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**DUKE POWER**

February 17, 1993

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D. C. 20555

Subject: McGuire Nuclear Station, Units 1 and 2  
Docket Nos. 50-369 and 50-370  
Inservice Testing (IST) Requirements  
Relief Request 93-01

Dear Sir;

Pursuant to 10 CFR 50.55(g)(5)(iii), I am submitting the attached relief request for NRC review and approval. This request for relief from the requirements of Section XI of the ASME Code involves the extension of the interim relief that was granted by the NRC on January 16, 1991 to allow for the completion of modifications to the WN system. The modification to the WN system is scheduled to be completed during the next refueling outage for each unit. As such, an extension of the interim relief period until the end-of-cycle 8 refueling outages for both units is requested.

Briefly, the IST program plan for the McGuire Nuclear Station was submitted by a letter dated April 20, 1990, which superseded all previous IST program submittals. The IST program plan that was submitted by the April 20, 1990 letter covered the first ten-year interval from December 1, 1981, to December 1, 1991, for Unit 1 and March 1, 1984 to March 1, 1994 for unit 2. The second ten-year interval IST program plan for unit 1 was submitted by an October 12, 1992 letter.

The IST program plan submitted by the April 20, 1990 letter identified several requests for relief. One of the relief request was for the WN sump pumps. By a January 16, 1991 letter, the NRC granted interim relief for one year or until the next refueling outages, whichever was greater. This was believed to be, at that time, of sufficient length to allow for the completion of modifications to the WN system so that direct measurement of certain parameters could be done.

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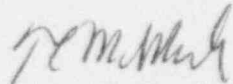
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A revised request for relief for the WN pumps was submitted by a letter dated December 2, 1991. The relief request was revised to state that the modifications to the WN system would be completed by the end of 1992. In response, the NRC stated in an April 8, 1992 letter that the interim relief could not be extended since the basis for extending the interim relief was not specified. Further, that a modification schedule with the basis for extending the interim relief period be submitted.

To this end, please find attached for both units a revised relief request for the WN sump pumps, which includes a new modification schedule and the basis for extending the interim relief period.

Please contact Paul Guill at (704) 875-4002 if you have any questions regarding this matter.

Very truly yours,



Ted C. McMeekin

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xcc: with attachment  
R. O. Sharpe  
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\pfg046.nrc

# ATTACHMENT

DUKE POWER COMPANY  
MCGUIRE NUCLEAR STATION

## Request for Relief From ASME Code Section XI Requirements

### I. Component for Which Relief is Requested

- A. Name and Identification Number  
Diesel Generator room sump pumps, WN-1,2A2; WN-1,2A3;  
WN-1,2B2; and WN-1,2B3
- B. Function  
The removal of water from the Diesel Generator  
rooms.
- C. ASME Section XI Code Class  
Class 3
- D. Valve Category  
Not Applicable

### II. ASME Code Section XI Requirement That Has Been Determined To Be Impractical

For Unit 1, ASME Code Section XI, 1986 Edition, Subsection IWP, Subarticle 3100, Table IWP-3100-1. In particular, The discharge pressure, and the flow rate inservice test quantities of Table IWP-3100-1.

For Unit 2, ASME Code Section XI, 1980 Edition through Winter 1980 addenda, Subsection IWP, Subarticle 3100, Table IWP-3100-1. In particular, the discharge pressure, and the flow rate inservice test quantities of Table IWP-3100-1.

### III. Basis for Requesting Relief

The original basis for requesting relief was that the diesel generator room sump pumps are vertical pumps that are tested by filling the diesel generator room sump and pumping the sump down. A stable system condition can not be obtained due to the continuous decrease in the sump water level. In addition, there is no instrumentation to measure suction pressure, discharge pressure or flow rate. A modification to the WN system is required to install the piping, valves, and instrumentation needed to perform the Code required testing. Until the modification to the WN system is completed, an alternate means of calculating the above parameters was proposed.

The request for relief for this situation was submitted April 20, 1990. Approval by the NRC was granted on an interim basis, as documented in a NRC letter dated January 16, 1991. The initial interim relief that was granted by the NRC was only valid for one year (up to January 16, 1992) or until the next refueling outage (the end-of-cycle 7 refueling outages for both units), whichever was greatest. As such the modifications to the WN system should have been implemented by January 16, 1992 for Unit 1 and prior to the startup of cycle 8 for Unit 2.

The initial relief request that was submitted for this situation was amended. A revised relief request was submitted to the NRC by a December 2, 1991 letter. The revised relief request stated that the modifications to the WN system would be completed by the end of 1992.

A response by the NRC to this change was provided within an April 8, 1992 letter. The NRC did not extend the period for the interim relief that was granted January 16, 1991. The reason for not extending the interim relief was because the basis for extending the period was not specified. The NRC suggested that a schedule for the modification, with the basis for extending the period be submitted. Accordingly, the subsequent paragraphs addresses the modification schedule and the basis for this schedule.

Implementation will require tie-in to the common discharge header for the diesel generator room sump pumps. In order to accomplish these tie-ins, the diesel generators are required to be removed from service and are thus render inoperable. For this reason, the tie-ins are scheduled to be installed during a routine diesel generator preventive maintenance outage while the unit is operating.



If implementation is not completed prior to the next refueling outage for each unit, the tie-ins will be installed during the outage. The next Unit 1 refueling outage (end-of-cycle 8) is scheduled to start March 13, 1993 and completed by June 4, 1993. The next Unit 2 refueling outage (end-of-cycle 8) is scheduled to start July 1, 1993 and be completed by September 14, 1993.

The following discussion is some background information explaining why the modifications to the WN system have not already been completed as committed to within the request for reliefs that have been submitted. The modifications were approved for both units in April, 1990 with implementation planned for late 1991. A survey of the proposed piping and hanger layout for the modifications was performed in August, 1991. During the walkdown, it was discovered that the piping and hangers as designed could potentially interfere with other modifications that were planned to be installed later, and could interfere with maintenance activities for the diesel generators. In September, 1991, the decision was made to redesign the piping and hanger layout to avoid the potential interference problems. During a meeting held in October, 1992 to review post-modification testing, changes to the design of the modifications were suggested to reduce long-term maintenance costs, reduce the timeframe required to install the tie-ins, and simplify hydrostatic testing. These requested changes have been incorporated into the design of the modifications.

#### IV. Alternate Testing

The alternate testing method that was discussed in the initial relief request that was submitted April 20, 1990 will continue to be performed. Briefly, the average discharge pressure and flow rate will be calculated and than compared to the acceptance criteria per Table IWP-3100-2. This alternate method will continue to provide a measure of pump degradation and will continue to provide a reasonable assurance of operational readiness in the interim.

#### V. Implementation Schedule

The alternate method of testing continues to be performed. This alternate method of testing will continue until the necessary modifications to the WN system are completed. Implementation of the modifications to the WN system will be completed prior to or during the end-of-cycle 8 refueling outages for both units. The current schedule for the start of these refueling outages are March 13, 1993 for Unit 1 and July 1, 1993 for Unit 2.