

April 8, 2005

Mr. G. R. 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: RELIEF REQUEST NOS. MC-GRP-01,  
MC-SRP-KC-01, MC-SRP-ND-01, AND MC-SRV-NS-01 (TAC NOS. MC5571,  
MC5572, MC5573, MC5574, MC5575, MC5576, MC5577, AND MC5578)

Dear Mr. Peterson:

By letter to the Nuclear Regulatory Commission (NRC) dated August 12, 2004, as supplemented by letter dated on November 18, 2004, pursuant to Title 10 of the *Code of Federal Regulations*, Section 50.55a(a)(3), you requested the use of an alternative to the American Society of Mechanical Engineers Operating and Maintenance Code, for McGuire Nuclear Station, Units 1 and 2. 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 March 17, 2005. Your staff indicated that a response could 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: Request for Additional Information

cc w/encl: See next page

April 8, 2005

Mr. G. R. 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: RELIEF REQUEST NOS. MC-GRP-01,  
MC-SRP-KC-01, MC-SRP-ND-01, AND MC-SRV-NS-01 (TAC NOS. MC5571,  
MC5572, MC5573, MC5574, MC5575, MC5576, MC5577, AND MC5578)

Dear Mr. Peterson:

By letter to the Nuclear Regulatory Commission (NRC) dated August 12, 2004, as supplemented by letter dated on November 18, 2004, pursuant to Title 10 of the *Code of Federal Regulations*, Section 50.55a(a)(3), you requested the use of an alternative to the American Society of Mechanical Engineers Operating and Maintenance Code, for McGuire Nuclear Station, Units 1 and 2. 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 March 17, 2005. Your staff indicated that a response could 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: Request for Additional Information

cc w/encl: See next page

DISTRIBUTION:

PUBLIC  
PDII-1 R/F  
RidsNrrDlpmLpdii-1 (JNakoski)  
CHawes (Hard Copy)  
RidsNrrPMJShea  
RidsNrrDeDpr

RidsRgn2MailCenter (LPlisco)  
RidsNrrDlpmDpr  
RidsAcrsAcnwMailCenter  
RidsOgcRp  
GBedi

ADAMS Accession No.: ML050730178

NRR-088

<b>OFFICE</b>	PDII-1/PM	PDII-1/LA	DE/EMEB/SC	PDII-1/SC
<b>NAME</b>	JShea	CHawes	DTerao	JNakoski
<b>DATE</b>	03/ 17 /05	03/ 14 /05	04 / 08 / 05	04/ 08 /05

**OFFICIAL RECORD COPY**

REQUEST FOR ADDITIONAL INFORMATION

RELIEF REQUEST NOS. MC-GRP-01, MC-SRP-KC-01, MC-SRP-ND-01,

AND MC-SRV-NS-01

ALTERNATIVES TO ASME OM CODE

DUKE ENERGY CORPORATION

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-369 AND 50-370

**General Comment**

The licensee should follow the Nuclear Energy Institute (NEI) guidelines in NEI White Paper, Revision 1, "Standard Format for Requests from Commercial Reactor Licensees Pursuant to 10 CFR 50.55a," dated June 7, 2004 as endorsed in U.S. Nuclear Regulatory Commission Office of Nuclear Reactor Regulation (NRR) Office Instruction LIC-102, "Relief Request Reviews," Revision 1.

**Generic Relief Request No. MC-GRP-01**

**Comment:** The licensee is requesting generic relief for all the pumps characterized as "smooth-running pumps." The staff has not authorized establishment of a minimum vibration reference value generically and has not authorized alert and required action range values for pumps classified in a licensee's inservice testing (IST) program as "smooth running." If a licensee intends to request an alternative using a minimum reference value for each pump, the submittal should address the current vibration levels and the methodology for detecting pump degradation.

**RAI 1:** In order for the NRC staff to complete its review of this relief request, please provide the pump specific information on vibration levels and the methodology for detecting pump degradation for all pumps for which relief is requested.

**Specific Relief Request No. MC-SRP-KC-01**

**RAI 2:** The American Society of Mechanical Engineers (ASME) Operations and Maintenance (OM) Code Edition 1998 through the 2000 Addenda, requires that all pumps within the scope of an IST program need to be categorized either as Group A or Group B. Therefore, please specify the category of the component cooling water pumps (i.e., either Group A or Group B) and use the appropriate instrument accuracy, as required by the Table ISTB-3500-1.

**RAI 3:** The licensee is requested to specify the paragraph of the OM Code from which relief is requested.

**RAI 4:** Under the, "Basis for Relief" paragraph, the licensee specified a required pressure instrument accuracy of 2 percent based on Table ISTB-3500-1. This pressure instrument

accuracy of 2 percent is only for Group A and Group B tests. The licensee did not provide accuracy information (i.e.  $\pm 0.5$  percent) to be used for the comprehensive test of component cooling water pumps, as specified in Table ISTB-3500-1. Please clarify, and include the accuracy requirements for the comprehensive pump test.

**RAI 5:** Under the, "Basis for Relief" paragraph, the licensee did not provide information related to the component cooling water pumps' discharge pressure and pressure gauge accuracy requirements (for Group A or Group B and comprehensive pump tests). Please clarify and provide all the related information.

**Specific Relief Request No. MC-SRP-ND-01**

**RAI 6:** ASME OM Code Edition 1998, through the 2000 Addenda, requires that all pumps within the scope of an IST program need to be categorized either as Group A or Group B. Therefore, please specify the category of the residual heat removal pumps (i.e., either Group A or Group B) and use the appropriate instrument accuracy, as required by Table ISTB-3500-1.

**RAI 7:** The licensee is requested to specify the paragraph of the OM Code from which relief is requested.

**RAI 8:** Under the, "Basis for Relief" paragraph, the licensee states "Range requirements will be waived for the tests. The purpose of quarterly test is to verify Tech. Spec. requirements are met and to obtain vibration data for trending. The instrumentation used for the quarterly residual heat removal test will meet accuracy requirements for assuring RHR pump operability per Tech. Spec."

Please clarify and explain how quarterly inservice testing fulfills the Technical Specification Requirements.

**RAI 9:** The licensee is requested to rearrange and clarify the details provided under "Basis for Relief" and "Alternative Testing" so that the information is easily distinguished between the "Basis for Relief" and "Alternative Testing" paragraphs.

**RAI 10:** Under the, "Alternate Testing" paragraph the licensee specified a required pressure instrument accuracy of 2 percent based on Table ISTB-3500-1. This pressure instrument accuracy of  $\pm 2$  percent is only for Group A and Group B tests. The licensee did not provide accuracy information (i.e.  $\pm 0.5$  percent) related to the comprehensive test as specified in Table ISTB-3500-1. Please clarify, and include the accuracy requirements for the comprehensive pump test.

**Specific Relief Request No. MC-SRV-NS-01**

**RAI 11:** In order for the staff to evaluate whether the proposed IST alternative is acceptable, the licensee must demonstrate that (1) the proposed alternative provides an acceptable level of quality and safety pursuant to 10 CFR 50.55a(a)(3)(i) or (2) compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety pursuant to 10 CFR 50.55a(a)(3)(ii), or (3) the code requirements are impractical pursuant to 10 CFR 50.55a(f)(5)(iii).

Please provide the information necessary to demonstrate the basis for the request consistent with these requirements.

**RAI 12:** The licensee is requested to specify the paragraph of the OM Code from which relief is requested.

**RAI 13:** In the submitted relief request, it appears that the licensee intends to use grouping criteria for IST of the subject check valves, however, it is unclear which paragraph of the OM Code the licensee is requesting relief from. Please clearly identify the IST criteria and the specific paragraph of the OM Code for which relief is requested.

Please note that ISTC-5221(c)(1) states, "Grouping of check valves for sample disassembly examination program shall be technically justified and shall consider, as a minimum, valve manufacturer, design, service, size, materials of construction, and orientation." Paragraph ISTC-5221(c)(3) states, "At least one valve from each group shall be disassembled and examined at each refueling outage; all valves in each group shall be disassembled and examined at least once every 8 years." Provided the licensee meets all the requirements of grouping for these check valves as specified in ISTC-5221(c), it is unclear why the licensee needs relief from Code requirements.

McGuire Nuclear Station

cc:

Ms. Lisa F. Vaughn  
Duke Energy Corporation  
Mail Code - PB06E  
422 South Church Street  
P.O. Box 1244  
Charlotte, North Carolina 28201-1244

County Manager of Mecklenburg County  
720 East Fourth Street  
Charlotte, North Carolina 28202

Mr. C. Jeffrey Thomas  
Regulatory Compliance Manager  
Duke Energy Corporation  
McGuire Nuclear Site  
12700 Hagers Ferry Road  
Huntersville, North Carolina 28078

Ms. Anne Cottingham, Esquire  
Winston and Strawn  
1400 L Street, NW  
Washington, DC 20005

Senior Resident Inspector  
c/o U.S. Nuclear Regulatory Commission  
12700 Hagers Ferry Road  
Huntersville, North Carolina 28078

Dr. John M. Barry  
Mecklenburg County  
Department of Environmental  
Protection  
700 N. Tryon Street  
Charlotte, North Carolina 28202

Mr. Peter R. Harden, IV  
VP-Customer Relations and Sales  
Westinghouse Electric Company  
6000 Fairview Road, 12th Floor  
Charlotte, North Carolina 28210

Ms. Karen E. Long  
Assistant Attorney General  
North Carolina Department of Justice  
P.O. Box 629  
Raleigh, North Carolina 27602

Mr. R. L. Gill, Jr.  
Manager - Nuclear Regulatory Issues  
and Industry Affairs  
Duke Energy Corporation  
526 South Church Street  
Mail Stop EC05P  
Charlotte, North Carolina 28202

NCEM REP Program Manager  
4713 Mail Service Center  
Raleigh, North Carolina 27699-4713

Mr. Richard M. Fry, Director  
Division of Radiation Protection  
North Carolina Dept. of Environment, Health  
and Natural Resources  
3825 Barrett Drive  
Raleigh, North Carolina 27609-7721

Mr. T. Richard Puryear  
Owners Group (NCEMC)  
Duke Energy Corporation  
4800 Concord Road  
York, South Carolina 29745

Mr. Henry Barron  
Group Vice President, Nuclear Generation  
and Chief Nuclear Officer  
P.O. Box 1006-EC07H  
Charlotte, North Carolina 28201-1006