



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

Report Nos. 50-369/80-31 and 50-370/80-17

Licensee: Duke Power Company
422 South Church Street
Charlotte, NC 28242

Facility Name: McGuire Nuclear Station

Docket Nos. 50-369 and 50-370

License Nos. CPPR-83 and CPPR-84

Inspection at McGuire Nuclear Station near Charlotte, North Carolina

Inspector: W. P. Aug 11-12-80
W. P. Aug Date Signed

Approved by: A. R. Herdt 11-12-80
A. R. Herdt, Section Chief, RC&ES Branch Date Signed

SUMMARY

Inspection on October 20-22, 1980

Areas Inspected

This routine, announced inspection involved 18 inspector-hours on site in the areas of Unit 1 Pipe Support Baseplate Designs using concrete expansion anchors (IEB 79-02); Unit 1 seismic analysis for as-built safety-related piping systems (IEB 79-14); and QA training and Qualifications (Unit 2).

Results

Of the three areas inspected, no items of noncompliance or deviation were identified.

DETAILS

1. Persons Contacted

Licensee Employees

- *T. E. Touchstone, Senior Construction Engineer
- *E. B. Miller, Senior QA Engineer
- *T. A. Matthews, Design Engineer
- *E. B. Abrams, Project Manager, Hangers
- *G. B. Robinson, QA Engineer, Mechanical
- *A. P. Cobb, Design Engineering
- *J. C. Rogers, Project Manager Construction

NRC Resident Inspector

- *M. J. Graham

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on October 22, 1980 with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

- a. (Closed) Unresolved Item 79-07-01 - Qualifications of QA personnel. Qualification and training records for QA personnel were reviewed. The inspector had no further questions on this item.
- b. (Open) Infraction 80-04-01 "Failure to Follow Penetration and Support Installation and Inspection Requirements". Licensee corrective action for items "b" and "d" of the noncompliance was inspected. The inspector had no further questions on those items. Item "a" of the noncompliance, "concrete expansion anchor torque", is on the same subject as item A.3 of Infraction 80-18-01. The continuing problem of concrete expansion anchors that fail the licensee's torque inspection criteria has not been fully resolved. The licensee action performed still has not verified the adequacy of the installed concrete expansion anchors and does not satisfactorily provide for IEB 79-02 requirements. Item "c" of the noncompliance had not been satisfactorily resolved. This item shall remain open.
- c. (Closed) Infraction 80-18-01 - Pipe Support Installation and Inspection Deficiencies - Licensee corrective action was inspected. The inspector has no further questions regarding items "A.1" and "A.2" of this infraction. Item "A.3" is similar to item "a" of infraction 80-04-01 and will be followed-up as part of infraction 80-04-01.

- d. (Closed) Unresolved Item 80-18-03 - "Unresolved IEB 79-14 Questions". The licensee had evaluated the reported conditions to be technically acceptable. Procedural requirements had been provided to ensure that the noted conditions are identified and evaluated. The inspector has no further questions on this item.
- e. (Closed) Licensee Identified Item 80-29-04 - "Damaged Mechanical Snubbers" - Licensee corrective action to re-inspect mechanical snubbers and replace damaged snubbers was inspected. Initial inspection of this item was documented on IE Report 50-369/80-29. The inspector has no further questions on this item.
- f. (Closed) Unresolved Item 80-29-02 - Stress Analysis Modulus of Elasticity - The licensee's contractor performed a seismic study to determine the difference between using the modulus of elasticity at room temperature and at hot conditions for the problem in question. The study showed no significant difference in the results of the analysis. The licensee submitted the contractor's results in response to the unresolved item. The inspector has no further questions.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Pipe Support Baseplates Using Concrete Expansion Anchor Bolts (IEB 79-02), Unit 1

The licensee's sampling reanalysis program to verify a safety factor of 4 for sleeve and wedge type concrete expansion anchors was reinspected. The licensee was again informed that IEB 79-02 requires that sleeve and wedge type concrete expansion anchors with safety factors less than 4 be corrected. The licensee was further informed that a revision to the IEB 79-02 response should be submitted. This should outline the proposed schedule for correction and should detail the pipe system location, classification and current safety factor of the concrete expansion anchors involved.

IE inspection report 50-369/80-18 noted that pipe support 1-MCA-ND-259 had concrete expansion anchors installed that was designed with insufficient embedment. The licensee reported replacing the concrete expansion anchors and committed to evaluating the potential generic implications.

Pending licensee completion of all IEB 79-02 requirements, the bulletin shall be left open. No items of noncompliance or deviations were identified.

6. Seismic Analysis for As-Built Safety Related Piping Systems (IEB 79-14) Unit 1

An inspection was performed to verify licensee compliance with IEB 79-14 requirements and licensee commitments. IE Report 50-369/80-18 noted that the licensee was required by IEB 79-14 to document and report inaccessible pipe supports. Subsequent to the inspection the licensee documented, on

file memorandums SRG-80M-0036 and SRG-80M-0228 dated September 9, 1980 and October 20, 1980 respectively, all pipe supports that are inaccessible for inspection. The licensee also reduced the number of inaccessible supports. As required by IEB 79-14, the licensee will submit a revision to their bulletin response to identify the inaccessible pipe supports.

Pending licensee completion of IEB 79-14 requirements, IEB 79-14 shall remain open. No items of noncompliance or deviations were identified.