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DUKE POWER

June 17, 1992

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Subject: McGuire Nuclear Station
Docket Nos. 50-369, -370
Inspection Report No. 50-369, -370/92-08

Gentlemen:

Please find attached Duke Power Company's revised response to Violation 369/92-08-01 and 369, 370/92-08-03 for McGuire Nuclear Station as referenced in your June 4, 1992 letter. The revised response to the violations gives completion dates for the corrective actions to be taken.

Should there be any questions concerning this matter, contact Larry Kunka at (704) 875-4032.

Very truly yours,

T. C. McMeekin

Attachment

xc: Mr. S. D. Ebneter
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McGUIRE NUCLEAR STATION

RESPONSE TO VIOLATION 369/92-08-01

VIOLATION 369/92-08-01

10 CFR 50 Appendix B Criterion XVI and the licensee's accepted Quality Assurance Program (Duke-1-A) Section 17.2.16 collectively require that measures be established to assure that conditions adverse to quality are promptly identified and corrected.

Contrary to the above, although measures were established, they were not effectively implemented. On February 26, 1992, while conducting daily rounds, a non licensed operator reported to the Unit Supervisor that the 1A diesel generator fuel oil tank level was low. This condition was not corrected until February 28, 1992. During this time, the 1A diesel generator fuel oil tank level was 38,000 gallons which was below the 39,500 gallon minimum level required by Technical Specification 3.8.1.1

This is a Severity Level IV (Supplement I) violation and applies to Unit 1 only.

THE REASON FOR THE VIOLATION

On February 26, 1992, during sampling of the Unit 1 Fuel Oil Storage Tanks (FOST's), Chemistry technicians inadvertently left two valves on the recirculation pump suction of the 1A FOST open while recirculating the 1B FOST. Therefore, during the four hour recirculation period for the 1B FOST, the recirculation pump was taking suction on both 1A and 1B FOST but was discharging only to the 1B FOST. This caused the level in the 1A FOST to be lowered below the Technical Specification (TS) limit.

Later that evening, an Operations (OPS) non-licensed operator (NLO) was performing the first night shift inspection of the Service Building and Outside Equipment per OMP 2-8. He observed the 1A FOST level was 38,000 gallons and noted this value in the appropriate block on Attachment 3 of OMP 2-8. The rounds standard instructions in OMP 2-8 specifies for any out of normal value or value parameter that is noted on the enclosure, the person performing the rounds inspection shall write "E1" in the parameter space along with the parameter value. The required value listed on the rounds sheet was "greater than 40,000 " gallons. The NLO did

not flag the out of normal value. The NLO did inform the Assistant Shift Supervisor of the 1A FOST level. The assistant shift Supervisor acknowledged the level and stated he would look into it. He believed the level was within the TS limits, when the TS limit is actually 39,500 gallons. Another Senior Reactor Operator (SRO) was given the rounds sheets to review. The normal practice for SRO review of rounds sheets is to focus primarily on values that are flagged as out of normal. Since the NLO had not flagged the FOST value as out of normal, the low value was not detected during the SRO's review and no action was taken.

The next day, an NLO on the day shift noted the value of the 1A FOST as 37,500 gallons, but again due to attention to detail, the value was not noted as out of normal and the subsequent SRO review did not detect the low value. Therefore, once again no action was taken to increase the low level in the 1A FOST.

When the night shift returned, the NLO recorded 37,500 gallons in the 1A FOST. Since he had informed the Assistant Shift Supervisor of the low level on the previous shift, he saw no reason for concern and once again did not flag the value as out of normal. When the SRO reviewed the rounds sheets, once again the low value was not detected and no action was taken to raise the level in the 1A FOST.

During the day shift on February 28, the NLO assigned to perform the rounds noted 37,500 gallons as the 1A FOST level but again the value was not flagged as out of normal. The rounds sheets were given for review to a shift supervisor who had not performed this review recently and was not as familiar with the rounds sheet review. Therefore, he was very thorough in looking at the data. During this review the Shift Supervisor realized that the 1A FOST was outside of TS limits and actions were taken to increase the level to within TS limits.

Therefore, the low level on the 1A FOST was not immediately corrected due to inattention to detail by various OPS personnel while performing and reviewing the rounds sheets.

THE CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

1. 1A FOST valves were closed and locked by Chemistry personnel.

2. OPS personnel returned 5,000 gallons of fuel oil from 1B FOST to 1A FOST which raised the 1A FOST level above the TS limit.

THE CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

1. OPS management personnel will evaluate the current NLO rounds turnover policy and initiate changes to the policy as necessary.

2. The importance of NLO rounds sheets, management's expectations of how to complete rounds sheets, proper rounds turnover, and proper rounds techniques will be re-emphasized in NLO training.

3. OPS personnel will revise rounds sheets to highlight TS related items.

4. OPS personnel will evaluate how out of normal values are flagged on rounds sheets and make changes as necessary.

5. OPS management will devise an Equipment Training and Qualification Standard (ETQS) that incorporates having an OPS supervisor accompany each NLO and Reactor Operator during rounds activities at least once every two years.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

McGuire will be in full compliance September 25, 1992.

McGUIRE NUCLEAR STATION

RESPONSE TO VIOLATION 369, 370/92-08-03

VIOLATION 369, 370/92-08-03

Technical Specification 6.8.1 requires that written procedures be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February, 1978, which includes the operation of safety related systems, maintaining containment integrity, and performing surveillance tests on safety related equipment.

Contrary to the above, procedures were not adequately implemented to maintain configuration control as evidenced by the following examples:

1. On August 12, 1991, the licensee discovered valves 1SA-40 and 1SA-39, the above and below seat drains for the auxiliary feedwater turbine stop valve, open. Licensee procedure, OP/1/A/6250/02, Auxiliary Feedwater System, requires that these valves be closed.

2. On September 30, 1991, the licensee discovered valve 1RN-95A, Containment Spray (NS) System Pump 1A Air Handling Unit Outlet Control, in the Nuclear Service Water system shut. This resulted in the "A" train of NS being inoperable for an indeterminate period of time. During the period when the system was inoperable, the unit was in a refueling outage when NS was not required to be operable. This valve is required to be maintained in a partially open configuration by procedure OP/1/A/6100/22, Unit 1 Data Book.

3. On February 28, 1992, the licensee discovered that the suction valves to the recirculation lines between the 1A and 1B diesel generator fuel oil storage tanks were left open. Licensee procedure CP/1/A/8600/411, Chemistry Procedure for Sampling of Oils in Unit 1, requires that the valves be closed following the completion of fuel oil recirculation which was performed on February 2f, 1992.

4. On January 30, 1992, while attempting to terminate a containment atmosphere sample on Unit 2, the Radiation Protection technicians isolated the EMF supply valve and the EMF sample inlet valves, rendering the EMF's

inoperable for approximately 2 hours. The valves intended to be isolated were the sample inlet and outlet valves, as required by HP/0/B/1003/39, VQ/VP/Incore Release Procedure. This occurred while the unit was in a refueling outage.

5. On April 1, 1992, pressure transmitter 2NSPT5390 was discovered with its isolation valve closed by Operations personnel. With the transmitter isolation valve in the closed position, the Containment Pressure Control System (CPCS) for the Containment Air Return Exchange and Hydrogen Skimmer (VX) system Train 2A is inoperable. This example was given in Inspection Report 369,370/92-10.

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

REASON FOR THE VIOLATION

The reason for each of the five examples of configuration control problems will be addressed separately.

1. The rounds non licensed operator (NLO) opened the valves as instructed by the rounds sheet. He then went into the RN Pump Strainer Room to continue his rounds with the intention of returning to the pump room to close the valves. This is a common practice. While in the RN Strainer Room, he was distracted by a radio call directing him to another location in the plant. The NLO left to respond to the call, leaving the valves open. Later he resumed his round but forgot to reclose the valves.

   The NLO was distracted by other activities after opening the valves but before reclosing them. No guidance was given in the procedure to ensure the operator does not have concurrent duties while cycling these valves. The cause was determined to be an inadequate procedure that did not specify the valves should be opened and shut without concurrent duties and the NLO not having sufficient attention to detail.

2. On September 30, 1991, valve 1RN-951, Containment Spray (NS) System Pump 1A Air Handling Unit Outlet Control, was found mispositioned in the closed position during maintenance activities. The misposition of 1RN-951 was brought to the attention of Operations Control Room personnel during discussion of the misposition of valve 1RN-949, Residual Heat Removal (ND) System Pump 1A Air Handling Unit Outlet Control, which was discovered on October 4, 1991.

Valve 1RN-951 had been in the incorrect position for an unknown period of time after September 4, 1991, when the air handling unit had been operated with no abnormal temperatures noted. This resulted in Train 1A of the NS system being inoperable for an unknown period between September 4, 1991 and October 4, 1991. The NS system had been required to be operable September 4 through September 21, 1991, until Unit 1 entered Mode 5. No definite or probable cause could be found for the incorrect positioning of 1RN-951.

3. On February 26, 1992, Chemistry technicians were assigned the task of obtaining samples from the Unit 1 and 2 Diesel Generator (DG) Fuel Oil Storage Tanks (FOST). Prior to sampling the fuel oil inside each FOST must be recirculated at least four hours. The technicians proceeded to the Unit 1 FOST location, and placed the 1A FOST in recirculation mode. This required the unlocking and opening of four valves. Approximately four hours later, the technicians obtained the sample from the 1A FOST and placed the 1B FOST in recirculation mode for the required four hours.

   The technicians did not realize that the two valves for the 1A FOST in the suction header of the recirculation pump were not closed. The procedure being used did not specify an individual sign off for the valve position. Therefore, during the four hour recirculation period for the 1B FOST, the recirculation pump was taking suction on both 1A and 1B FOST but was discharging only to the 1B FOST. This caused the level in the 1A FOST to be lowered below the Technical Specification limit of 39,500 gallons.

4. On January 30, 1992, 2EMF 38, 39, and 40, Containment Particulate, Gas and Iodine monitor was taken out of service to perform monthly maintenance. Unit 2 Containment Purge (VP) system operation was secured during the maintenance. The VP system was to be restarted on the day shift. Radiation Protection (RP) day shift personnel started a sample at 0800 to measure and account for any changes in containment airborne activity levels. After returning to the RP shift lab, the personnel realized the VP system had not been restarted and the sample was not required. At 0907, the VP purge was restarted. At approximately 0930, the RP personnel stopped the sample. At approximately 1130, RP personnel working on the EMF noticed the EMF sample supply valve and the EMF supply valve were both closed.

   Both of the RP personnel involved with the securing of the sample believed that they were the ones who performed the Independent Verification when the sample was secured. Neither could remember actually operating the valves but both were

confident they had IV'ed the valves. Since neither of the individuals could remember operating the valves, they could not have been in the correct position when they were IV'ed. The cause of this event is failure to follow the procedure for the EMF Sampling (HP/0/B/1003/39) and inattention to the details of the task at hand.

5. On April 1, 1992, Operations (OPS) personnel noticed the handle on the isolation valve for CPCS transmitter 2NSPT5390 was not fully extended in the open direction. The OPS personnel attempted to move the transmitter isolation valve in the closed direction and found the valve closed. With the transmitter isolation valve in the closed position, the CPCS for Containment Air Return Exchange and Hydrogen Skimmer system 2A was inoperable. No reason as to how, why or when the transmitter isolation was closed could be determined.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

For all of the above configuration control events, the appropriate plant personnel were informed and the mispositioned component was returned to its correct position.

Other corrective actions will be listed for the individual events.

1. The rounds sheet has been changed to require the NLO to stand by the valves while they are being cycled.

2. A. The remaining Unit 1 ND and NS pump air handling unit outlet throttle valves were verified by OPS personnel to be in the correct position.

   B. Performance personnel ensured that the valve stem lock nuts were tightened on all Unit 1 and 2 throttled RN system flow balance related valves.

   C. OPS personnel revised Station Directive 3.1.5, Activities Affecting Station Operations or Operating Indications to add a requirement for station personnel to notify the Control Room SRO if a plant device is found mispositioned or misaligned.

3. A. Procedures CP/1(2)/8500/41, CHM Procedure for Sampling of Oils on Unit 1 and Unit 2, were revised to require sign offs for individual valve alignments.

   B. Chemistry (CHM) management personnel discussed this event with the chemistry technicians involved.

4. A. Discussions were held with the two RP specialists involved in the event.

   B. Discussions were held with all RP shift personnel reinforcing the requirements of the RP IV responsibilities covered in RP Manual Section 8.6, the necessity to follow the procedure in the field, and the need to not switch from the performer to the IVer within the same step of a procedure.

5. A. Instrument and electrical (IAE) personnel verified all CPCS transmitter isolation valves were open on Units 1 and 2.

   B. Isolation valves were verified positioned properly on the following system for instruments without continuous indication:

      Auxiliary Feedwater
      Residual Heat Removal
      Chemical and Volume Control
      Nuclear Service Water
      Containment Air Addition and Release
      Liquid Waste

CORRECTIVE STEPS TO BE TAKEN TO AVOID FURTHER VIOLATIONS

The corrective steps to be taken will be addressed for each example with generic corrective steps listed at the end.

1. The change to the rounds sheet and the reason for the change will be communicated to all rounds NLOs. This will be completed by September 25, 1992.

2. Maintenance management will cover this event with all maintenance technicians. The importance of notifying OPS Control Room personnel if a plant device is found mispositioned or misaligned will be stressed. This will be completed by September 30, 1992.

3. A. OPS and CHM personnel will evaluate the interface process for operation of plant equipment which is under the dual control of OPS and CHM and enhance current practices as appropriate. This action will be completed by July 1, 1992.

B. CHM management will cover this event with appropriate CHM personnel. This action will be completed by July 1, 1992.

C. CHM personnel will review all procedures under their control that are directly involved with state, federal or NRC regulations and assure that component configuration control is adequately addressed. This action will be completed by July 1, 1992.

D. CHM personnel will evaluate the practice of locking open valves during tank recirculation activities and revise this policy as appropriate. This action will be completed by July 1, 1992.

E. CHM management will revise the task of obtaining fuel oil samples during routine monthly sampling of FOSTs so that Train A tanks will be sampled on a different day than Train B tanks. This action will be completed by July 1, 1992.

F. Procedures CP/1(2)/A/8600/41 will be revised by CHM staff to require notification of the duty SRO prior to FOST recirculation and sampling activities. This action will be completed by July 1, 1992.

4. A. Procedure HP/0/B/1003/39 will be changed so that only the steps that require IV are identified in bold so they will not be confused with steps that do not require IV. This action will be completed by September 1, 1992.

B. When other shift RP procedures are due for review or are updated, the IV requirements will be reviewed and placed in bold type. This action will be completed by September 1, 1992.

The corrective action to be taken for example 5 will also address the configuration control concerns generically.

5. The Component Mispositioning Working Group (CMWG) has been formed to use the Human Performance Enhancement System methodologies to find the root or probable causes of the component mispositioning events and upon determining the causes, recommend effective means to prevent recurrence of mispositioning events. The team will be composed of members of the site staff and management representing the principle work groups who position components.

The initial recommendations from this working group will be made to management by December 31, 1992. Management will then evaluate the recommendations for implementation.

Additionally, since many component mispositionings are due to procedure adherence, the excellence group formed to look at procedure adherence in response to the violation given in Inspection Report 91-22 will also serve to address component mispositioning.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

McGuire will be in full compliance at the indicated date for each of the actions above.