the North Carolina State official, Mr. John James, of the Bureau of Land and Waste Management Department of Health and Environmental Control, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the Commission concludes that the proposed exemptions 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 action.

For further details with respect to the proposed action, see the licensee's request for the exemptions dated April 20, 1999, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington DC, and at the local public document room located at the J. Murrey Atkins Library, University of North Carolina at Charlotte, 9201 University City Boulevard, Charlotte, North Carolina

Dated at Rockville, Maryland, this 14th day of September 1999.

FOR THE NUCLEAR REGULATORY COMMISSION



Frank Rinaldi, Project Manager, Section 1  
Project Directorate II  
Division of Licensing and Project Management  
Office of Nuclear Reactor Regulation