

DUKE POWER COMPANY

POWER BUILDING

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31 MAR 30 8:45

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

March 25, 1981

TELEPHONE: AREA 704
373-4083

Mr. James P. O'Reilly, Director
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Subject: McGuire Nuclear Station
Docket Nos. 50-369, 50-370

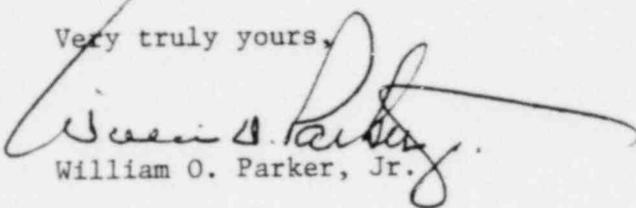
Reference: RII:TJD
50-369/81-03

Dear Mr. O'Reilly:

Please find attached a response to infractions 81-03-04, 81-03-05 and 81-03-07 which were identified in the above referenced inspection reports. Duke Power Company does not consider any information contained in this report to be proprietary.

I declare under penalty of perjury that the statements set forth herein are true and correct to the best of my knowledge.

Very truly yours,



William O. Parker, Jr.

RWO:pw
Attachment

8104100/139

MCGUIRE NUCLEAR STATION
RESPONSE TO IE INSPECTION REPORT 50-369/81-03

- A. Technical Specification 6.8.1 requires in part that written procedures be established, implemented, and maintained for surveillance activities of safety-related equipment. Technical Specification 4.9.4.1 requires in part that each containment penetration providing direct access from the containment atmosphere to the outside atmosphere be verified closed or exhausting through the containment purge and ventilation system within 72 hours prior to the start of core alterations.

Contrary to the above, prior to January 30, 1981, no written procedure existed to verify containment integrity during core alterations, and none was implemented prior to start of core alterations on January 28, 1981.

Response:

1. Prior to January 30, 1981, no written procedure existed to verify containment integrity during core alterations, and none was implemented prior to start of core alterations on January 28, 1981.
2. The initial fuel loading procedure did not contain a valve checklist and no periodic test existed to insure that containment isolation valves necessary for Mode 6 were verified closed.
3. PT/1/A/4200/02C was written to verify containment integrity. This periodic test was performed at 24 hour intervals by Operations personnel and verified complete at each shift change by the Reactor Engineer in charge of fuel loading for that shift.
4. Periodic procedures for verifying containment integrity for Modes 1 through 5 have been written prior to the incident.
5. It is felt that the station is presently in full compliance.

- B. Technical Specifications 3.9.4.c requires that during core alterations, containment penetrations providing direct access from the containment atmosphere to the outside atmosphere be closed by an isolation valve, blind flange, or manual valve, or be exhausting through operable Containment Purge and Ventilation System, HEPA filters, and charcoal absorbers.

Contrary to the above, on January 30, 1981, Valves 1-VX-40 and 1-VX-41, containment air sample line valves were found open, and the pipe cap was not in place.

Response:

1. On January 30, 1981, Valves 1-VX-40 and 1-VX-41, containment air sample line valves, were found open with their pipe caps not in place.
2. The initial fuel loading procedure did not contain a valve checklist and no periodic test existed to insure that containment isolation valves necessary for Mode 6 were verified closed.

3. PT/1/A/4200/02C was written to verify that containment integrity was established. While performing this PT, a nuclear equipment operator (NEO) discovered VX-41 and VX-40 were open. The NEO closed VX-41 and locked closed VX-40.
4. Periodic test procedures for verifying containment integrity for Modes 1 through 5 had been written prior to the incident.
5. It is felt that the station is now in full compliance.

- C. 10 CFR 50 Appendix B Criterion V requires that activities shall be accomplished in accordance with instructions. Design Engineering Quality Assurance Manual in section HPR-130, "Mechanical System/Restraint Design Drawings, Field Revisions" specifies in paragraph 2.3 and 3.2 the process by which field revisions to structural restraint design drawings are to be made.

Contrary to the above, Design Engineering issued structural restraint drawing MC-AA-3730 (RO) for restraint R10 of MC 1683-VI.22 with the notation "No Structural or Hardware Changes between MC-1683-VI.22-R10 (R6) and MC-AA-3730 (RO)" when in fact an additional sway bar had been added.

Response:

1. The Notice of Violation addresses an error by a design engineer whereby "No Structural Change" was documented on the Construction Department Record Copy of support/restraint drawing MC-AA-3730 (RO).
2. This drawing defines a unique support/restraint design for location R10 on piping isometric MC 1683-VI.22. The support/restraint was installed based upon a "Typical" (generic) design but required a hardware change. The hardware change required issuance of the design using a unique drawing. The engineer did not observe that a hardware change had been made on the unique drawing and, to expedite Construction and QC completion, he documented "No Structural Change". In addition to the design error, Design Engineering workplace procedure MCSRD 5.0 was violated by not having such Record Copy additions documented with two design engineer signatures.

This occurrence, including reportability evaluation, was documented in Design Engineering Design Nonconformance DNC-0009 and Construction Nonconforming Item Report 12727. The support/restraint design was altered to increase the concrete expansion anchor factor of safety to 4.0 or greater for IEB 79-02 compliance. Detailed engineering evaluation, removing conservatism in load definition and design analysis, showed that the existing installed design (without the structural change) had a safety factor above 4.0. Hence, the installed configuration was adequate. Generically, there are few situations where Typical designs have been converted to unique designs. A sample review of 396 candidate designs were reviewed for similar situation and problem. Only 13 designs were Revision 0 unique designs which were converted from previously existing Typical designs. No reoccurrence of the documentation problem ("No Structural Change") was found.

3. The following corrective actions were defined:
 - 1) Construction Nonconforming Item Report 12727 was resolved by correcting the Record Copy drawing and performing the craft and inspection work required.
 - 2) Design Nonconformance DNC-0009 was resolved by completing specific and generic evaluations noted above and by counseling the individual involved in proper review and documentation procedures.
4. Since the item represented an isolated incident, no programmatic changes were deemed necessary.
5. These corrective actions were completed prior to start of fuel loading on January 28, 1981.