

January 28, 1999

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING GENERIC LETTER  
96-05 - MCGUIRE NUCLEAR STATION, UNITS 1 AND 2 -  
(TAC NOS. M97065 AND M97066)

Dear Mr. Barron:

On September 18, 1996, the NRC issued Generic Letter (GL) 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves," to request that nuclear power plant licensees establish a program, or ensure the effectiveness of the current program, to verify on a periodic basis that safety-related motor-operated valves (MOVs) continue to be capable of performing their safety functions within the current licensing basis of the facility.

On March 31, 1998, Duke Energy Corporation (licensee for McGuire Nuclear Station, Units 1 and 2) submitted an updated response to GL 96-05 indicating its intent to implement the provisions of a Joint Owners Group (JOG) Program on MOV Periodic Verification at McGuire. The NRC staff has encouraged licensees to participate in the industry-wide JOG program to provide a benefit in reactor safety by sharing expertise and information on MOV performance and to increase the efficiency of GL 96-05 activities at nuclear plants. Licensee participation in the JOG program also minimizes the amount of information necessary for the NRC staff to review each licensee's response to GL 96-05. As a result, the NRC staff requires only limited information to complete its GL 96-05 review for McGuire.

The staff requests a response to the enclosed request for additional information by March 20, 1999. This date has been discussed and agreed upon with Mr. M. Cash of your staff. The staff appreciates the efforts expended with respect to this matter.

Sincerely,  
original signed by:  
Frank Rinaldi, Project Manager  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-369 and 50-370

Enclosure: Request for Additional  
Information

cc w/encl. See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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Sincerely,

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

Frank Rinaldi, Project Manager  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-369 and 50-370

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cc w/encl: See next page

McGuire Nuclear Station

cc:

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Request for Additional Information

Response to Generic Letter 96-05

McGuire Nuclear Station, Units 1 and 2

1. In NRC Inspection Report No. 50-369 and 370/96-11, the NRC staff closed its review of the motor-operated valve (MOV) program implemented at McGuire Nuclear Station (McGuire) in response to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance." In the inspection report, the NRC staff discussed certain aspects of Duke Energy Corporation's (Duke's) MOV program to be addressed over the long-term. For example, the inspectors noted that (1) additional industry data would be obtained and modifications were planned to increase the margins for four Aloyco split-wedge gate valves; (2) Duke intended to improve the margin for Borg Warner gate valve 1CF0129 during the next refueling outage; (3) margin improvement plans included the replacement of eight Borg Warner gate valves; (4) Duke initiated an action plan to improve the margins and the valve factor basis for the Pressurizer Power Operated Relief Valve block valves; (5) program documents required revisions to include the latest load sensitive behavior and stem friction coefficient assumptions; (6) eleven MOVs with available valve factors of less than 0.50 were scheduled for margin improvements during the next refueling outage; and (7) several dynamic butterfly valve tests were planned to improve the basis for current torque requirements. Duke should provide a summary status of the actions taken to address the specific long-term aspects of the MOV program at McGuire noted in the NRC inspection report.
2. Duke should briefly describe its plans for the use of test data from the motor control center (MCC) including (1) correlation of new MCC test data to existing direct force measurements; (2) interpretation of changes in MCC test data to changes in MOV thrust and torque performance; (3) consideration of system accuracies and sensitivities to MOV degradation for both output and operating performance requirements; and (4) validation of MOV operability using MCC testing.
3. The Joint Owners Group (JOG) program focuses on the potential age-related increase in the thrust or torque required to operate valves under their design-basis conditions. In the NRC's safety evaluation dated October 30, 1997, on the JOG program, the NRC staff specified that licensees are responsible for addressing the thrust or torque delivered by the MOV motor actuator and its potential degradation. Duke should describe the plan at McGuire for ensuring adequate ac and dc MOV motor actuator output capability, including consideration of recent guidance in Limitorque Technical Update 98-01 and its Supplement 1.

Enclosure