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DUKE POWER

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

Subject: McGuire Nuclear Station, Units 1 and 2
Docket Nos. 50-369 and 50-370
NRC Inspection Report No. 50-369, 370/95-13
Violation 50-369, 370/95-13-01 and Deviation 50-369, 370/95-13-02
Supplemental Reply to a Notice of Violation and a Notice of Deviation

Gentlemen:

Enclosed is a supplemental response to a Notice of Violation dated June 30, 1995 concerning failure to conduct a proper evaluation of design changes on safety-related equipment and a supplemental response to a Notice of Deviation dated June 30, 1995 concerning Standby Nuclear Service Water Dam construction. The initial response to the Notice of Violation and Notice of Deviation was submitted on July 19, 1995. Section 3.a of the supplemental response to Violation 50-369, 370/95-13-01 states that the Regulatory Retest List has been revised (Revision 1) to add a requirement to contact the VC/YC System Engineer for evaluation for Heat Balance retest of Chillers A and B. Section 2.a of the supplemental response to Deviation 50-369, 370/95-13-02 states the survey of the north abutment area was completed on November 17, 1994.

Should there be any questions concerning this supplemental response, contact Randy Cross at (704) 875-4179.

Very Truly Yours,

T. C. McMeekin

Attachment

xc: (w/attachment)

Mr. S. D. Ebneter
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McGuire Nuclear Station
Supplemental Reply to a Notice of Violation

Violation 50-369, 370/95-13-01

10 CFR 50 Appendix B, Criterion III, Design Control as implemented by the Duke Power Company Topical Quality Assurance Program, (Duke 1-A), Amendment 19, Section 17.3.2.2 and 17.3.2.3, requires that design control measures ensure that design modifications to safety-related equipment or systems are commensurate with those applied to the original design.

Contrary to the above, modification NSM-52288 to Control Room Ventilation/Chilled Water (VY/VC) system valves did not take into consideration the effects of the increased service water flows on system reliability when the valves were in the fully opened position. As a result, the system was declared past inoperable on February 21, 1995, for the periods of April 17, 1994, to June 22, 1994, and December 13, 1994, to December 31, 1994. The modification allowed Train A chiller control valves to fail fully opened on ESF actuation, increasing the probability that Train "A" of the system would be lost during periods of elevated service water flow and low service water temperatures.

This is a Severity Level IV violation (Supplement I).

Reply to Violation 50-369, 370/95-13-01

1. Reason for the violation:

   The reason for the violation is an inadequate review of the cumulative effects of all field changes during the design process.

2. Corrective steps that have been taken and the results achieved:

   a) Engineering tests and calculations were immediately performed to characterize Train A YC chiller performance as a function of Nuclear Service Water (RN) system flow and RN system temperature.

   b) ESF testing for the Train B YC chiller was conducted on December 31, 1994. During this testing, the Train B YC chiller performed as designed.

   c) Manual throttling of valve 1RN-98 was implemented on December 31, 1994 as a compensatory measure to maintain operability of the Train A YC chiller.

   d) A Heat Balance test was performed on February 7, 1995 for the Train A YC chiller to characterize the Train A chiller performance when the RN system temperature was at its lowest point.

   No similar events have occurred since implementation of these corrective actions.

3. Corrective steps that will be / to avoid further violations:

a) The Regulatory Rete_ _ist was revised (Revision 1) to add a requirement to contact the VC/YC System Engineer for an evaluation for Heat Balance retest for Chillers A and B. This change was performed in accordance with McGuire Site Directive (MSD) 350, Identifying and Performing Plant Retesting. This corrective action was completed on June 15, 1995.

b) Engineering personnel evaluated the need for additional long term plant changes or procedural changes regarding cooling water control for the YC chillers and determined the long term solution will be to continue to manually throttle valve 1RN-98. This solution adequately meets RN flow requirements to the YC Train A chiller. This corrective action was completed on June 21, 1995.

c) McGuire System Engineers will receive training on this event, including the need to consider the cumulative effects of field changes upon design functions. This corrective action will be completed by November 30, 1995.

4. Date when full compliance will be achieved:

McGuire Nuclear Station will be in full compliance by November 30, 1995.

McGuire Nuclear Station
Supplemental Reply to a Notice of Deviation

Deviation 50-369, 370/95-13-02

Final Safety Analysis Report, Appendix 2G, Standby Nuclear Service Water Pond Dam Figures 2G-1A 2G-2 and 2G-3 indicate that the Standby Nuclear Service Water Dam extends approximately 1260 feet with an earthen berm along the entire length of the dam.

Contrary to the above, an NRC/FERC Dam Inspection conducted November 14-16, 1994, revealed that the earthen berm did not extend the entire length of the dam., The berm terminated approximately 200 feet short of the north end of the dam.

Reply to Deviation 50-369, 370/95-13-02

1. Reason for the deviation :

   The reason for the deviation is Inappropriate Action. A review of dam construction photos taken during the period 1971 -1974 and interviews with construction personnel involved in construction of the dam indicate the earthen berm at the North abutment was never built. During the period of dam construction, a concrete batch plant was temporarily located near the North abutment and construction of the earthen berm at this location would have interfered with access to the batch plant. After construction of the McGuire plant and subsequent removal of the concrete batch plant, the earthen berm was not added at the North abutment.

2. Corrective steps that have been taken and the results achieved:

   a) A survey of the north abutment area was immediately initiated to ensure that accurate elevation data was available to support an operability evaluation for the Standby Nuclear Service Water Pond Dam. The survey was completed on November 17, 1994.

   b) Engineering personnel performed an operability evaluation for the Standby Nuclear Service Water Pond Dam that determined the dam was present operable and the dam met the design basis criteria. This corrective action was completed on November 21, 1994.

   c) Minor Modification MM-6926 was implemented to install an earthen berm on the North abutment of the Standby Nuclear Service Water Pond Dam. This corrective action was completed on May 24, 1995.

   No similar events have occurred since implementation of these corrective actions.

3. Corrective steps that will be taken to avoid further deviations:

   No additional corrective actions are planned.

4. Date when the corrective actions will be completed :

   All corrective actions have been completed.