

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

REGION III

Report of Operations Inspection

IE Inspection Report No. 050-010/76-G2  
IE Inspection Report No. 050-237/76-01  
IE Inspection Report No. 050-249/76-01

Licensee: Commonwealth Edison Company  
Post Office Box 767  
Chicago, Illinois 60690

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

License No. DPR-2  
License No. DPR-19  
License No. DPR-25  
Category: C

Type of Licensee: BWR (GE) 200 and 81 Mwe

Type of Inspection: Routine, Unannounced

Dates of Inspection: January 20-21, 26-29, February 2-3  
and 10-11, 1976

Principal Inspector: *RC Knop for*  
P. H. Johnson

3/3/76  
(Date)

Accompanying Inspectors: J. E. Kohler  
(January 20-21, 1976)  
*RC Knop for*  
H. B. Kister  
(January 26, 1976)

3/3/76  
(Date)

C. H. Brown  
(January 27-29, 1976)

Other Accompanying Personnel: None

Reviewed By: *RC Knop*  
R. C. Knop, Chief  
Reactor Projects  
Section No. 1

3/3/76  
(Date)

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## SUMMARY OF FINDINGS

### Inspection Summary

Dresden 1: Inspection on January 20-21, 26-29, February 2-3, and 10-11 (76-02): Review of facility records, quality assurance program, testing and other activities associated with post-outage startup, and followup on previous noncompliance items. Three noncompliance items were noted, related to procedure approval, test documentation, and the use of startup checklists.

Dresden 2 and 3: Inspection on January 20-21, 26-29, February 2-3 and 10-11 (76-01 and 76-01): Review of facility records, standby gas treatment system test results, quality assurance program, Unit 2 startup report, and followup on previous noncompliance items.

### Enforcement Items

The following items of noncompliance were identified during the inspection:

#### A. Infraction

Contrary to Paragraph 6.2.A.1 of the Dresden 1 Technical Specifications and Unit 1 Startup Procedure DGP 1-1, startup checklist DGP 1-53 was not completed prior to a Unit 1 startup performed on January 28, 1976. (Paragraph 5.c, Report Details)

#### B. Deficiencies

1. Contrary to Section 6.5.A of the Dresden 1 Technical Specifications, documentation of pre-startup core spray system tests and of the December 1975 emergency feedwater pump surveillance test was not kept in a manner convenient for review, in that the related records could not be produced for review over a 2-week period during the course of the inspection. (Paragraphs 4.a and 4.b, Report Details)
2. Contrary to Paragraph 6.2.A.7 of the Dresden 1 Technical Specifications, preparation of test equipment for performance of control rod drive scram and friction testing was documented on an unapproved version of the procedure. (Paragraph 5.a, Report Details)

### Licensee Action on Previously Identified Enforcement Items

- A. Licensee actions as described in a June 4, 1974, response to an RO:III enforcement letter were reviewed. Action by the licensee on all items had been completed. (Paragraph 7.a, Report Details)

- B. Licensee actions as described in August 28 and September 6, 1974, responses to an RO:III enforcement letter were reviewed. Licensee action had been completed on all items except A.3. (Paragraph 7.b, Report Details)
- C. Licensee actions described in October 18, 1974, and February 20, 1975, responses to an RO:HQ enforcement letter were reviewed. The licensee had completed action on all items except A.5.b and A.7. (Paragraph 7.c, Report Details)
- D. Licensee actions described in January 17 and February 5, 1975, responses to an RO:III enforcement letter were reviewed. Licensee action on all items had been completed. (Paragraph 7.d, Report Details)
- E. Licensee actions related to the station's training program as described in September 2 and 26, 1975, responses to an IE:III enforcement letter were reviewed. Licensee action related to enforcement items A.2, B.1, B.2.a, and B.2.c had been completed. (Paragraph 7.e, Report Details)

Other Significant Items

A. Systems and Components

None.

B. Facility Items

All facility blueprints for Dresden 1 are being collected in order to generate a controlled set of prints for future document control purposes.

C. Managerial Items

None.

D. Noncompliance Identified and Corrected by Licensee

None.

E. Deviations

None.

F. Status of Previously Reported Unresolved Items

The licensee had taken actions to assure that charcoal cartridges installed in the Unit 2/3 standby gas treatment system are properly oriented. (Paragraph 11.b, Report Details)

### Management Interview

Management interviews were conducted by the inspectors with Mr. Stephenson and members of his staff at the conclusion of each portion of the inspection. The following matters were discussed:

- A. The inspector stated that he had reviewed the control of facility records, and that the records management practices described in Section 2 of Dresden Administrative Procedures were being implemented (Paragraph 10, Report Details.) Specific observations noted in this area as follows:
  1. The inspector stated that he had difficulty recovering documents related to facility changes which had been initiated by the Station Nuclear Engineering Department. The licensee responded that this weakness had been previously identified in an internal audit and that corrective measures were in progress. The inspector stated that he had no further questions regarding this item. (Paragraph 10.e, Report Details)
  2. The inspector noted that some facility prints had been awaiting offsite revision by Sargent and Lundy for two or more years (although the prints were being controlled, in that they were marked "revision pending" and rough marked-up copies were available). The licensee acknowledged the inspector's comment and stated that actions to issue revised prints would be expedited. (Paragraph 10.d, Report Details)
- B. The inspector stated that he had obtained documentation from the licensee to resolve a previously reported unresolved item pertaining to the orientation of charcoal cartridges in the Dresden 2/3 Standby Gas Treatment System. (Paragraph 11.b, Report Details)
- C. The licensee was informed that a review of the Quality Assurance Manual and station implementing procedures had been conducted, with emphasis in the areas of procurement control; receipt, storage and handling of equipment and materials; and audits. The inspector stated that no problem areas had been identified although it was noted that the licensee's audit program did not periodically verify Technical Specifications surveillance requirements to be included in surveillance procedures. The licensee stated that this area would be reviewed in a forthcoming audit. (Paragraph 13.a, Report Details)
- D. The licensee's followup actions on noncompliance items related to the station training program were discussed. The inspector noted that the licensee's actions on items A.2, B.1, B.2.a and B.2.c had been completed, and that actions related to item B.2.b would be reviewed further during a future inspection. The inspector stated that review of abnormal and emergency procedures by licensed

personnel had been discussed with training department representatives. The licensee was informed that the IE:III position was that this periodic review should include all plant abnormal procedures (DGA's) and those abnormal procedures (DOA's) which would require immediate action by the operator in the event of abnormal conditions. The inspector stated that the licensee should determine which DOA's would require such periodic review. (Paragraph 7.e, Report Details)

- E. The inspector described his review of activities associated with resumption of Unit 1 operation following the refueling outage, and presented the following specific comments:
1. Startup checklist DGP 1-S3 was not completed prior to a Unit 1 startup performed on January 28 following a reactor scram. Completion of this checklist was required by startup procedure DGP 1-1, as discussed during a previous inspection. The inspector stated that this represented an item of non-compliance with Technical Specification requirements. The licensee acknowledged the inspector's comments. (Paragraph 5.c, Report Details)
  2. The temperature recorder chart was considered to have provided adequate assurance of proper reactor vessel temperatures for stud tensioning, but that the licensee should consider more specific recording of the required vessel temperature prior to stud tensioning and following detensioning. (Paragraph 4.c, Report Details)
  3. Noncompliance with records retention requirements of the Technical Specifications was identified, in that test documents for the December emergency feedwater pump test and for pre-startup tests of the Unit 1 core spray system could not be produced for review. The licensee acknowledged the inspector's comments, noting that the tests had been performed but that the documents could not be located. (Paragraphs 4.a and 4.b, Report Details)
  4. An unapproved version of the licensee's procedure was used to prepare test equipment for control rod drive friction and scram time tests. This was noted to represent an item of noncompliance. The inspector noted that the procedure had subsequently been retyped and approved by the onsite review function, apparently without change. The licensee acknowledge the comment. (Paragraph 5.a, Report Details)

- F. The inspector summarized followup review of other noncompliance items identified during previous inspections. (Paragraph 7.a through 7.d, Report Details) Specific comments were presented as follows:
1. Noncompliance items related to the 1974 Unit 3 integrated leak rate test had been resolved by the incorporation of appropriate changes in Unit 2/3 procedures. The inspector noted that similar changes should be considered for Unit 1 procedures prior to the next integrated leak rate tests. The licensee responded that similar changes would be considered for Unit 1. (Paragraph 7.d(5) through (7), Report Details)
  2. The licensee was noted to have established procedures for review of deviation reports by the Technical Staff Supervisor and the onsite review function; however, a significant backlog of reviews remained to be completed. The licensee stated that efforts to eliminate the backlog were being expedited. The inspector stated that this item would be reviewed further during a future inspection. (Paragraph 7.c(1), Report Details)
  3. Startup checklists for Units 2 and 3 were noted to have been revised to provide for increased sampling frequency of primary coolant during startup conditions. The inspector noted that similar changes should be considered by the licensee for Unit 1 startup checklists. The licensee acknowledged the inspector's comment. (Paragraph 7.c(b), Report Details)
- G. The licensee was informed that a review of the Dresden 2 Startup Report submitted on December 5, 1975, had been conducted. The inspector noted that licensee representatives had expressed intention to submit a correction to one section of the report. (Paragraph 6, Report Details)
- H. The inspector stated that his review of the licensee's actions in response to RO Bulletin 74-14 had shown that all actions requested by the bulletin appeared to have been completed in early 1975, although some of the related implementing procedures were not currently in effect. The licensee stated that the procedures would be reviewed and reissued as necessary. The inspector stated that further action on this bulletin and licensee action related to RO Bulletins 74-9 and 74-13 would be reviewed during a future inspection. (Paragraph 8, Report Details)



## REPORT DETAILS

Part I - January 26-29, February 2-3 and 10-11, 1976

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

### 1. Persons Contacted

B. Stephenson, Station Superintendent  
J. Abel, Administrative Assistant  
E. Budzichowski, Unit 1 Operating Engineer  
R. Christensen, Shift Engineer  
J. Dodge, Nuclear Station Operator  
J. Dolter, Leading Nuclear Engineer  
R. Dyer, Maintenance Job Planner  
J. Harrison, Unit 1 Leading Engineer  
R. Herbert, Engineer  
E. Johnson, Quality Control Inspector  
T. Josefik, Nuclear Station Operator  
T. Kraakevik, Engineering Assistant  
J. Lamping, Maintenance Staff Assistant  
C. Maney, Staff Assistant (Procedures)  
R. Nimmer, Surveillance Coordinator  
E. Petrowsky, Nuclear Engineer  
F. Petrusich, Quality Control Inspector  
C. Sargent, Unit 3 Leading Engineer  
C. Schiavi, Engineering Assistant  
T. Watts, Technical Staff Supervisor  
B. Zank, Acting Training Supervisor  
A. Zapatocky, Instrument Foreman

### 2. General

At the time of this inspection, Units 2 and 3 were operating at approximately 800 and 600 MWe, respectively. Unit 1 was in the process of resuming operation following a 5-month refueling and maintenance outage.

### 3. Review of Plant Operations (Startup Preparations, Unit 1)

The inspector verified by examination of plans and procedures and discussions with licensee representatives that plans were made prior to completion of the refueling outage for the startup and testing of systems disturbed during the outage.

4. Review of Plant Operations (Pre-startup Activities, Unit 1)

The inspection included review of selected pre-startup procedures and tests, control rod sequence, and performance of surveillance tests during the outage. The following comments resulted from the review:

- a. Although the schedule of completed surveillance showed the test to have been done, documentation could not be provided for the emergency feedwater pump operability test performed during the month of December 1975. This was noted by the inspector to represent noncompliance with Section 6.5 of the Technical Specifications.
- b. The licensee could not provide documentation to establish that pumps and motor operated valves in the core spray system had been tested prior to startup of Unit 1. Several licensee representatives stated that the testing had been satisfactorily completed as part of the integrated core spray operability test required to be performed during each refueling outage. Several persons also remembered seeing the integrated test package during subsequent to performance of the testing, although the test package could not be located by licensee personnel who requested on January 28 or at any subsequent time prior to completion of the inspection. The inspector noted that this also represented noncompliance with the documentation requirements of Section 6.5 of the Technical Specifications.
- c. Paragraph 4.6.B.3 of the Dresden 1 Technical Specifications requires reactor vessel shell temperature immediately below the flange to be permanently recorded when the reactor vessel head studs are tightened or loosened. Review of records showed this requirement to be satisfied by a multipoint temperature recorder which had been operating at the time head bolting studs were tensioned in January 1976. Although the temperature of the specific location immediately below the flange was not indicated, temperatures of the flange and of the vessel wall midsection indicated substantially above the minimum of 130°F at the time of stud tensioning. The inspector noted that temperature requirements had been satisfied but stated that the licensee should consider more specific documentation of the required temperature prior to tensioning and after detensioning studs, since in the event of more marginal temperature conditions it might be difficult to establish that the required temperature had been attained immediately below the vessel flange. The licensee acknowledged the inspector's comment.



5. Startup Testing - Refueling (Unit 1)

Startup tests and other activities associated with the Unit 1 startup were reviewed to verify that required tests and procedures were accomplished in accordance with established requirements. Activities reviewed included control rod drive friction and scram time tests, shutdown margin demonstration, control rod sequence checks, core performance at rated temperature and pressure, and completion of required startup checklists and procedures. The following comments resulted from the review:

- a. Review of control rod drive friction and scram time tests showed test results to satisfy established acceptance criteria. Control rod G-3, which would not withdraw at cold plant conditions, became operable following reactor heatup and was scram tested on January 28 prior to being returned to service. The inspector noted that the procedure used to document the setup of instrumentation for the friction and scram time testing showed no evidence of having been reviewed by the onsite review function, although an identical and approved version of the procedure was found to be effective. This was identified as an item of non-compliance with the requirements of Section 6.2 of the Technical Specifications.
- b. The results of the shutdown margin demonstration showed the reactor to be greater than 3% shutdown with the highest worth rod fully withdrawn. Testing was noted to have been performed using several control rod configurations.
- c. Review showed startup checklists and procedures associated with the initial post-outage startup to have been completed as required. However, the unit was started up on January 28 following a reactor scram without completing the startup checklist (DGP 1-S3) as required by the startup procedure (DGP 1-1). The inspector recognized that only one startup checklist was provided, and that its completion for every unit startup was required by the startup procedures, as noted during a previous inspection<sup>1/</sup>. The inspector stated that this represented an item of noncompliance with the procedure requirements of the Technical Specifications, Section 6.2.A. The licensee stated that the issuance of an abbreviated startup checklist was being considered.

6. Review of Startup Report (Unit 2)

This inspection included a review of the startup report submitted by the licensee<sup>2/</sup> subsequent to the startup of Unit 2 following its

<sup>1/</sup> IE Inspection Report No. 050-010/75-17, Management Interview Section, Paragraph E.

<sup>2/</sup> Ltr, Stephenson to Keppler, dtd 12/5/75.

1975 refueling outage. During the review and subsequent discussion with licensee representatives, it was noted that the fuel loading information provided in Startup Test No. 1 contained information inconsistent with that shown in Figure 2-1 of the report. Licensee representatives stated that a correction to the startup test report was to be submitted.

7. Followup on Items of Noncompliance (Units 1, 2, and 3)

The review of licensee actions in response to previous items of noncompliance considered distribution and assignment of responsibility for corrective actions, licensee review of non-compliance items and corrective actions, and accomplishment of corrective actions and measures identified to avoid recurrence. This inspection included review of corrective actions outlined in licensee responses to five enforcement letters, as follows:

a. Response dated June 4, 1974<sup>3/</sup>

- (1) Item A.1(b) - Calibration Procedure 33-200-1 was verified to have been revised to require "checkoff" by the instrument mechanic performing the surveillance. Item resolved.
- (2) Item A.2 - Review of modification records showed a subsequent modification to the Unit 2 and 3 vacuum breakers to have been installed and tested as described in an earlier licensee response<sup>4/</sup>. Item resolved.
- (3) Item A.3 - Review showed Surveillance Procedure 1600-S-XII to have been revised to specify actions to be taken in the event of an inoperable vacuum breaker. Item resolved.
- (4) Item A.4 - The licensee's response stated that the Standby Gas Treatment System demisters had been returned to operability pending justification for their removal from service. Licensee representatives stated that demisters were still in service and that no further consideration was being given to removing them from service in the future. Item resolved.
- (5) Item A.5(b) - Surveillance procedures for core spray, LPCI, HPCI, and primary containment isolation valve operability were verified to have been revised to provide for a check of seal-in circuits during surveillance testing. Item resolved.

<sup>3/</sup> RO Inspection Rpts No. 050-237/74-02 and 050-249/74-02.  
<sup>4/</sup> Ltr, Lee to Davis, dtd 3/15/74.

(6) Item B.1 - The response noted that additional attention had been focused on reporting requirements. It was also noted during this inspection that new reporting requirements had become effective in December, 1975, and that these had been extensively discussed in the process of implementing the revised reporting requirements. Item resolved.

b. Licensee responses dated August 28 and September 6, 1974:<sup>4/</sup>

(1) Item A.1.a - Review of the Unit 1 battery bank discharge test performed during the 1975 refueling outage showed the procedure to have been revised to include appropriate data sheets. Required data were noted to have been recorded. Item resolved.

(2) Item A.1.b - Review of Local Leak Rate Test Procedures 38-1600-S-0 and 38-3000-S-I showed revisions to have been made requiring the air supply line to be disconnected prior to the recording of data for determining leak rate. Item resolved.

(3) Item A.3 - In the response to this noncompliance item, the licensee stated that special work in the reactor requiring hand tools would be done using approved procedures. During a previous inspection<sup>6/</sup>, such procedures were determined to have been implemented for Units 2 and 3, and similar requirements appeared to have been subsequently incorporated into Unit 1 procedures. However, these requirements apparently were not retained in the procedures when they were revised to standardized format in 1975. Licensee representatives stated that the procedural requirements governing the use of hand tools inside the reactor vessel would be reinserted into the applicable procedures. The inspector stated that this item remained unresolved and would be reviewed further during a future inspection.

(4) Item A.5 - The modification in question was verified by record review to have been reviewed and approved by the Mechanical and Structural Engineering Department. Item resolved.

(5) Item A.6 - Review of the Unit 2/3 integrated leak rate test procedure showed requirements for data reduction methods in accordance with ANSI N45.4-1972 to have been incorporated. Item resolved.

5/ RO Inspection Rpts No. 050-010/74-06 and 050-249/74-05.

6/ IE Inspection Rpt No. 050-010/75-05.

- (6) Item A.7 - Review of Unit 2/3 integrated leak rate test and double-gasketed local leak rate test procedures showed that they had been revised to require leak rate testing of double gasketed seals prior to opening at the beginning of a refueling outage in which an integrated leak rate test is to be conducted. Item resolved.
- (7) A.8 - Review of the Unit 2/3 integrated leak rate test procedure showed procedural requirements to have been incorporated to assure proper calibration records for instruments being used in the integrated leak rate test. Item resolved.

c. Licensee responses dated October 18, 1974 and February 20, 1975:<sup>8/</sup>

- (1) A.5.b - Review showed that administrative procedures for the review of deviation reports had been revised as described in the licensee's response. Licensee review of reportable occurrences had been noted during recent inspections to be proceeding as required. The licensee was also noted during this inspection to have established a system for reviewing non-reportable deviations; however, some backlog of unreviewed deviation reports remained. The inspector stated that this item would be reviewed during a future inspection.
- (2) Item A.5.c - Review of the onsite audit program during a previous inspection<sup>8/</sup> showed that audit checklists were being used as required. Item resolved.
- (3) Item A.5.d - Review of Discrepancy Report No. 0124, dated March 22, 1974, showed that control rod blades with serial Nos. HY2, HY15, and HY21 had been returned to the vendor's plant. Quality assurance training was noted to have been provided as stated in the licensee's response. Item resolved.
- (4) Item A.5.e - Revised work request procedures were noted to have been implemented, and quality assurance training was noted to have been provided as described in the licensee's response. Item resolved.
- (5) Item A.5.g - The inspector examined procedure 33-000-III, "General Surveillance Requirements for Instrument Mechanics", which had been revised as described in the licensee's

<sup>8/</sup> IE Inspection Rpts No. 050-010/75-16, No. 050-237/75-22, and No. 050-249/75-19.

letter. A spot check of three pieces of test equipment observed in use showed appropriate calibration labels to be attached. Item resolved.

(6) Item A.6 - Review of Unit 2/3 startup checkoff sheets showed notification to Radiation Protection of increased sampling requirements to have been added to the checkoff sheets as described in the licensee's response. Item resolved.

(7) Item A.7 - Review of licensee actions related to this item will be completed during a future inspection.

d. Licensee responses dated January 17 and February 5, 1975: 9/

Items A.1 and A.2 - These noncompliance items were related to the approval and implementation of maintenance procedures. Review of the licensee's quality assurance training program showed eight hours of training to have been provided in June, 1975, as described in the licensee's response. Items resolved.

e. Licensee responses dated September 2 and 26, 1975: 10/

(1) Item A.2 - It was noted that operator requalification oral examinations had been essentially completed, a qualification schedule had been formulated, and a program for conducting a management review of licensed operator performance had been implemented. Item resolved.

(2) Item B.1 - The inspector noted that records of operator evaluations, reviews of procedure changes, facility changes, plant manipulations, operator review of abnormal and emergency procedures, and operator license training dates were being maintained. Item resolved. The inspector questioned the licensee's practice of requiring a periodic review by licensed operators of only the overall plant abnormal and emergency procedures. This was discussed further during the management interview.

(3) Items B.2.a and B.2.c - The inspector noted that the licensee had initiated a program for improving the maintenance of records for non-licensed personnel. It was also noted that QP 2.52 changed the requirement for periodic reports to station management regarding the status and adequacy of the station training program such that reports are now required only when requested by the Station Superintendent. Items resolved.

9/ RO Inspection Rpt No. 050-237/74-09.  
10/ IE Inspection Rpts No. 050-010/75-13, No. 050-237/75-19, and  
No. 050-249/75-15.



- (4) Item B.2.b - Quality Procedure 2-52 was noted to have been revised to require training on new and revised quality procedures within 60 vice 30 days, and the licensee had established a program for accomplishing the training, although some training on recently issued quality procedures remained to be completed. The inspector stated that this item would be reviewed further during a future inspection.

8. IE Bulletin Followup (Units 2 and 3)

Licensee actions in response to RO Bulletin 74-14 were reviewed. This bulletin pertained to BWR relief valve discharges to the suppression pool, and was not applicable to Unit 1. The review showed current procedures to adequately address limits on bulk suppression pool temperatures during normal operation and to require tripping the reactor if bulk suppression temperatures exceeded established limits. The review showed the following considerations identified in the RO Bulletin not to be adequately covered in current procedures:

- a. Provision for taking prompt action in case of inadvertent relief valve actuation or failure to reseal, to minimize the duration of steam discharge;
- b. Prompt initiation of suppression pool circulation in cases of relief valve discharge, to minimize local peaking of water temperatures; and
- c. Requirements for visual internal and external inspection of the suppression pool subsequent to extended steam discharge to the suppression pool.

Item b was covered in part, in that one surveillance procedure involving relief valve actuation was noted to have a prerequisite of establishing suppression pool circulation. Three other procedures were noted to require visual external inspection of the suppression pool structure following extended relief valve discharges, although internal inspection was not discussed. During subsequent discussion, the licensee produced Procedure 200-AN-XV, which adequately treated these three aspects of the RO Bulletin, and which appeared to have been issued in response to the bulletin. The licensee stated, however, that the procedure appeared not to have been reissued when the AN procedure series was converted to the standardized DCA procedure series in late 1975. Licensee representatives stated during the management interview that procedure provisions responding to these portions of the RO Bulletin would be incorporated. The inspector stated that the licensee's actions in response to RO Bulletin 74-14 would be reviewed further during a future inspection.



REPORT DETAILS

Part II - January 20-21, 1976

Prepared by W. S. Little 3/3/76  
for J. W. Kohler (Date)

Reviewed by W. S. Little 3/3/76  
W. S. Little (Date)

9. Persons Contacted

- B. Stephenson, Station Superintendent
- D. Ruby, Central Files Coordinator
- C. Lawton, Office Manager
- R. Nimmer, Engineer Assistant
- C. Schiavi, Modification Coordinator
- C. Sargent, Unit 3, Leading Engineer
- T. Watts, Technical Staff Supervisor
- G. Romba, Special Assignment
- J. Kolanowski, Unit 2, Leading Engineer

10. Facility Records (Units 1, 2, and 3)

a. Record Retention and Retrieval

The inspector reviewed semiannual reports from the years 1974-1975 and selected the following maintenance and surveillance records relating to safety related equipment to be retrieved by the licensee. All documents requested were retrieved and no discrepancies were found.

(1) Reactor Coolant System

Unit 1, Design Modification, Changing Range of Core Spray Differential Pressure Switch.

Units 2 and 3, Main Steam Line Isolation Valve Maintenance (WR8562, October 3, 1974).

(2) Reactivity and Power Control

Unit 1, Control Rod Drive Exercise Surveillance (January - June 1975).

Units 2 and 3, Control Rod Drive K-11 Maintenance (WR4868, August 24, 1975).

Units 2 and 3, Control Rod Drive Exercise Surveillance (January - June 1975).

(3) Power Conversion and Auxiliary Systems

Unit 1, Replace Valve Operator on 1 C Steam Generator Isolation Valve (WR4331).

Units 2 and 3, Maintenance on "E" Tip Machine (WR8476, September 30, 1974).

Units 2 and 3, Emergency Diesel System Cooling Water Pump Maintenance (WR8854, October 26, 1974).

(4) Containment Systems

Units 2 and 3, Containment Cooling Service Water Surveillance (July-December 1975).

(5) ECCS

Unit 1, Core Spray Line Flange Bolts (WR3374).  
Units 2 and 3, HPCI Flow Rate Test.

(6) Other Engineered Safety Features

Unit 1, Replace Valve Operators Off Steam Line to Poison Tank (WR3374).

Units 2 and 3, SGTs Maintenance (WR8788, September 25, 1974).

(7) Electrical Systems

Unit 1, DC System Battery Charger Surveillance (June 5, 1975).

Units 2 and 3, Diesel Generator Monthly Inspection (December, 1975)

b. Maintenance of As-Built Drawings

Records of facility changes were reviewed to determine whether facility changes were being incorporated into as-built drawings.

The licensee maintains a central file and several satellite files containing construction prints (M drawings) on microfilm cards for all three units. Following the installation of a facility

change, a marked-up copy of the print is sent to central files and is filed in the DCR file (prints needing offsite revision). All microfilm cards within the plant pertaining to that particular modification are then stamped "revision pending", referring the user to the DCR file. When the print is finally revised, it is microfilmed and all pertinent cards stamped "revision pending" are then replaced.

The following design modification packages were selected from the DCR file. These packages contained marked up building prints that had not been formally revised by Sargent and Lundy. The inspector verified that all file locations containing microfilm cards of these design modifications were stamped "revision pending." No discrepancies were found.

<u>Modification Number</u>	<u>Print Number</u>	<u>Date</u>
74-6	M539M	3/26/74
74-11	M374A	8/6/74
74-26	M356A	11/5/74
75-60	M26A	4/15/74
75-166	12E2540A	

Two Unit 1 design modifications from the January-June 1975 semiannual report were selected to determine whether the prints were revised to include the design modification. No discrepancies were found.

- (1) Core Spray System - Changing the range of the core spray differential pressure switch from 0-300 psi to 0-50 psi.
- (2) Diesel Generator - Addition of a thermoswitch to alarm in the control room on low temperature.

c. Facility Modifications

Facility modifications were selected from 1974-1975 semiannual reports for review under the guideline of 10 CFR 50.59.2.b. No discrepancies were found.

- (1) Modification 73-192 - Installation of a 3.95 inch test connection with a valve on line 2-1603-18-LX downstream of valve 1601-60 in the Unit 2/3 torus areas.

(2) Modification 74-197 - Increasing the Unit 2/3 scram discharge volumes from 1.1 to 3.34 gallons per control rod drive.

d. Print Changes

The inspector reviewed the file containing marked up copies of construction prints describing facility modifications that have been installed. These prints were awaiting final revision by Sargent and Lundy and some dated back to March, 1974. The inspector asked the licensee why prints requiring formal changes could not be updated in a more timely fashion. The licensee agreed with the inspector that the prints should be revised more quickly, and will expedite the necessary revisions.

e. Control of Facility Changes Performed by Corporate or Contractor Groups

The inspector had difficulty recovering facility change packages initiated by offsite entries, such as Station Nuclear Engineering, and General Electric Company. The licensee acknowledged this difficulty, and had previously identified it in an internal audit. The licensee stated that some revisions to the current administrative procedure may be necessary to facilitate recovery of modification documents initiated offsite. The inspector had no further questions regarding this item.

11. Containment Air Cleaning System (Units 2 and 3)

- a. The inspector reviewed the results of the last charcoal filter efficiency test on standby gas treatment system (SGTS), performed in June, 1974. The results of this test indicated that one train had an efficiency for removal of iodine of only 78%. This was reported by the licensee as an abnormal occurrence<sup>11/</sup>. The licensee's corrective action was to change out the charcoal. The completed work request was produced as documentation that the charcoal had been replaced. The inspector had no further questions regarding this item.
- b. A previous inspection<sup>12/</sup> in November 1975 identified that charcoal cartridges installed in the SGTS appeared to have been installed with improper orientation, based on direction-of-flow arrows shown on certification tags attached by the manufacturer. The licensee has determined through visual examination of the filter trains that the trays are installed correctly, although the tags are on backwards. The inspector was shown a work request to retag the filter trains correctly,

<sup>11/</sup> Ltr, Stephenson to Keppler, dtd 7/2/74.

<sup>12/</sup> IE inspection Rpts No. 050-237/75-26 and No. 050-249/75-23.

as well as a document dated December 4, 1975 describing the results of the visual inspection of the SGTS filter trains. The inspector considers this item to be resolved.

REPORT DETAILS

Part III - January 26-28, 1976

Prepared by C. H. Brown 3/3/76  
C. H. Brown (Date)

Reviewed by W. S. Little 3/3/76  
W. S. Little (Date)

12. Persons Contacted

T. Watts, Technical Staff Supervisor  
M. Wright, Quality Control Engineer

13. Quality Assurance Program - Annual Review (Units 1, 2, and 3)

In conducting the annual review of the licensee's Quality Assurance Program, the inspector selected three areas to determine whether the licensee's Quality Assurance Manual and implementing procedures fulfill the commitments outlined in Topical Report CE-1, which describes the Commonwealth Edison Quality Assurance Program.

a. Audits

Review of the Quality Assurance Manual and station implementing procedures revealed that written provisions have been established for performing onsite audits. Responsibilities in the following areas have been assigned:

- (1) Overall management.
- (2) Approval of procedures.
- (3) Determining adequacy of qualifications of personnel to perform audits.
- (4) Determining the independence of audit personnel.
- (5) Assuring corrective actions are taken on items identified during the audits.
- (6) Issuance of audit reports to management.
- (7) Periodic review to determine the status and adequacy of the audit program.



Areas to be audited and audit schedules have been defined.

Methods and followup have been defined for corrective actions to audit identified deficiencies.

Requirements have been defined for independence of the audit personnel.

Requirements for audit report distribution have been defined.

Review of onsite audits for the second and third quarters of 1975 indicated a satisfactory level of audit followup, with the exception that Technical Specification surveillance requirements were not being audited for coverage in surveillance procedures. The licensee stated that a random sample of Technical Specifications requirements would be audited during a forthcoming audit.

b. Procurement Control

The review of the station's Quality Assurance Manual and implementing procedures for procurement control showed that written provisions have been established in accordance with commitments in Topical Report CE-1 as follows:

- (1) Responsibilities have been defined for key personnel utilized in procurement activities.
- (2) Written procedures define the responsibilities for final review and approval of procurement documents for all equipment and supplies.
- (3) A formal method has been established to maintain control of changes to procurement documents.
- (4) Provisions have been established defining the method of qualifying vendors and suppliers, specifying methods for documentation of the qualification, and requiring selection and use of only qualified vendors, suppliers, or contractors.
- (5) The defined controls include provisions to assure that the procurement documentation contains verification of quality as necessary.
- (6) The specific identification of equipment and materials to be included in the procurement documentation is defined in the procurement controls.

- (7) Requirements have been established to assure that safety related services provided by a contractor, vendor, or other outside organization will have an established QA program equivalent to the licensee's.
- (8) The licensee has an established program defining the type and frequency of controls to be used to verify implementation of an outside organization's QA program.

The licensee's program contains a "grandfather clause" pertaining to "Original Equipment Manufacturer" so that a vendor of this category is not subjected to the qualifications as stated in b(4).

c. Receipt, Storage and Handling

Review of the Quality Assurance Manual and station implementing procedures showed that written provisions have been established for receipt, storage and handling of equipment and materials as follows:

- (1) Written requirements have been established for conducting receipt inspections of safety related materials, and responsibilities have been assigned to assure that receipt inspections are performed.
- (2) Controls have been established for identifying, segregating and disposing of nonconforming items. Provisions have been defined for notifying the affected organization of a nonconforming item. Requirements have been established for documenting and prohibiting actual operation or use of equipment or material in a "nonconforming" status. Responsibilities have been assigned to assure that the above controls for nonconforming equipment and materials are implemented.
- (3) Measures have been established for controlling the storage of safety related equipment and materials onsite. Off site storage is addressed in the qualification of the supplier.
- (4) Responsibilities have been assigned to assure that controls referenced in (3) above are implemented.
- (5) Measures have been established which control the handling of safety related equipment and materials. Responsibilities have been defined to assure these controls are maintained.
- (6) Provisions have been defined to assure that safety related equipment and material tests and inspections are formally recorded and maintained.