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

REGION III

Report of Operations Inspection

IE Inspection Report No. 050-010/75-16
IE Inspection Report No. 050-237/75-22
IE Inspection Report No. 050-249/75-19

Licensee: Commonwealth Edison Company
P.O. Box 767
Chicago, Illinois 60690

Dresden Nuclear Power Station
Units 1, 2, and 3
Morris, Illinois

Licenses No. DPR-2
No. DPR-19
and No. DPR-25
Category: C

Type of Licensee: BWR (GE) 200 & 810 MWe

Type of Inspection: Routine, Unannounced

Dates of Inspection: July 15-17, 22-25, 29-31, and September 5, 1975

Principal Inspector: P. H. Johnson — 9/30/75 (Date)

Accompanying Inspectors: H. B. Kister — 9/30/75 (Date)
for R. J. Cook
J. E. Kohler (July 29 only)
for B. Jorgensen

Other Accompanying Personnel: R. C. Knop (September 5, 1975 only)

Reviewed By: R. C. Knop, Senior Reactor Inspector
Projects Unit 1 — 9/30/75 (Date)

SUMMARY OF FINDINGS

Inspection Summary

Inspection on July 15-17, 22-25, 29-31, and September 5, (Dresden 1, 75-16; Dresden 2, 75-22; Dresden 3, 75-19): Review of plant operations, abnormal occurrences, plant maintenance, procedures, review and audit programs, organization, local leak rate test results (Unit 2 only), and technical staff capabilities. Four noncompliance items were noted, related to maintenance procedures (Unit 2 only), reporting requirements (Unit 3 only), local leak rate testing frequency (Unit 2 only), and the onsite audit program.

Enforcement Items

The following items of noncompliance were identified during the inspection:

A. Infractions

1. Contrary to paragraph 6.2.A.6 of the Dresden 2 Technical Specifications, maintenance work on a main steam isolation valve scram limit switch was not accomplished in accordance with approved procedures, with the result that the switch was re-installed with its internals missing. The related work request package was also improperly reviewed, in that an incorrect post-maintenance test was specified, and incorrect sign-offs of test completion were inadvertently made. (Paragraph 8.a, Report Details)

   This infraction had the potential for contributing to an occurrence with safety significance.

2. Contrary to Criterion XVIII of 10 CFR 50, Appendix B, and Commonwealth Edison's Quality Procedure 18-51, onsite audits were conducted by persons having responsibilities in the areas audited. (Paragraph 4.a, Report Details)

   This infraction had the potential for contributing to an occurrence with safety significance.

3. Contrary to Section III.D of 10 CFR 50, Appendix J, greater than two years elapsed between successive performances of type B and C containment leak tests for Dresden Unit 2. (Paragraph 13, Report Details)

This infraction had the potential for contributing to an occurrence with safety significance.

B. Deficiencies

Contrary to Paragraph 6.6.A of the Dresden 3 Technical Specifications, Standby Liquid Control System relief valve setpoints in excess of Technical Specifications limits (Unit 3 abnormal occurrence Report No. 75-30) were reported to the NRC more than 10 days after discovery. (Paragraph 5.a, Report Details)

Licensee Action on Previously Identified Enforcement Items

Licensee actions related to items A.1, 2, 3, 4, 5.a and 5.e, as identified in the RO:III enforcement letter dated September 20, 1974, were reviewed and found to have been completed. (Paragraph 10, Report Details)

Other Significant Items

A. Systems and Components

None.

B. Facility Items (Plans and Procedures)

Unresolved Item: The 3B traversing in-core probe (TIP) ball valve was inoperable in the open position for over two days in August, 1974. This matter is being reviewed further to determine whether noncompliance with Technical Specifications is involved. (Paragraph 8.b, Report Details)

C. Managerial Items

None.

D. Noncompliance Identified and Corrected by Licensee

None.

E. Deviations

None.

F. Status of Previously Reported Unresolved Items

Not reviewed.

Management Interview

Messrs. Knop and Johnson of the IE:III office conducted an interview with Messrs. Lee (Vice President), Palmer (Division Manager, Nuclear Stations), Stephenson (Station Superintendent), and senior members of the station staff on September 5. The following matters were discussed:

A. The inspector discussed the noncompliance item related to maintenance performed on a main steam isolation valve limit switch. The licensee responded that additional personnel had been added to the staff to provide for improved processing of work requests. (Paragraph 8.a, Report Details)

B. The inspector stated that a question of compliance with Technical Specifications concerning TIP ball valve maintenance was being left unresolved pending further review. He noted that on one occasion a ball valve had been left inoperable in the open position for greater than two days until maintenance returned it to an operable condition. The inspector also questioned the availability of approved maintenance procedures for ball valve repairs. The licensee responded that ball valve maintenance was not complicated and was considered to be a craft capability repair. (Paragraph 8.b, Report Details)

C. The use of vendor procedures for plant maintenance was discussed. The inspector questioned the need for licensee review of such procedures prior to their use for maintenance. The licensee responded that the newly established work request procedure provides for precautions and test requirements to be specified, and calls for review of safety related work packages by individuals whose approval would constitute an onsite review. (Paragraph 8.c, Report Details)

D. The inspector discussed a Unit 2 drywell entry made during reactor operation to examine a limit switch, and questioned the licensee concerning precautions required, noting that related information recorded in the reactor log was minimal. Licensee representatives responded by describing precautions which are taken under such circumstances. The licensee also stated that a procedure describing drywell entry during critical operations had been prepared, but had not been issued since it was not yet accepted by the operators' bargaining unit. The inspectors reaffirmd their position that such a procedure, even if applicable only to management personnel, should be issued for guidance. (Paragrph 5.b, Report Details)

E. The inspector noted that one item of noncompliance with reporting requirements had been identified during the inspection. (Paragraph 5.a, Report Details)

F. The licensee was advised that more than two years had elapsed after the 1972 local leak rate tests performed on Unit 2 containment penetrations prior to retesting during the past refueling outage, which represents noncompliance with Appendix J to 10 CFR 50. The inspectors also noted that the local leak rate testing performed on Units 2 and 3 during the recent refueling outages indicated as-found containment leakage results considerably in excess of the allowed 1.6% per day. They stated that more frequent testing of some penetrations might merit consideration to assure continued containment integrity during operation. Licensee representatives noted that the high as-found results for Unit 2 could be partly attributed to the long interval between tests. They also stated that a modification to add an additional valve to the feedwater system was being considered, and that consideraton would be given to more frequent testing in selected cases. (Paragraph 13, Report Details)

G. The inspector discussed a noncompliance item related to the lack of independence on the part of persons conducting onsite audits. The licensee acknowledged the inspector's comments, and stated that some assignments for the third quarter audit had been readjusted after the discrepancy was identified. The inspector discussed three discrepancies noted during a Fall 1974 offsite audit of the training department which had not been corrected in a timely manner and which were subsequently reported as non-compliance items by an NRC inspector in June 1975. This was noted to represent a need for more effective followup on audit results. The inspector also stated that one onsite auditor had been conducting audits against a superseded version of Technical Specifications obtained from the training department. The licensee responded that several copies of Technical Specifications were kept in the training department for use in training, and that these were not kept completely current. The inspector stated that if such copies were to be kept, they should be closely controlled so that improper use, such as for audits or licensed operator training, did not result. (Paragrph 4, Report Details)

H. The inspector stated that examination of the deviation report files showed that onsite reviews of deviation reports not classed as incidents (10-day reports) were not being conducted in a timely manner; for example, some reports had been pending review for more than two months. The licensee acknowledged the inspector's comments. (Paragraph 4.f, Report Details)

I. The inspector summarized the findings which resulted from the special IE inspection program (Paragraph 2, Report Details) conducted at Dresden during June and July, 1975, as follows:

1. Review and Audits. Continued emphasis and improvement are needed in this area, particularly with respect to the audit program and the conduct of onsite reviews (procedures, non-compliance, etc.). (Paragraph 4, Report Details)

2. Shift Activities. Licensee performance in this area was better than anticipated, although continued alertness is needed, particularly regarding the implementation of procedures and awareness of plant activities. The recently established required reading file appeared to be functioning effectively.

3. Maintenance. Continued improvements in this area were in progress, such as in maintenance procedures. The Maintenance Department was considered by the inspectors to be generally effective and well-managed.

4. Procedure Preparation and Issue. Examination of procedure distribution and control, availability of current procedure revisions to operating personnel, control of blank forms and check-off sheets, and control of temporary procedures were reviewed and looked generally good except for a few minor discrepancies. The principal concern related to procedure issue remains with the adequacy of onsite review. (Paragraph 6, Report Details)

5. Problem Resolution (Abnormal Occurrences, etc). Performance in this area had improved considerably since the June 1974 management inspection. Onsite reviews of abnormal occurrences were being performed as required. (Paragraph 10.b, Report Details) However, additional attention to review of deviation reports (see paragraph H above) and reporting requirements is needed.

6. Followup Actions. Followup of required actions was generally good, supported by effective functioning of the licensee's action item system.

7. Technical Staff. Man-years of total Technical Staff experience and experience at the Dresden Station have increased approximately 30-40% since June, 1974, and several additional persons have been added. As a result, the Technical Staff has shown

improvement in depth, although not to a level in excess of what is needed. It was still noted, however, as expressed following the June 1974 management audit, that management of the Technical Staff and overall coordination of the onsite review and investigative function as presently structured represent too much responsibility for one individual to effectively fulfill. This was evidenced by the weaknesses noted in the performance of the onsite review and audit functions. (Paragraph 9, Report Details)

8. Training. Of the areas reviewed during the inspection program, this was probably the area of greatest concern, as noted in the inspection report[1/] covering the first portion of the program. The station has current needs for improved training facilities, additional training staff, and more management participation in the evaluation of licensed operators and the training program.

9. General. Plant housekeeping habits are generally poor, and have an adverse effect on general attitude and morale. Management attention is evident in the improvements being seen in radwaste management, although much potential improvement remains. General administration of the station was considerably improved over that noted during the June 1974 management audit.

Licensee representatives responded to several of the inspector's comments and discussed improvements being made in the areas described.

1/ IE Inspection Rpts No. 050-010/75-13, No. 050-237/75-19 and No. 050-249/75-15.

REPORT DETAILS

Part I

Prepared by P. H. Johnson and H. B. Kister

1. Persons Contacted

B. Stephenson, Station Superintendent
A. Roberts, Assistant Superintendent
D. Butterfield, Administrative Assistant
D. Adam, Radiation Chemistry Supervisor
J. Bauer, Shift Engineer
E. Budzichowski, Unit 1 Operating Engineer
R. Christensen, Shift Foreman
J. Dolter, Leading Nuclear Engineer
D. Dransfeldt, Nuclear Station Operator
R. Goodin, Shift Foreman
G. Heintz, Nuclear Station Operator
W. Hildy, Instrument Engineer
B. Jaicomo, Nuclear Station Operator
R. Jolley, Nuclear Station Operator
G. Klopp, Radwaste Operating Engineer
J. Kolanowski, Unit 2 Leading Engineer
J. Lamping, Maintenance Staff Assistant
T. Lang, Unit 3 Engineer
C. Maney, Engineering Assistant
H. McLain, Shift Foreman
R. Nimmer, Engineering Assistant
J. Pearson, Nuclear Station Operator
R. Ragan, Unit 3 Operating Engineer
D. Reece, Shift Engineer
C. Sargent, Unit 1 Leading Engineer
C. Schiavi, Engineering Assistant
T. Schneider, Chemist
N. Scott, Shift Engineer
R. Thomas, Instrument Foreman
S. Uremovic, Nuclear Station Operator
T. Watts, Technical Staff Supervisor
H. Whitehead, Shift Engineer
M. Wright, Quality Control Engineer
J. Wujciga, Unit 1 Engineer

2. General

This inspection completed a special two-month inspection program which was conducted to evaluate on an accelerated basis the performance of key aspects of Dresden Station operation. Portions of the regular IE inspection program were included. The first portion of the special program was previously reported.[2/]

3. Organization and Administration

The inspector reviewed organization and administration for the station against the requirements of the Technical Specifications and guidance given in ANSI N18.7. Areas reviewed included organizational structure, personnel qualifications, assignment of responsibilities, shift crew composition, and onsite review composition. The inspector noted during review of the recently issued Station Quality Assurance Manual that paragraph 1.2.6 calls for the Administrative Assistant to represent the Station Superintendent in the Superintendent's absence, in conflict with paragraph 6.1.A of the Technical Specifications. Station management stated that the Administrative Assistant understood his responsibilities and that a change would be initiated to correct the inconsistency in the SQAM. No other inspector comments resulted from the review. Station management stated that the following personnel changes were to be made to the station organization:

a. The unit 2 Operating Engineer, G. Abrell, was to be reassigned to the company offices as Nuclear Licensing Administrator. His position was to be filled by N. Scott, a shift engineer.

b. The Administrative Assistant, D. Butterfield, was to be reassigned offsite to Nuclear Fuels Services. His position was scheduled to be filled by J. Abel, the BWR Licensing Administrator.

4. Review and Audit of Plant Activities

The inspector reviewed the following aspects of the licensee's review and audit program: (1) Review of proposed tests and experiments; (2) Review of proposed technical specifications changes; (3) Membership of the onsite review function; and (4) Conduct of the periodic audit program. The inspector presented the following findings related to conduct of the review and audit program:

2/ Ibid.

a. Onsite audits conducted during the first two quarters of 1975 included audits conducted by personnel within their areas of responsibility. Examples noted were audits of training activities by the Training Supervisor and instrument maintenance activities by the Instrument Engineer. The inspector noted that this was contrary to Quality Procedure 18-51, and represented noncompliance with regulatory requirements.

b. Audit results were documented and reviewed by management as required.

c. Followup actions on audit findings related to training program inadequacies were not taken in a timely manner. As a result, three audit deficiencies were subsequently identified by IE:III as noncompliance items. These were:

(1) Failure to provide training on new and revised quality procedures within 30 days,

(2) Omission of the semi-annual report on training adequacy, and

(3) Improper maintenance of training records.

Enforcement action related to these items was noted to have been taken in an earlier inspection report.3/

d. One auditor was noted to have been conducting audits against a suspersded version of Technical Specifications obtained from the training department.

e. Technical inconsistencies noted in two recently issued procedures (see paragraph 6.a) indicated a need for continued attention to the thoroughness of onsite review of procedures.

f. Licensee representatives were informed that onsite review of deviations not classified as abnormal occurrences should be conducted on a more timely basis. Some such reviews were noted to have been in progress for more than two months.

5. Abnormal Occurrence Review

A review of reporting, corrective actions, licensee review and evaluation, and compliance with regulatory requirements was conducted for the following abnormal occurrences and unusual events related to Units 1, 2 and 3:

3/ Ibid.

Event Title	Event Date	Licensee Report Date
Unit 1		
1. Core Spray Vent Line Leak	4-12-75	4-18-75
2. Core Spray Pressure Permissive Switch Failure	5-28-75	6-5-75
3. "D" Steam Extraction Nozzle Leak	5-26-75	6-3-75
Unit 2		
4. Failure of No. 2 Diesel Generator	3-17-75	3-27-75
5. Unit 2 Diesel Generator Overheating	5-11-75	5-21-75
6. Equipment Sump Discharge Valve Failure	5-13-75	5-21-75
7. Failure of MSIV $\leq$10% Closure Limit Switch	5-19-75	5-29-75
8. Failure of Containment Cooling Water Valves	5-22-75	5-30-75
9. Torus Low Level	5-26-75	6-5-75
10. Unit 2 Diesel Generator air Motor Failure	6-4-75	6-13-75
11. Unit 2 Diesel Generator Air Motor Failure	6-12-75	6-18-75
Unit 3		
12. HPCI System Area Temperature Switch Setpoint Drift (Fenwal Switches)	4-26-75	5-6-75
13. Inoperable Piping Restraints	4-28-75	5-8-75
14. Failure of 24/48 V DC Batteries	5-9-75	5-19-75
15. SBLC Relief Valve Sepoints High	5-24-75	6-13-75
16. Cracks in CRD Collet Housings	6-26-75	7-3-75

The inspector's review included discussions of each event with licensee representatives as required, and examination of the report referenced above and other documents related to the particular areas reviewed. The following are comments as a result of the review:

a. Event 15 represents noncompliance with the Technical Specifications reporting requirements in that the report was submitted 20 days after the occurrence date in lieu of the required 10 days.

b. Event No. 7: The inspector reviewed the licensee's corrective actions, including a letter from the Station Superintendent to all Management personnel. The letter adequately described the occurrence, including the errors committed by station personnel leading up to the occurrence. Emphasis was also placed on the need to adequately specify and review tests to be performed. Noncompliance related to the abnormal occurrence is discussed in paragraph 8.a of the Report Details. The inspector noted that a drywell entry had been made while the reactor was operating (prior to inerting) to examine the limit switch, and that information included in the Control Room Log related to the entry, precautions taken, and conditions found was minimal. This was discussed during the management interview.

c. Events No. 11 and 12: The Diesel Generator No. 2 air start motor problem initially occurred in March 1975 (AO No. 50-237/75-16). The cause at that time was considered to be defective air start motors and new ones were installed. In April 1975 the diesel again failed to start due to the air motor jamming the pinion teeth against the ring gear. The vendor was called in and diagnosed the problem as excessively high air pressure used for pinion engagement. The licensee is presently waiting for a detailed recommendation from the vendor for a modification which would regulate pilot air pressure to allow slower engagement of the pinion teeth. In June 1975, the diesel failed to start on two different occasions with the cause still not definitely determined. The inspector noted that additional personnel are on hand during surveillance tests and that specific instructions regarding actions to take upon failure of the diesel to start are posted in the control room. The inspector had no further comments at the time of this review.

The inspection also included a review of those aspects of the licensee's organization which provide for routine review and evaluation of non-routine events. Operating engineers and unit lead engineers were noted to be reviewing operating logs

on a regular basis in keeping with commitments expressed in the licensee's response[4/] to a previous IE:III enforcement letter; however, these review responsibilities had not been formally assigned in any licensee directive. During telephone discussion of the matter subsequent to the inspection, a licensee representative stated that these responsibilities would be incorporated into a pending revision of the station's administrative procedures. No other comments resulted from the review.

6. Procedures

The various aspects of procedure issue, control, and distribution were reviewed as follows:

a. Review. A sample of approximately 20 recently issued procedures were examined for adequacy of review. Each procedure was noted to have been reviewed by the onsite review function as required by Technical Specifications. However, technical inconsistencies in two procedures (010-AN-III, Revision 1, and DGA-9, Revision 1) indicated a need for more thorough review. These discrepancies were identified to station management for resolution.

b. Issue Control. Review initially showed that an accurate listing of effective procedures was needed. A computer-printed listing was available, but was noted in several cases to be incomplete or inaccurate. The licensee had begun issuing procedure i... to be placed at the front of each procedures manual section, and had essentially completed this action by the end of the inspection, except for procedures which had not yet been revised in the standardized procedure format. No discrepancies were noted related to procedure issue control.

c. Distribution. The inspector compared a sampling of approximately 100 procedures in the Shift Engineer's and control room procedure files with the master procedure file to determine adequacy of distribution. All effective procedures included in the sample were found to be properly filed.

d. Forms Control. A sampling of approximately 20 blank forms and checkoff sheets were reviewed for proper filing and availability in the Shift Engineer's file. No discrepancies were noted except for one copy of a superseded startup

4/ Ltr. Abel to Keppler, dtd 2/20/75.

checklist, which was removed. Related noncompliance was identified in IE Inspection Reports No. 050-010/75-13, No. 050-237/75-19 and No. 050-237/75-15. A subsequent licensee letter[5/] stated that the files had been reviewed for proper content and that an itemized index had been provided.

e. Temporary Procedure Changes. The inspector examined the file of temporary changes issued since the beginning of 1975. All procedures present were noted to have received onsite review as required by the Technical Specifications. The inspector noted that no sequence or control number is assigned to temporary procedure changes to assure that all temporary changes are forwarded to station management for onsite review. Licensee representatives acknowledged the inspector's comment but stated that temporary procedure changes were routinely forwarded to management each day with other records such as logs and surveillance sheets which are generated by on-shift personnel. Discussion with shift personnel corroborated this statement.

Based on the above review, the inspector noted that thoroughness of procedure review required continued attention, but that he had seen no reason for concern in the other areas examined.

7. Review of Plant Operation

The inspectors conducted a review of selected aspects of plant operation for Units 1, 2, and 3, with findings as follows:

a. Log Review. Shift Engineer and Reactor Logs for the following periods were reviewed for conformance with Dresden Administrative Procedure 2-3, with no discrepancies noted:

Shift Engineer	-	5-18-75 thru 5-20-75, 7-19-75 thru 7-29-75
Unit 1	-	6-15-75 thru 6-30-75 7-5-75, 7-10-75, 7-29-75
Unit 2	-	5-18-75 thru 5-30-75 7-15-75 thru 7-29-75
Unit 3	-	6-21-75 thru 7-5-75 and 7-29-75

5/ Ltr. Bolger to Keppler, dtd 9/2/75.

b. Control Room Activities. The inspectors observed control room activities at various times during the inspection, with comments as follows:

(1) Control room manning was observed to conform to Technical Specifications requirements.

(2) Jumper logs were reviewed, and no discrepancies were observed with regard to placing and removing jumpers. Review of the daily surveillance checklists indicated that shift supervisors were reviewing the jumper log daily as required. It was also noted that shift supervisors were intermittently initialing the jumper log as well as the daily check sheet. Since there is no specified space in the jumper log to indicate reviews, initials were intermingled with the jumper log entries and could make the entries unclear. The inspector questioned the need for initialing in 2 places, and was informed that shift supervisors had initialed the jumper log prior to addition of the item to the daily checklist, and that some were still doing it. The inspector's comment was passed to station management for resolution.

(3) On one occasion, while control rod drive exercising was in progress on Unit 3, the inspector noted that a pencil was being used to hold the NOTCH OVERRIDE switch in the "override" position. The inspector noted that no fuel was installed in the reactor vessel at the time. The licensed operator stated that such a practice was not to be used with fuel in the reactor vessel, but was being employed because each control rod drive was being fully withdrawn and inserted several times. The inspector responded that such a method of holding a switch in a position which bypasses an interlock was not consistent with nuclear plant operation. This comment was also passed to station management, who expressed concurrence.

c. Plant Tours. The inspectors conducted tours of accessible areas of the plant at various times during the inspection. The state of housekeeping was noted to be generally poor. The following specific items were noted:

(1) The area around the reactor feed pumps was littered with paper, dirt, and various pieces of bolts, equipment, etc.

(2) The ground floor of the reactor building, particularly around the drywell access hatches, needed a general pick-up of debris, poly bags, and paper.

(3) The basement area in the vicinity of the core spray and LPCI pumps was in need of a general cleaning. The condensate storage tank suction valves to 2A and 2B LPCI pumps were each noted to be missing a yoke bolt. Three valve position indicators in the vicinity did not indicate either open or closed (apparently burned-out light bulbs).

The inspectors discussed general housekeeping with the Station Superintendent, who stated that specific areas were assigned to departments who were responsible to maintain the required degree of cleaniness. Shift foremen also assigned personnel on shift to cleaning details as part of shift duties; however, not much success had been attained by this method, particularly when shift activities were heavy, such as during outages. When asked, the Superintendent stated that he had last been in the plant the previous week, and that visit had been limited to a specific area for the purpose of inspecting equipment at the request of an operating engineer. The Superintendent further stated that he had directed the Assistant Superintendent to begin making regular tours. The inspectors stated that tours by top management should be planned on a regular basis such that all areas of the plant would be covered periodically. The superintendent acknowledged the inspector's comment.

8. Plant Maintenance

The inspector reviewed safety related maintenance activities conducted for Units 1, 2, and 3. Included in the inspection was a review of selected maintenance to ensure compliance with Technical Specifications and Quality Assurance requirements regarding LCO's, administrative approvals, use of procedures, inspection, functional testing after maintenance, and the use of qualified personnel. The following are comments that resulted from the review:

a. MSIV $\leq$10% Closure Limit Switch Maintenance, Unit 2

The inspector reviewed the maintenance records relating to the overhaul of the MSIV $\leq$10% limit switches. It was noted that the maintenance performed resulted in one limit switch not being properly reassembled (see Paragraph 5.b). Review of the abnormal occurrence report, maintenance records, and discussions with the licensee indicated the following:

(1) The post-Maintenance functional test of the defective switch was signed off on the check sheet as satisfactory, which was not possible since the internals had not been installed.

(2) The uncompleted operational test was mistakenly signed off by the maintenance foreman instead of the Shift Engineer and in addition, the review of the work package before final sign-off did not catch the error.

(3) The wrong operational test procedure had been specified and would not have revealed the defective switch had it been operationally checked.

(4) Maintenance was not performed in accordance with an approved procedure.

The licensee was informed that the event represented noncompliance with Technical Specifications requirements; however, a formal response would not be required since the matter had been identified, reported, and corrective action taken.

b. TIP Ball Valve Maintenance, Units 2 and 3

The inspector reviewed several instances of maintenance conducted on traversing in-core probe (TIP) ball valves. During the review of work package No. 7114 and the operating log, it was noted that at 0715 on August 7, 1974 the 3B TIP ball valve failed in the open position while the reactor was at power operation and remained open and inoperable until 1500 on August 9, 1974, when maintenance was completed and an operability test was satisfactorily performed. The inspector noted that paragraph 3.7.A.3 of the Technical Specifications, supported by definition 1.0.Q, requires containment isolation valves to be operable or closed, although TIP ball valves are not listed in Table 3.7.1. It was also noted that the TIP lines isolated by the ball valves do not communicate directly with containment. Discussions with licensee representatives indicated that they considered the availability of the shear valve to be adequate backup for the ball valve. The inspector stated that a determination as to compliance with Technical Specifications requirements would be made after further review.

c. Maintenance Procedures

In the course of reviewing maintenance activities the inspector noted that the 2C main steam isolation valve had been repaired during the past refueling outage using a vendor manual procedure. See Management Interview for further discussion.

9. Technical Staff

The inspection included a review of Technical Staff qualifications and experience levels, with findings as follows:

a. Based upon information provided by licensee representatives, man-years of Technical Staff total engineering experience and of cumulative service at the Dresden Station had increased by 30-40% over levels seen during the June 1974 management audit.

b. Senior licensed operators had been assigned as lead engineer for each of the three units, resulting in improved supervision of Technical Staff activities. However, one of the three SRO's was scheduled to be reassigned to the La Salle County Station following the Unit 3 outage.

c. Several degreed engineers were assigned to the Technical Staff since the June 1974 review. Three additional engineering positions had also been established under the unit operating engineers.

d. Several additional non-degreed personnel had been added to the Technical Staff during the past year. These included four quality control inspectors and additional administrative personnel.

10. Noncompliance Followup

The inspection included review of corrective actions taken in response to noncompliance items identified during the June, 1974, management inspection, as outlined in the licensee's responses 6/ to the enforcement letter which followed. The inspector reviewed and had no further questions concerning the following items:

6/ Ltrs, Lee to Davis, dtd 10/18/74, and Abel to Keppler, dtd 2/20/75.

a. Item A.1. Review of operating logs was being done on a regular basis by operating engineers and unit lead engineers. Abnormal occurrence reports covering the omissions identified in the inspection report were submitted by the licensee.

b. Item A.2. Procedure changes were verified to have been implemented to provide more effective review of abnormal occurrences. The inspector's examination of this program in recent months has shown no discrepancy related to onsite review of abnormal occurrences.

c. Item A.3. Administrative procedures were determined to have been changed as described to provide for the required review of modification-related procedures. These procedure changes were included in the licensee's recently completed quality assurance training sessions.

d. Item A.4. The inspector verified that administrative procedures had been revised to provide for followup review of temporary procedure changes. Examination of temporary procedure changes since the beginning of 1975 showed no discrepancies.

e. Item A.5.a and f. The inspector examined without comment the revised administrative procedure governing documentation of safety related modifications. These procedures were covered in the recently completed quality assurance training sessions.

11. Miscellaneous Items

a. Control Circuit Deficiencies: In a letter to the Directorate of Licensing March 7, 1973, the licensee committed to changing the circuit design of certain circuit breakers. The inspector reviewed the licensee's corrective actions and noted that the required work had been completed.

b. Bergen Patterson Restraints: Inspection Report 75-07 discussed an occurrence in which a restraint failure occurred due to leakage at the fill fitting. The licensee had stated that a check would be performed to determine whether the fittings could be tested for leakage by applying force to the indicator rod. The inspector reviewed a new procedure for in-place inspection of pipe restraints (38-020-1) and discussed the potential of fill fitting leakage with the licensee. A licensee representative stated that leakage at the fitting

should be readily detectable when filling or adding oil to the unit since the filling operation extends the rod and applies some amount of back-pressure on the fitting. When the filling device is removed any tendency to leak should be easily detected. The inspector agreed with the comment provided that the maintenance man was aware of the potential for leaks at this fitting and routinely checked it after each filling operation. The representative stated that maintenance personnel were aware of this concern.

c. Defective Barton DP Switches: Progress of corrective action for replacement of defective Barton DP Switches was reviewed by the inspector. Step three of the program, which is actual replacement of the switches, was due to be completed by June 1975. Due to the lack of availability of replacement parts the licensee has notified the Office of Nuclear Reactor Regulation that the above date could not be met. A new date was deferred pending establishment of firm delivery dates for parts.

d. Surveillance Procedure Discrepancies: Unit 2/3 Inspection Report 74-02 discussed errors found in surveillance procedures for the MSIV scram functional test and the group isolation valve tests. The licensee agreed to correct the errors and committed to review all similar group isolation procedures to ensure adequacy. The inspector reviewed the MSIV Partial Scram Test Procedure, 500-S-VIII, and Group Isolation Test Procedures, 500-S-XI, 500-S-XIII and 50-S-XIV and concluded that the procedures had been reviewed by the licensee and corrected as required.

e. FENWAL Switch Replacement: The inspector reviewed the licensee's program for replacement of FENWAL Series 1700 thermo-switches, which are used in Units 2 and 3 for MSL and HPCI steam leak detection monitoring. The licensee stated that the Unit 2 and Unit 3 HPCI room switches had been replaced and, subject to satisfactory performance of the new HPCI switches, the Main Steam Line "X" area switches would be replaced at the next refueling outage for each unit.

REPORT DETAILS

Part II

Prepared By: J. E. Kohler 9/29/75
J. E. Kohler (Date)

Reviewed By: B Jurelle for 9/29/75
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12. Persons Contacted

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13. Local Leak Rate Testing Results (Dresden 2)

The inspector examined the results of local leak rate tests (LLRT's) performed during the 1974-1975 Dresden 2 refueling outage, as summarized in a report to Region III dated July 3, 1975. The results reported for the 1974-1975 outage identified 10,198 scfh of measured leakage through type B and C penetrations, equivalent to containment leakage of approximately 22 weight percent per day. About 50% of this measured leakage was through reactor feedwater check valves (220-58A and B, 220-62A and B). These results indicated excessive deterioration of the primary containment boundary during the previous operating cycle. The inspector's review showed the previous series of LLRT's to have been performed in June 1972, approximately 2 years and 5 months before the most recent series was commenced. According to 10 CFR 50, Appendix J, LLRT's of Type B and C penetrations are to be performed during each refueling outage, but in no case at a testing interval greater than 2 years. The inspector noted that the interval between the 1972 and the 1974-1975 LLRT's represented noncompliance with 10 CFR 50 requirements.