

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Reports No. 50-546/81-10; 50-547/81-10

Docket Nos. 50-546/50-547

Licenses No. CPPR-170; CPPR-171

Licensee: Public Service of Indiana
Post Office Box 190
New Washington, IN 47162

Facility Name: Marble Hill Nuclear Generating Station, Units 1 and 2

Inspection At: Marble Hill Site
Jefferson County, IN

Inspection Conducted: June 10-12, 1981

Inspectors: F. C. Hawkins *RBK FOR F.C. Hawkins* 6-23-81
E. W. Schweibing for
J. J. Harrison 6-23-81

R. B. Landsman *RB Landsman* 6-23-81
(In-Office Review)

Approved By: *R. Williams for*
C. C. Williams, Chief 6/23/81
Plant Systems Section

Inspection Summary

Inspection on June 10-12, 1981 (Reports No. 50-546/81-10; 50-547/81-10)
Areas Inspected: Followup on previously identified inspection findings; observation of work related to the corrective actions for SPP-6 (Cadwelds); observation of inprocess concrete repair activities; investigation of alleged improper waterproofing activities by Concrete Waterproofing of Indiana. The inspection consisted of thirty-two hours onsite by two NRC inspectors and eight hours of in-office review by one NRC inspector.
Results: No items of noncompliance or deviations were identified.

DETAILS

Persons Contacted

Public Service of Indiana (PSI)

- *C. Beckham, Quality Engineering Manager
- *G. Warner, Civil Construction Engineering Manager
- *C. Togni, Chief Civil Engineer
 - T. Geib, Project Licensing Engineer
 - B. Morrison, Quality Engineering Superintendent - Civil
- *L. Worley, Quality Engineer
- *J. Wolfe, Quality Assurance Administration Assistant
- *C. Anthony, Concrete Patching Engineer
- *S. Brewer, Nuclear Safety and Licensing Manager
 - R. Hardison, Construction Engineer

G. K. Newberg Construction Company N-MH)

- *D. Stegemoller, Vice President - Power Construction
 - D. Maxwell, Project Quality Control Manager
 - J. Johnson, Quality Control Inspector
 - J. Mulligan, Quality Control Inspector
 - T. Price, Cement Finisher Superintendent
 - R. Robbins, Cement Finisher Union Steward
 - A. Anderson, Xypex Waterproofing Coordinator

Sargent & Lundy Engineers (S&L)

- A. Weiss, Concrete Technologist

United States Testing Company (UST)

- W. Lavery, Level II Cadweld Inspector

Concrete Waterproofing of Indiana (CWI)

- H. Mayner, Xypex Sealing Superintendent

Other Personnel

- *J. Harrison, Region III Resident Inspector
 - D. Malone, Cement Masons Business Agent - Local 821

*Denotes those attending the exit interview.

Licensee Actions on Previous Inspection Findings

(Closed) Open Item (546/79-21-01; 547/79-21-01): Control of groundwater seepage in safety related structures.

The Region III inspector reviewed N-MH Procedure No. WPN-39, Revision 6, entitled, Concrete Sealing and examined documentation pertaining to waterproofing work in 18 areas in the Unit 2 steam tunnel. The documentation was in accordance with the requirements of WPN-39. Additionally, the performance of waterproofing activities in the auxiliary building was observed to be as specified by WPN-39. Interim inspections concerning this subject are documented in IE Reports 79-26 and 80-21.

(Closed) Unresolved Item (546/80-06-01; 547/80-06-01):

- a. The critical depth at which in-place nuclear density tests were to be taken for No. 53 stone was not established.
- b. No procedural requirements for QC inspection for backfill placement and compaction existed.
- c. No system existed to assure that the specified sample/test frequency of backfill material was met.
- d. The specific sampling point for backfill material did not take into account possible changes of gradation due to handling.
- e. Relative density test results were observed to vary substantially from expected values.
- f. No provisions were established which controlled the use of No. 53 stone which failed to meet gradation requirements.
- g. QC inspectors were not cognizant of the soils specification requirements.

The resolution of Items a. through g. above were addressed by the licensee in Section 9.0 (SPP-10) of the Construction and Material Verification Program and in revisions to applicable procedures and specifications. The specification and procedural revisions were confirmed by the Region III inspector. Review of SPP-10 is documented in IE Report 80-44.

Functional or Program Areas Inspected

1. Construction Verification Program - Cadwelds (SPP-6)

As a result of cadweld deficiencies identified by the SPP-6 program, certain corrective actions have been specified. Specifically, Corrective Action Request (CAR) No. 281 PSI 0018 specifies the removal and replacement or repair of cadweld splices designated in Attachment A of the CAR.

Activities to implement the specified corrective actions were underway during this inspection. Inprocess production and QC inspection activities were verified to be in accordance with the applicable procedures and standard industry practice. The removal of five of the T-Type vertical splices specified in Attachment A was also verified.

2. Concrete Repair

The concrete repair program (reference IE Report 81-06), which began on April 3, 1981, continued to near completion. 18 of the 20 areas on which repair work was complete, were inspected and the pertinent documentation for each was reviewed. The two areas which require further repair work were inspected to determine their status. Licensee personnel stated that completion of the 20 areas was scheduled within the next four weeks.

3. CWI Allegations

Region III personnel were contacted on June 9, 1981 by a former employee of CWI who expressed concern over work that the waterproofing firm was performing at Marble Hill. In an effort to obtain more specific information concerning the individual's concerns, he was contacted by telephone at his parents' residence on June 10, 1981 by two Region III inspectors. During the ensuing conversation, the following concerns were expressed by the individual:

- a. CWI personnel, during waterproofing operations, had nicked reinforcing steel with pneumatic chipping hammers and that the CWI foreman had instructed the craftsmen to cover the damaged steel, thereby preventing the QC inspection required by N-MH Procedure WPN-39. The specific area referred to by the individual was Job No. 22 in the Unit 2 steam tunnel. (547/81-10-01)

Finding:

An internal N-MH memorandum dated May 8, 1981, concerning this incident, was reviewed. The memorandum confirmed the fact that one section of nicked reinforcing steel in Job No. 22 was partially covered with waterproofing slurry concentrate prior to N-MH QC inspection of the area. The responsible N-MH QC inspector stated that, at the time the individual brought Job No. 22 to his attention, the area was not ready for QC inspection. The inspector further stated that, had the area been released for his inspection, the slurry concentrate would have had to have been removed to allow his inspection of the reinforcing steel. The proper QC inspection and release of Job No. 22, in accordance with WPN-39, was confirmed by the Region III inspectors by reviewing the Sealing Application Release. Other documentation for Job No. 22 included Damaged Rebar Report (DRR) No. 93. DRR No. 93 reported one reinforcing steel nick 1/32 inch deep and 1/2 inch wide, in the longitudinal deformation. The nick was reported in accordance with the criteria specified in WPN-39.

- b. The individual contended that a N-MH QC inspector was relieved of his waterproofing inspection responsibilities because he refused to accept completed CWI work in the Unit 2 steam tunnel. (547/81-10-02)

Finding:

The N-MH QC inspector, referred to by the individual, was interviewed. He denied the allegation, stating that his responsibilities had changed because of variable construction work schedules and the hiring of additional QC inspection staff. The N-MH project QC Manager during a separate interview, reconfirmed the QC inspector's statements.

- c. The individual contended he was laid off by CWI on May 7, 1981 and by N-MH on June 3, 1981 because he had expressed his concerns to management personnel. (547/81-10-03)

Finding:

Extensive interviews were held with CWI and N-MH management personnel. The representatives of each contractor categorically stated that the individual was laid off because sufficient work did not exist to justify his continued employment. The Region III inspectors were unable to substantiate that the individual's release was related to his concerns as they were expressed to his management.

Summary

The individual's specific concerns, as understood by the Region III inspectors, could not be substantiated through interviews with contractor personnel, review of quality documentation, and observation of inprocess waterproofing activities. Further, our investigation and inspection did not disclose any conditions adverse to quality in the construction activity in which the individual was involved.

It should be noted that personality conflicts were apparent between the individual, his peers and his management, and that any alleged labor relation difficulties which he may have experienced are not within the NRC's jurisdiction.

Exit Interview

The inspectors met with staff representatives (denoted in the Persons Contacted paragraph) during and at the conclusion of the inspection. The inspectors summarized the scope of the inspection.