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U. S. Nuclear Regulatory Commission Document Control Desk Washington, DC 20555-0001

Subject: Duke Energy Corporation McGuire Nuclear Station, Units 1 and 2 Docket Nos. 50-369, 50-370 Commitment Change Annual Report

Attached is a summary report of McGuire commitment changes for this annual reporting period. These changes were made per the guidance defined in NEI 99-04, "Guidelines for Managing NRC Commitments."

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# McGuire Nuclear Station NRC Commitment Changes Per NEI-99-04

# 1) Background:

By letter dated August 8, 1988, the NRC issued Generic Letter 88-14, "Instrument Air Supply System Problems Affecting Safety-Related Equipment." The purpose of this generic letter was to request review of NUREG-1275, Volume 2, and performance of a design and operations verification of the instrument air system. A part of the generic letter required verification of adequate maintenance practices to ensure safety-related equipment would function as intended upon the loss of instrument air.

#### **Commitment:**

By letter dated May 8, 1989, McGuire submitted the requested verification and program discussion. "IAE Maintenance Practice Review" was included as a portion of Attachment 2. This paragraph stated in part: "A preventative maintenance program is being established for critical instrument air demand equipment. A list of approximately 56 critical to operation air operated valves (AOVs) have been identified to have associated air regulator filters replaced. These filters were replaced during the last Unit 1 and 2 outages. PM work requests are being written to change out these filters every 2 years."

### **Revised Commitment:**

In response to the commitment, the filters were changed every refueling outage since the early 1990s. Operating experience (Preventative Maintenance (PM)) results revealed that the replacement frequency was too conservative. Responsible engineering personnel will adjust the PM frequency for air regulator filter replacements based upon results of the PM program.

#### 2) Background:

LER 370/92-03 described an event whereby the Unit 2 Residual Heat Removal (ND) system was declared inoperable due to a degraded flow path caused by an equipment failure. Personnel performing vibration analysis on the Component Cooling (KC) pump 2B1 noticed that the actuator on valve 2KC-82B, ESF ND HX 2B outlet flow control, appeared to be slightly sagging. An investigation determined that two of the four bolts which secure the actuator to the valve had failed rendering valve 2KC-82B inoperable. The cause of the failure of the bolts was determined to be brittle failure due to reduced cross sectional area induced by general corrosion from a packing leak. The failure was due to tensile load applied by the weight of the valve actuator on the necked down bolts.

# **Commitment:**

Planned Corrective Action #4 of the subject LER stated that component engineering personnel would implement a preventative maintenance activity to inspect the actuator mounting bolts on valve 2KC-82B to monitor for potential degradation due to corrosion.

## **Revised Commitment:**

The commitment to inspect the actuator mounting bolts on valve 2KC-82B has been deleted. The bolting material has been changed to a corrosion resistant material. Therefore, the continued inspection of the mounting bolts is no longer necessary.

# 3) Background:

On October 1, 1997, McGuire attended a predecisional enforcement conference with NRC staff personnel to discuss apparent violations associated with inoperable ice condenser doors identified in McGuire Unit 2, as addressed in Inspection Report 50-369, 370/97-16.

### **Commitment:**

Planned corrective actions and verbal commitments as a result of the conference were documented in McGuire's corrective action program via PIP M97-2686. The verbal commitment in proposed corrective action #14 states in part: "Prior to entry to Mode 4, a gap measurement will be performed, which clarifies requirements of gap check program." Corrective action #10 committed to "establish a program for gap inspections on each unit prior to return to service out of cold shutdown." This program was implemented using PT/0/A/4200/045. Baseline gap measurements were taken at that time. Additional measurements were taken during subsequent outages on each unit. Operating experience for these cycles determined the total floor movement was less than 1/16" (0.062") which is the measurement tolerance for the gap readings.

# **Revised Commitment:**

There are two known events that can cause floor movement. The first is water intrusion from defrosting the wall panels. The second is a thaw/freeze cycle within the floor caused by system isolation for a period over 48 hours. During a forced outage, a unit may be taken below Mode 4 while the system remains fully operational and all areas of the ice condenser remain below freezing. In this situation, there is no possibility of water intrusion or thawing of the floor. Therefore, floor movement does not occur and measuring the ice condenser floor to lower inlet door gaps is not necessary.

Performing measurements per PT/0/A/4200/045 has changed from any entry below Mode 4 to the following condition: Any entry below Mode 4 when a condition has existed since the last performance of this procedure where concern for significant water intrusion to the ice condenser

floor or a thaw/freeze cycle has occurred in the floor. This change provides more specific conditions detailing when inspection of the ice condenser SSC's is required. All conditions that are known to cause floor movement remain covered by this revised commitment.

# 4) Background:

By letter dated April 4, 1978, McGuire provided details in the resolution of outstanding issues as documented in the McGuire Safety Evaluation Report. McGuire was requested to provide a proposed method for assuring certain Emergency Core Cooling System (ECCS) piping was water solid to minimize the potential for water hammer.

# **Commitment:**

Attachment 5 of the April 4, 1978 letter, "Protection from Water Hammer due to Postulated Formation in the Section of Piping Between the Void Outlet of the Boron Injection Tank and the Reactor Coolant System" stated in part: "to insure that voids do not occur, a periodic test (90 day intervals) shall be performed."

PT/1&2/A/4200/029 was performed quarterly to verify positive pressure downstream of NI-9 and NI-10. The intent was to ensure piping is periodically vented to prevent any water hammer concerns.

# **Revised Commitment:**

PT/1&2/A/4200/019 is performed every 31 days to verify (per TS SR 3.5.2.3) that the ECCS piping is full of water. NUREG-0422, Supplement 1 (May 1978) acknowledges the commitment to perform PT/1&2/A/4200/029 every 90 days. Furthermore, it states that "testing requirements will be included in the Technical Specifications". Therefore, PT/1&2/A/4200/019 is adequate to ensure ECCS piping is full of water (and to minimize water hammer even from slight leakage) and PT/1&2/A/4200/029 will no longer be performed.

# 5) Background:

By letter dated November 18, 1993, "Deletion of the Boronometer as a Method for Meeting a Regulatory Guide 1.97 Commitment," McGuire committed to utilize the Post-Accident Sampling System to satisfy Regulatory Guide 1.97 requirements for verifying reactor coolant system boron concentration.

# **Commitment:**

McGuire letter dated November 18, 1993 states in part, "The Regulatory Guide 1.97 recommendation of monitoring reactor coolant soluble boron concentration may be satisfied by sampling and chemical analysis."

#### **Revised Commitment:**

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By letter dated September 17, 2001, the NRC issued McGuire License Amendment Nos. 199/180. This license amendment deleted the Post Accident Sampling System (PASS) at McGuire. Boron concentration in the reactor coolant system will be obtained and analyzed in accordance with contingency plans located in chemistry and radiation protection procedures during and following an accident.