

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

NRC Inspection Report: 50-298/85-16

License: DPR-46

Docket: 50-298

Licensee: Nebraska Public Power District (NPPD)
P. O. Box 499
Columbus, Nebraska 68601

Facility Name: Cooper Nuclear Station (CNS)

Inspection At: Cooper Nuclear Station, Nemaha County, Nebraska

Inspection Conducted: May 1-31, 1985

Inspector:

D L DuBois

D. L. DuBois, Senior Resident Inspector, (SRI)

6/7/85

Date

Other Accompanying Personnel: J. A. Holm
F. N. Carlson

Approved:

J. P. Jaudon
J. P. Jaudon, Chief, Project Section A,
Reactor Project Branch 1

6/28/85

Date

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Inspection Summary

Inspection Conducted May 1-31, 1985 (Report 50-298/85-16)

Areas Inspected: Routine, unannounced inspection of operational safety verification, monthly surveillance and maintenance observations, licensee action on previous inspection findings, nondestructive examination activities associated with recirculation, core spray, and reactor water cleanup systems piping replacement, and design changes and modifications. The inspection involved 208 inspector-hours onsite by one NRC inspector and two consultants.

Results: Within the six areas inspected, two violations were identified (inadequate procedures, paragraph 2; and incomplete test records, paragraph 3).

DETAILS

1. Persons Contacted

Principal Licensee Personnel

+#P. V. Thomason, Division Manager of Nuclear Operations
+#V. L. Wolstenholm, Quality Assurance Manager
+#D. A. Whitman, Technical Staff Manager
+#C. R. Goings, Regulatory Compliance Specialist
+G. Horn, Construction Manager
+J. M. Meacham, Technical Manager
#D. Norvell, Acting Maintenance Manager
#E. M. Mace, Plant Engineering Supervisor
#L. L. Roder, Administrative Services Manager
#H. T. Hitch, Senior Staff Engineer
L. Bednar, Senior Staff Engineer
J. Flaherty, Assistant to the Plant Engineering Supervisor
J. T. Scheuerman, Lead Reactor Engineer

The NRC inspectors also interviewed other licensee and contractor personnel.

+Denotes presence at exit interview held May 10, 1985

#Denotes presence at exit interview held May 30, 1985

2. Licensee Action on Previous Inspection Findings

(Closed) 8114-09 (Unresolved). This item identified that plant procedures did not contain the Technical Specification (TS) review requirements for special procedures or special test procedures although the NRC inspector could not identify an instance when the reviews were not being performed by the licensee. TS Section 6.2.1.A.4.b requires the Station Operations Review Committee (SORC) to review all proposed tests and experiments and their results, and the NPPD Safety Review and Audit Board (SRAB) to review tests that may constitute an unreviewed safety question. The SRI reviewed the following licensee procedures and determined that they presently identify the referenced TS requirements:

- . CNS Procedure 3.5, "Special Test Procedures/Special Procedures," Revision 0, dated September 29, 1984.
- . CNS Procedure 0.3, "Station Operations Review Committee," Revision 0, dated September 28, 1984.
- . "Safety Review and Audit Board Instructions and Guidelines," Revision 0, dated August 1, 1984.

This item is closed.

(Closed) 8420-01 (Unresolved). This item concerned ambiguous TS requirements for determining operability of the Standby Gas Treatment (SGT) System. In a letter from Mr. L. G. Kunc1 (NPPD) to Mr. D. B. Vassallo (NRR), dated April 26, 1985, the licensee submitted Proposed Change No. 18 to the TS. The SRI reviewed the proposed TS change and determined that ambiguous TS statements were removed and replaced by specific and clear requirements. The proposed TS change affected Sections 3.7.B.2.a, 3.7.B.2.b, 3.7.B.2.c, and the "BASIS" for those sections applicable to system flow rates and testing conditions for the HEPA filters, charcoal absorbers, and fans. CNS Procedures 6.3.19.2 and 6.3.19.3 specify that system flow rate should be established and maintained during testing and the definition of that flow rate is specifically stated in the proposed TS change. Also, the licensee has committed to providing a clear definition of the design function of the SGT system in the CNS Updated Safety Analysis Report (USAR), Volume II, Section V, Paragraph 3.3.4, in the next proposed revision to the USAR tentatively scheduled for July 1985.

This item is closed.

(Closed) 8421-25 (Unresolved). This item was identified by the NRC Performance Appraisal Team (PAT) and concerned the apparent failure to take adequate corrective action to prevent recurrence of nonconforming conditions and to review identified minor design change (MDC) safety evaluations.

As a result of an NRC inspection conducted at CNS during the period October 17-21, 1983, a violation was written concerning the licensee's failure to approve MDCs prior to implementing those changes. The violation was documented as item 8326-04 in NRC Report 50-298/83-26 and is presently being tracked under that item number.

NRC Report 50-298/83-26 also included a violation item 8326-03, concerning a failure of the SRAB to review 17 MDC packages. This item was closed out in NRC Report 50-298/85-01 following an NRC inspection conducted during the period January 7-11, 1985. The SRI subsequently verified that the SRAB members did review the 17 identified MDCs.

Since one of the PAT findings is being tracked under item No. 8326-04 and the other was closed in a subsequent NRC report, unresolved item 8421-25 is closed for record purposes.

(Closed) 8421-28 (Unresolved). This item was identified by the PAT and concerned apparent licensee failures: to designate a SORC member as a member of SRAB; to correct inconsistencies between the SORC procedure and TS requirements; and to review items of potential safety significance in committee.

The SRI verified that the licensee assigned a SORC member, Mr. P. V. Thomason, Division Manager of Nuclear Operations, to be a member of the SRAB. This assignment was documented in an Inter-District Memorandum from Mr. L. G. Kunc1, Assistant General Manager-Nuclear, to Mr. P. V. Thomason, dated March 21, 1985. Prior to his formal assignment to the SRAB, Mr. P. V. Thomason and CNS departmental managers would attend SRAB meetings only when requested by the SRAB or if plant management determined that specific plant expertise would be beneficial during the conduct of a particular SRAB meeting.

The PAT further determined that no SRAB member had ever held an NRC BWR operators license nor received equivalent training. The SRI's review of the "SRAB Instructions and Guidelines," Revision 0, dated August 1, 1984, identified a training program requirement that each SRAB member is to receive a minimum of 40 hours of training each year. The training is to include regulatory requirements, the CNS Technical Specification and License, and CNS equipment, systems, and procedures. To date, all but two SRAB members have received the required training.

The SRI reviewed the inconsistencies between the TS Section 6.2.1 and CNS Procedure 0.3, "Station Operations Review Committee," Revision 0, dated September 28, 1984. A synopsis of the SRI's review in this area includes:

- . TS Section 6.2.1.A.1 requires the Division Manager of Nuclear Operations to appoint in writing, alternate members of the SORC. The SRI reviewed an Inter-District Memorandum from Mr. P. V. Thomason to Mr. J. V. Sayer, dated October 5, 1984. The memorandum designated Mr. Sayer as an alternate member of the SORC. Prior to that date, the SRI was informed by Mr. Thomason that the need had not arisen to select an alternate SORC member. Procedure 0.3, Revision 0, paragraph II.B, did not state the exact words of the TS requirement for alternate SORC members to be designated in writing but it did require that, "other members of SORC shall be as described in the Technical Specifications." Revision 1 of Procedure 0.3, dated May 13, 1985, states the exact wording of TS Section 6.2.1.A.1.
- . TS Section 6.2.1.A.5 requires the SORC to report specific items, listed within that section, to the SRAB. Procedure 0.3, Revision 0, specifically addressed three of the six items listed in the TS. The remaining three items were indirectly required by Procedure 0.3 to be reviewed by the SORC. SORC meeting minutes are reviewed by the SRAB. The SRI reviewed SORC and SRAB meeting minutes for the years 1984 and 1985 to present and determined that all SORC items were reviewed by the SRAB as required. Revision 1 of Procedure 0.3 individually addresses all six of the specific items listed in TS Section 6.2.1.A.5.
- . TS Section 6.2.1.A.4.b requires the SORC to review proposed tests and experiments and their results. Procedure 0.3, Revision 0, required the SORC to review proposed tests and experiments but did

not state the requirement to review results. The SRI's review of SORC meeting minutes verified that the SORC was meeting the TS requirement. Revision 1 of Procedure 0.3 added the words of the requirement that the SORC review test and experiment results.

TS Section 6.2.1.A.3 specifies the quorum requirements of the SORC. Procedure 0.3, Revision 0, did not address the quorum requirements stated in the TS. The SRI's review of the SORC meeting minutes did not find an instance where the quorum requirement was not met during the conduct of SORC meetings. Revision 1 of Procedure 0.3, paragraph IV.A.1, states the exact wording of the TS quorum requirement.

TS Section 6.2.1.A.6 requires that SORC meeting minutes include identification of all documentary material reviewed and that a copy of those minutes be forwarded to the Assistant General Manager (AGM)-Nuclear. CNS Procedure 0.3, Revision 0, paragraph IV.A.3, required that presentations to the SORC be supported by appropriate reference material, but the procedure did not specifically require that the reference material be included in SORC meeting minutes. The SRI has observed that past SORC minutes have included lists of reference material.

CNS Procedure 0.3, Revision 0, Section IV.A.7.e, discussed distribution of SORC minutes but did not specify distribution to the AGM-Nuclear. In practice, the AGM-Nuclear was regularly receiving copies of the minutes. Revision 1 of Procedure 0.3, Section IV.D.5, specifically states the TS requirement to distribute a copy of the minutes to the AGM-Nuclear.

TS Section 6.2.1.A.4 requires the licensee to review changes to plant equipment and systems for safety significance. Historically, the licensee has met the intent of this TS requirement; however, the licensee had not always included all safety significant reviews in the SORC minutes because a majority of the preparation, reviews, and discussions were accomplished outside of formal committee gatherings. The SRI has held discussions with plant management concerning the importance of holding committee meetings on all subjects required by the TS and to provide greater detail and specificity in the committee minutes. The SRI has observed during his periodic reviews of 1984 and 1985 SORC and SRAB meeting minutes, a continual improvement in the quality and quantity of information included in those minutes. To further enhance the overall management controls and administration of the SORC, CNS Procedure 0.3, Revision 1, provides specific requirements applicable to safety significant reviews and documentation of those reviews. Also, during SORC Meeting No. 323, conducted May 7, 1985, the Division Manager of Nuclear Operations committed the SORC membership to ensuring committee review and approval of all items of safety significance and to meet in committee on a regularly scheduled weekly basis.

Based upon the SRI's review of these findings and the licensee's corrective actions indicated above, unresolved item 8421-28 is closed.

(Closed) 8421-29 (Unresolved.) This item was identified by the PAT and concerned an apparent failure of the SRAB to conduct required reviews and make necessary recommendations to management; and an apparent failure by the SORC to review all TS violations. The TS states that the SRAB is responsible for reviewing certain subjects listed in Subsections a through k of Section 6.2.1.B.4. Also, the SRAB must report to and advise the AGM-Nuclear in those areas of responsibility. The PAT determined that the following events were not reviewed and reported by the SRAB:

- . A violation of TS Section 6.3.4.A which requires that a high radiation area be barricaded and conspicuously posted. This violation was identified in licensee QA Audit Report 83-23.
- . The cause of the failure of an automatic power transfer that occurred following a reactor trip on August 8, 1984.
- . Drifting in of three control rods from their full-power positions.

The SRI reviewed the following documents applicable to the above events:

- . Licensee QA Audit Report 83-23. Audit Report 83-23 identified and discussed the lack of a barrier and conspicuous posting of an area having a localized high radiation field. The SRI determined that Audit Report 83-23 was transmitted to the AGM-Nuclear and other corporate management through normal distribution channels.
- . SRAB Meeting No. 80 agenda. The SRI verified that Audit No. 83-23 was attached to the SRAB Meeting No. 80 agenda and was routed to all SRAB members for their review. The SRAB members acknowledged their individual reviews by signing and dating a SRAB document review memorandum from Mr. J. M. Pilant to SRAB, dated October 17, 1983.
- . SRAB document review memorandums from Mr. L. R. Berry to SRAB dated August 13, 1984 (two memorandums); August 14, 1984, September 10, 1984, and September 20, 1984. These memorandums combined, required the SRABs review of SORC meetings 298, 299, and 300; Licensee Event Report (LER) 84-010; and formal SRAB Meeting 88. The referenced SORC meeting minutes documented discussions concerning failure of an automatic power transfer including special testing and test results, safety-related maintenance and surveillance testing that occurred during the brief outage, Scram Report 84-05, and restart criteria that the SORC required to be satisfied prior to starting up the plant. LER 84-010 concerned the reactor trip and circumstances surrounding that event. SRAB Meeting No. 88 minutes indicated discussions of various topics including the automatic power transfer failure. The SRI reviewed the SRAB memorandums discussed in this paragraph and verified that each SRAB member acknowledged their

individual reviews and discussions by signing and dating each memorandum.

SRAB document review memorandum from C. M. Kuta to SRAB dated February 20, 1984. This memorandum required the SRAB to review SORC Meeting No. 272 minutes that contained a discussion of control rod drift problems. The SRAB members acknowledged their individual reviews by signing and dating the document review memorandum.

SRAB Meeting No. 83 minutes dated April 13, 1984. These minutes identified the SRABs review of SORC Meeting No. 275 minutes that contained a discussion of control rod drift problems.

The PAT determined that the following TS violations were not reviewed by the SORC:

The violation of TS Section 6.3.4.A identified above.

A violation of TS Section 6.2.1.B.6 which requires that SRAB meeting minutes be issued within 1 month of the meeting. This violation was identified in licensee QA Audit Report 84-02.

A violation of TS Section 6.2.1.B.4 which requires the SRAB to review 10 CFR Part 50.59 safety evaluations to verify that they do not constitute an unresolved safety question. This violation was identified in licensee QA Audit Report 83-01.

Concerning the SORC's failure to properly review a violation of TS Section 6.3.4.A; the SRI confirmed that the SORC had not reviewed this violation. The SRI's review of the following documents identified procedural deficiencies which contributed to the lack of SORC review:

CNS Procedure 0.5, "Nonconformance and Corrective Action," Revision 0, dated September 28, 1984, implements the requirement of TS Section 6.3.4.A concerning nonconformances and Nonconformance Reports (NCRs). This procedure delegates the responsibility to any individual who believes a nonconformance condition exists, to implement the procedure including the initiation of Attachment "A," "Nonconformance Report." Attachment "C" provides a distribution list for NCRs which includes the SORC. Paragraph III.A.7 implies exception to the distribution list in Attachment "C," when it states that NCRs originated by the QA staff shall be sent to the department supervisor responsible for the area in which the nonconformance is identified. Also, the following procedures will indicate that the QA department does not use Attachment "A" for reporting nonconformances but instead uses a "QA Audit/Surveillance Report."

CNS Quality Assurance Instruction (QAI)-5, "General Guidelines-Quality Assurance Audits," Revision 18, dated June 18, 1984, paragraph 3.3.j.2, defines QA "Findings" and "Observations." The

implied definition of a QA "Finding" is synonymous with a "non-conformance" as described in CNS Procedure 0.5. Paragraph 3.2 states that internal QA audit findings, disposition, and followup corrective actions will be identified on Attachment 7.2, "QA Audit/Surveillance Report." Paragraph 6.0 provides a distribution list for audit reports that differs from Attachment "C" of Procedure 0.5 and does not include the SORC.

CNS QAI-4, "Quality Assurance Surveillance," Revision 12, dated January 30, 1984, paragraph 4.0 requires that QA findings be identified on Attachment 5.3, "QA Audit/Surveillance Report." Paragraph 4.0 also provides a distribution list for Attachment 5.3 which differs from the distribution lists noted in the preceeding two paragraphs.

CNS QAI-10, "Nonconformance Reporting, Issuance, Control and Corrective Action," Revision 10, dated June 1, 1984, paragraph 3.1, states that QA audits are to be documented on the "Quality Assurance Audit/Surveillance Report" found in QAI-4. QAI-5 contains the same form but it is not referenced in paragraph 3.1. Paragraph 3.2 of QAI-10 states, in part, "CNS personnel will follow the guidelines established in Administrative Procedure 1.10 (Nonconformance and Corrective Action) whenever a nonconformity is identified . . ."
Note: Procedure 1.10 should be numbered 0.5.

The SRI determined from the above reviews that the QA department does not follow the guidelines of Administrative Procedure 0.5 when they identify nonconformances during QA surveillances and audits as follows:

- . QAIs-4, 5, and 10 do not require the use of Procedure 0.5, Attachment "A," "Nonconformance Report," for documenting, dispositioning, and following up QA identified "Findings." As a result, QA findings did not receive the same level of management review as nonconformances identified by other CNS personnel.
- . The QA Audit/Surveillance Report identified in QAIs-4, 5, and 10 does not receive the same distribution as the "Nonconformance Report" and neither QAI distribution list includes the SORC.

The licensee's failure to follow the procedure for activities affecting quality constitutes an apparent violation of 10 CFR Part 50, Appendix B, Criterion V. (298/8516-01)

Concerning the SORC's failure to properly review a violation of TS Section 6.2.1.B.6, the SRI determined that the SORC failed to review this audit finding for the same reasons stated above; e.g., insufficient level of management review and inadequate distribution of the QA Audit/Surveillance Report. Subsequent to the finding identified in Audit 84-02, the licensee issued change 1 to Attachment 1, paragraph 7, of the "NPPD Safety Review and Audit Board Instructions and Guidelines," effective

September 24, 1984. The revision states, "SRAB meeting minutes should be distributed to all SRAB members, the Assistant General Manager-Nuclear, the Division Manager of Nuclear Operations, and others designated by the SRAB Chairman within one week of each meeting. In no case will the SRAB meeting minutes be issued later than one month from the date of the given meeting as prescribed in CNS Technical Specifications, Item 6.2.1.B.6."

Concerning the SORC's failure to properly review a violation of TS Section 6.2.1.B.4.a, the SRI reviewed the licensee's Audit of SRAB Activities (G83-01) and determined that the findings were properly documented as TS violations in an attachment to the QA Audit/Surveillance Report. The SORC failed to review this audit finding for the same reasons stated above; e.g. insufficient level of management review and inadequate distribution of the QA Audit/Surveillance Report.

Based upon the licensee's corrective steps and the NRC regulatory action stated above, unresolved item 8421-29 is closed.

(Closed) 8422-01 (Violation). This item concerned the licensee's failure to cover materials stored outside with flame resistant covering. Licensee corrective actions included removal of all nonflame resistant tarpaulins from the site that could be used as weatherproof covering for material stored outdoors. The NRC inspector reviewed the licensee's response and verified satisfactory completion of corrective actions.

This item is closed.

(Closed) 8423-01 (Violation). This item concerned degradation of four sets of fire doors due to the lack of maintenance of door knobs and hinges, and extensive welding of exterior surfaces. Licensee corrective actions included immediate adjustment and/or replacement of affected door hinges and latches, ventilation system adjustments which enabled door H305-3 to close and latch properly, and subsequent purchase of three sets of doors to replace doors B100-1, B101-1, and D301-1. Doors B101-1 and D301-1 are included in Purchase Order (PO) No. 234767, whereas door B100-1 has been already installed. The NRC inspector reviewed the licensee's response to this violation and verified implementation of corrective actions.

This item is closed.

(Closed) 8423-02 (Unresolved). This item concerned procedural deficiencies, inadequate testing interval, and unsatisfactory test results applicable to station emergency lighting units. The licensee performed the following corrective actions:

- . Repaired/or replaced lighting units that failed testing.
- . Reduced the testing interval from 12 to 6 months on older model nickel cadmium (NICAD) battery units.

- . Approved and implemented Maintenance Procedure 7.3.30, "Emergency Lighting Units Inspection (NICAD) Battery Units," Revision 0, dated March 1, 1985.
- . Committed to replace the old NICAD battery units with "maintenance-free" Exide units as the old units fail, or by December 1, 1985, whichever occurs first.
- . Maintain sufficient supply of spare new units.

The NRC inspector verified that the licensee implemented the above corrective actions.

This item is closed.

(Closed) 8423-04 (Open Item). This item addressed the existence of excessive trash in the areas of the radwaste and turbine buildings. The NRC inspector toured the affected areas on May 29, 1985, and observed that the areas were properly maintained and free of accumulated trash.

This item is closed.

(Closed) 8423-05 (Open Item). This item concerned an inadequate number of barrier posts at six locations in the fire protection system. The NRC inspector reviewed Maintenance Work Request (MWR) 84-0581 which documented the installation of additional barrier posts, and visually inspected those installations. Five of the six locations appeared adequate, however, the fire flushing pump area requires another post or relocation of the present posts in order to close the excessive gap between posts located on the south side. The licensee committed to make the necessary changes to provide the required equipment protection.

This item is closed.

(Closed) 8423-06 (Open Item). This item concerned a shortage of equipment in fire locker No. 3. The NRC inspector reviewed CNS Surveillance Procedure 6.4.5.2, Attachment (G)(fire locker evaluation) that was completed by the licensee during May 1985, and determined that all fire lockers contained the required inventory of equipment.

This item is closed.

(Closed) 8423-07 (Open Item). An NRC inspector identified that CNS Surveillance Procedure 6.4.5.17, "Fire Fighting Equipment Monthly Inspection," Attachment B, stated that outside hose cabinets were to contain playpipes having a length of 50 inches. The actual length of the playpipes were observed to be 30 inches. The licensee corrected the typographical error of 50 inches to indicate the required length of 30 inches in a subsequent revision to Procedure 6.4.5.17. The NRC inspector verified that the procedure was revised and that the new equipment inventory checklists were in use.

This item is closed.

(Closed) 8423-08 (Open Item). During a previous inspection, an NRC inspector observed that a fire protection sprinkler located above the primary containment maintenance entrance was sprung out of position and was found to have several power cables strapped to it. The NRC inspector toured the affected area on May 29, 1985, and observed that the discrepancies had been corrected.

This item is closed.

(Closed) 8423-09 (Open Item). During the week of November 26-30, 1984, an NRC inspector observed that housekeeping practices associated with the firehouse were poor resulting in limited accessibility to fire fighting equipment located inside. The SRI performed a followup inspection of the area on December 4, 1984, and determined that licensee corrective actions restored the firehouse to an acceptable level of cleanliness and equipment was found to be properly stored and readily accessible. The SRI has performed several inspections of the firehouse during 1985 and has observed continued good housekeeping practices by the licensee. Also, access doors to the firehouse are maintained in a closed condition and accessibility to the area is limited to only those personnel having a need to enter it.

This item is closed.

3. BWR Pipe Replacement Nondestructive Examination

An inspection was conducted by a DOE contractor from the Idaho National Engineering Laboratory at the request of the NRC. The purpose of the inspection was to evaluate nondestructive examination test records associated with the BWR pipe replacement at the CNS. The inspector reviewed 25 Chicago Bridge and Iron (CBI) work travelers including approximately 900 sets of double loaded radiographic films, radiographic reader sheets, and liquid penetrant/visual examination test reports. The following work travelers and corresponding weld numbers were reviewed:

<u>Travelers</u>	<u>Weld Numbers</u>
46B01	2N-60 degrees
98A05	RWC-5
84A05	H2A
85A07	R1A and R5A
90A04	D1B and D2B
39F01	2N-210 degrees
49A02	N5B
89A04	S1B and S2B
82A03	S7A and S8A
84A08	H1A
81A15	RR27A

Travelers

Weld Numbers (con't)

85A15	R6A and R2A
96A06	CSB Joint C
91A08	H2B
91A05	H1B
91A14	H3B
92A11	R1B and R5B
91A11	H4B
96A0A	CSA Joint G
96A05	CSA Joint G
51A01	Delta P
83A12	D5A and D6A
83A04	D1A and D2A
81A08	S3A
98A07	RWC-3

It was concluded that there was an excellent defect correlation between the radiographic reports and the ultrasonic reports. However, it was found there were the following types and numbers of discrepancies:

- . Radiographic reader sheets located in the travelers needed to be updated to indicate acceptance or rejection status. (23 cases)
- . The required copies of the radiographic reader sheets were not found in the travelers. (9 cases)
- . Welder information was not transferred properly from one reader sheet to another. (5 cases)
- . No acceptance or rejection of a radiographic station was on the reader sheets. (5 cases)
- . Addition of welders' names to the reader sheets between reshots and final acceptance of the welds indicates a repair was made. The weld of concern was not repaired or rejected. (1 case)
- . Radiographic film was not properly marked to indicate status, reshots, or repairs. (7 cases)
- . The reader sheet indicated four films were used in the final acceptance radiography. Only two films were found in the film package. (1 case)
- . The reader sheets did not indicate the number of the reshots or repairs. (3 cases)
- . A majority of the visual and liquid penetrant inspection reports were not signed off by the customers' inspection department.

All of the above discrepancies, excluding the last item, were corrected by the licensee prior to the conclusion of the inspection. However, the discrepancies indicated an apparent violation of 10 CFR Part 50, Appendix B, Criterion XVII, which requires that inspection and test records identify the inspector, the acceptability of test results, and the corrective actions taken to correct deficiencies (8516-02).

4. Design Changes and Modifications

The NRC inspector selected work/procedure packages for review that were implemented during the outage that commenced September 15, 1984, and is still in progress. The outage has consisted of major work activities such as replacement of reactor recirculation system piping, environmental qualification of electrical equipment, 10 CFR Part 50, Appendix R fire protection system upgrade, refueling operations, and other equipment preventive maintenance, overhaul, replacement, or modification. A total of 20 packages were selected and these included 16 MDCs, 2 surveillance test procedures (STPs), and 2 special procedures (SPs). The selected packages provided a broad cross section of work performed on plant equipment and systems, the planning and coordination effort required by all affected technical and work groups, and management review and oversight of the outage as a whole. Special procedures and surveillance test procedures were included in this review because they related to or were a part of the MDC program performed during this outage. The following work/procedure packages were reviewed:

- . MDC-84-216, Amendment 1, Bronze Guides for Rockwell MSIVs
- . MDC 83-066, HFA Relay Replacement
- . MDC 84-0105/DC 84-001, ADS Logic Modification
- . MDC 83-079, Replace D/P Transmitters-Steamline
- . MDC 80-084, High Range Effluent Monitor
- . MDC 84-224, Removal of Rec, PC & SW Valve Unqualified Local Control Switches
- . MDC 83-023, HPCI Exhaust Line Vacuum Breakers
- . MDC 84-147, DG Instrument Tubing Upgrade
- . MDC 84-150, IGSCC Piping Replacement
- . MDC 84-150A, Removal of Interferences for IGSCC
- . MDC 84-150B, Reactor Building Interior Wall Penetrations
- . MDC 84-150C, Jet Pump Instrument Small Bore Piping-Reroute

- . MDC 84-150, Amendment 1, Reinstallation of Interference for IGSCC Pipe Replacement
- . MDC 84-259, Installation of CF-V-588
- . MDC 85-005, Replace 24 VDC Battery
- . MDC 85-022, Reroute ADS Valve Cables
- . SP 84-009, Installation of RPV-Annulus Level
- . SP 84-010, Installation of RPV Shroud Level Indicator
- . STP 6.3.12.6, Diesel Generator No. 1 Annual Inspection
- . STP 6.3.12.6, Diesel Generator No. 2 Annual Inspection

In addition to the documents listed above, the NRC inspector performed the following reviews:

- . Master field copies for 16 of the above MDCs.
- . Governing station Procedures 3.3, "Station Safety Evaluations"; 3.4, "Station Design Changes"; and 3.5, "Special Test Procedures."
- . Applicable SORC and SRAB meeting minutes.
- . Trend of MDCs implementation and closure over the past 3 years.

The NRC inspector's review verified that:

- . Test results met established acceptance criteria.
- . When circumstances prevented normal continuance of a procedure, appropriate changes were made to that procedure prior to recommencing the activity.
- . Procedure controls were established and maintained as required by the appropriate governing procedure.
- . Inservice leak testing, if required, was appropriately addressed in the work package and the applicable ANSI standard was readily available and referenced.
- . If questions were raised by personnel performing a particular procedure, the cognizant design engineer responded to the question and attached his reply to the package.
- . The packages contained required signature review sheets.

- . SORC and SRAB approvals were documented.
- . 10 CFR Part 50.59 reportable analysis reviews were performed.
- . MDCs that were originated under the superceded CNS Engineering Procedure 1.13, contained appropriate attachments from the present Engineering Procedure 3.4, which supplemented the original information and ensured that the packages conformed with current requirements and guidelines.
- . The licensee was making a conscientious effort to complete and reduce the total number of open MDCs.

The NRC inspector noted that only one of the MDC packages he reviewed was officially closed out; i.e., the "Design Change Completion Report," which is Attachment D to CNS Engineering Procedure 3.4, was completely filled out, reviewed, and approved. This item is open pending review of the remaining MDC completion reports identified during this inspection will be subject to an NRC inspection prior to startup from the present outage (298/8516-03).

These reviews were conducted to verify that facility design changes were prepared, reviewed, implemented, and closed in accordance with the requirements established in CNS procedures.

No violations or deviations were identified in this area.

5. Operational Safety Verification

The SRI observed control room operations, instrumentation, controls, reviewed plant logs and records, conducted discussions with control room operators, and conducted system walk-downs to verify that:

- . Minimum shift manning requirements were met.
- . Technical Specification requirements were observed.
- . Plant operations were conducted using approved procedures.
- . Plant logs and records were complete, accurate, and indicative of actual system conditions and configurations.
- . System pumps, valves, control switches, and power supply breakers were properly aligned.
- . Licensee systems lineup procedures/checklists, plant drawings, and as-built configurations were in agreement.
- . Instrumentation was accurately displaying process variables and protection system status to be within permissible operational limits for operation.

- . Plant equipment that was discovered to be inoperable or was removed from service for maintenance was properly identified, redundant equipment was verified to be operable, applicable limiting conditions for operation were identified and maintained.
- . Equipment safety clearance records were complete and indicated that affected components were removed from and returned to service in a correct and approved manner.
- . Maintenance work requests were initiated for equipment discovered to require repair or routine preventive upkeep, appropriate priority was assigned, and work commenced in a timely manner.
- . Plant equipment conditions, such as cleanliness, leakage, lubrication, and cooling water were controlled and adequately maintained.
- . Areas of the plant were clean, unobstructed, and free of fire hazards. Fire suppression systems and emergency equipment were maintained in a condition of readiness.
- . Security measures and radiological controls were adequate.

The SRI performed lineup verifications of the following systems:

- . Standby Liquid Control System
- . 4160 VAC Electrical Distribution System
- . Number 2 Diesel Generator

The tours, reviews, and observations were conducted to verify that facility operations were performed in accordance with the requirements established in the CNS Operating License and Technical Specification.

No violations or deviations were identified in this area.

6. Monthly Surveillance Observations

The SRI observed Technical Specifications-required surveillance tests. These observations verified that:

- . Tests were accomplished by qualified personnel in accordance with approved procedures.
- . Procedures conformed to Technical Specifications requirements.
- . Test prerequisites were completed including conformance with applicable limiting conditions for operation, required

administrative approval, and availability of calibrated test equipment.

- . Test data was reviewed for completeness, accuracy, and conformance with established criteria and Technical Specifications requirements.
- . Deficiencies were corrected in a timely manner.
- . The system was returned to service.

The reviews and observations were conducted to verify that facility surveillance operations were performed in accordance with the requirements established in the CNS Operating License and Technical Specifications.

No violations or deviations were identified in this area.

7. Monthly Maintenance Observation

The SRI observed preventive and corrective maintenance activities. These observations verified that:

- . Limiting conditions for operation were met.
- . Redundant equipment was operable.
- . Equipment was adequately isolated and safety tagged.
- . Appropriate administrative approvals were obtained prior to commencement of work activities.
- . Work was performed by qualified personnel in accordance with approved procedures.
- . Radiological controls, cleanliness practices, and appropriate fire prevention precautions were implemented and maintained.
- . Quality control checks and postmaintenance surveillance testing were performed as required.
- . Equipment was properly returned to service.

These reviews and observations were conducted to verify that facility maintenance operations were performed in accordance with the requirements established in the CNS Operating License and Technical Specifications.

No violations or deviations were identified in this area.

8. Exit Meetings

Exit meetings were conducted at the conclusion of each portion of the inspection. Then NRC inspector summarized the scope and findings of each inspection segment at those meetings.