U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-254/90022(DRP); 50-265/90021(DRP)

Docket Nos. 50-254; 50-265 Licenses No. DPR-29; DPR-30

Licensee: Commonwealth Edison Company
Opus West III
1400 Opus Place
Downers Grove, IL 60515

Facility Name: Quad Cities Nuclear Power Station, Units 1 and 2

Inspection At: Quad Cities Site, Cordova, Illinois

Inspection Conducted: November 4 through December 15, 1990

Inspectors: T. E. Taylor
J. Shine
R. Bocanegra
K. D. Ward

Approved By: J. Hinds, Chief
Reactor Projects Section 1B Date

Inspection Summary

Inspection from November 4 through December 15, 1990 (Reports No. 50-254/90022(DRP); 50-265/90021(DRP))
Areas Inspected: Routine, unannounced safety inspection by the resident and regional inspectors of licensee action on previously identified items; licensee event report review; regional request; operational safety verification; engineered safety feature systems; monthly maintenance observation; monthly surveillance observation; training effectiveness; report review; events; and meetings and other activities.
Results: Of the areas inspected, two violations, and one unresolved item were identified. The violations concerned five examples of failure to perform surveillances as required by Technical Specifications, and failure to take adequate corrective actions to preclude repetition concerning work package content and instructions for electrical maintenance activities. The following is a brief summary of inspection findings and area status.

EXECUTIVE SUMMARY

Plant Operation

1) During the inspection period station management continued its efforts to identify problem areas. A number of initiatives and action plans for enhancement of station performance have been developed. One event (Unit 2 scram on October 27, 1990), for which Escalated Enforcement Action was taken showed that additional management attention is needed in the area of controlling operations activities.

2) Closed LERs: 254/88004-LL, 90027-LL, 90014-LL, 90019-LL, 90020-LL; 265/8808-LL, 88010-LL, 88012-LL, 88017-LL, 90002-LL, and 90014-LL.

3) An Enforcement Conference regarding the Unit 2 October 27, 1990 scram was held on December 7, 1990.

4) Unit 2 HPCI flow controller failed requiring the licensee to make an ENS call. The controller was replaced and the HPCI pump was returned to operable status.

Maintenance and Surveillance

1) Overall the licensee's maintenance and surveillance programs appear adequate but may be declining. One violation for inadequate work instructions, and one for failure to perform Technical Specification surveillances were identified. The inspectors are monitoring this area to evaluate any downward trend.

2) The Unit 1 refuel outage is in progress. Only minor coordination problems associated with equipment out-of-services have been noted. Overall control of outage activities has shown an improvement over previous outages.

Engineering and Technical Support

1) This area continues to improve, in that, more System Engineers have been hired, a Systems Engineer Supervisor position has been created, and a formal training program for System Engineers is being established.

2) One Unresolved Item was identified concerning adequacy of onsite review (OSR) documentation. The concern relates to a special turbine torsional test for which no documentation exists except for the completed procedure and a list of OSR attendees.

3) A modification review was performed with no violations or deviations identified.

Radiological Controls

Performance in this area is improved. The percentage of contaminated plant areas has decreased from 40 percent to about 24 percent. Personnel dose and contaminations are below licensee projected levels.

Security

No concerns were identified. The licensee continues its high level of performance in this area.

DETAILS

1. Persons Contacted

Commonwealth Edison Company (CECo)

*D. Galle, Vice President, BWR Operations
*N. J. Kalivianakis, General Manager, BWR Operations
*R. L. Bax, Station Manager
*F. J. Geiger, Acting Technical Superintendent
*R. A. Robey, Acting Production Superintendent
R. Stols, Nuclear Licensing Administrator
*J. Swales, Assistant Superintendent - Operations
*G. Tietz, Superintendent of Programs
J. Fish, Master Mechanic
*J. Sirovy, Services Director
*T. Tamlyn, ENC Site Manager
*D. Craddick, Assistant Superintendent - Maintenance
B. Tubbs, Operating Engineer - Unit 1
G. Klone, Operating Engineer - Unit 1
M. Kooi, Operating Engineer - Unit 2
J. Kopacz, Operating Engineer - Unit 2
B. Strub, System Engineer Supervisor
J. Wethington, Assistant Tech Staff Supervisor
D. Gibson, Regulatory Assurance Supervisor
R. Walsh, Technical Staff Supervisor
D. Bucknell, Assistant Technical Staff Supervisor
*D. Kanakares, Regulatory Assurance
*J. Neal, Onsite Nuclear Safety Administrator
*C. Smith, Nuclear Quality Program Supervisor
K. Leech, Security Administrator
W. McGaffigan, Assistant Superintendent - Work Planning
J. Hoeller, Training Supervisor
T. Barber, Regulatory Assurance
*R. Bajema, Chief Steward
*D. Edwards, Chief Steward

Nuclear Regulatory Commission

*W. D. Shafer, Branch Chief, Division of Reactor Projects
*B. L. Burgess, Section Chief, Division of Reactor Projects
*T. Taylor, Senior Resident Inspector
*R. Bocanegra, Resident Inspector
*J. Shine, Resident Inspector

*Denotes those attending the exit interview conducted on December 14, 1990, and at other times throughout the inspection period.

The inspectors also talked with and interviewed several other licensee employees, including members of the technical and engineering staffs, reactor and equipment operators, shift engineers and foremen, and electrical, mechanical and instrument maintenance personnel, and contract security personnel.

2. Licensee Action on Previously Identified Items (92701, 92702)

Administrative Closures

NRC Region III management has reviewed the inspection items open for the Quad Cities station and determined that the following items will be closed administratively due to their lack of safety significance relative to emerging priority issues and to the age of the item. The licensee is reminded that commitments directly relating to these open items are the responsibility of the licensee and should be met as committed. NRC Region III will review licensee actions by periodically sampling administratively closed items.

a. (Closed) Bulletin 254/85003-BB; 265/85003-BB: Motor Operated Valve Common Mode Failures During Plant Transients.

b. (Closed) Unresolved Item 254/87028-03: Licensee Declared System Operable With Inoperable Support.

c. (Closed) LER 254/88004-LL: Reactor Head Vent Line Outside Safety Analysis Criteria for Allowable Stress Due to Design Error.

d. (Closed) LER 265/88008-LL: Linear Indications on Reactor Water Cleanup System Weld Due to Postulated Stress Corrosion Cracking.

e. (Closed) LER 265/88010-LL: Drywell Atmosphere Thermocouple Splices Did Not Have Raychem Heat Shrink.

f. (Closed) LER 265/88012-LL: Existing Pipe Supports Line 2-1265-2" Do Not Meet Design Requirements Due to Improper Analysis During Modification.

g. (Closed) LER 265/88017-LL: Stresses In MSIV Air Line Exceed FSAR Allowables.

h. (Closed) Unresolved Item 265/90017-01: On October 3, 1990, during the performance of a surveillance on Unit 2, the #3 and #4 control valves failed to fast close and give the associated half scrams. Lifted leads in the #3 and #4 turbine control valve fast acting solenoid valve (FASV) electrical circuits were identified as the cause of the test failure.

The FASV maintenance activities were reviewed by the NRC resident inspectors through discussions with electrical maintenance personnel (EM) and review of the work packages for Unit 2 #3 and #4 turbine control valve FASVs. The inspectors identified the causes of the test failure to be inadequate work package instructions and content, and inadequate information exchange between maintenance work shifts. The EM, that determinated the leads, interpreted the instructions to allow him to lift leads at a junction box, in addition to, lifting leads of the limit switches and solenoids. The lifted leads were not required to be documented in the work package. The EMs on subsequent shifts were not informed of the lifted leads at the junction box. The instructions for the activity were not of

sufficient detail to identify the actual leads to be lifted. Also, the package did not contain drawings which included the limit switch and solenoids that required additional leads to be lifted.

Corrective actions for a previous violation (265/89022-02a) for inadequate work instructions associated with a turbine stop valve maintenance activity included: Counseling of the EM work analyst by the Master Electrician on the importance and significance of work detail included when developing work packages; and a discussion with the Electrical Maintenance department with specific emphasis on ensuring that the drawings reflect the actual field conditions prior to performing any work.

Failure to take adequate corrective action for the previous event to preclude repetition of a similar event is considered a violation of 10 CFR 50 Appendix B Criterion XVI (50-265/90021-02(DRP)).

One violation was identified.

3. Licensee Event Report (LER) Review (92700)

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, that immediate corrective action was accomplished, and that corrective action to prevent recurrence had been or would be accomplished in accordance with Technical Specifications (TS):

a. (Closed) LER 254/90027-LL: Improperly Performed Technical Specification While in Economic Generation Control Due to Personnel Error.

b. (Closed) LER 265/90002-LL: Missed Technical Specification Fire Valve Surveillance. Valve Not Cycled Due to Personnel Error.

c. (Closed) LER 254/90014-LL: Missed Radiological Effluent Technical Specification Reactor Power Increase Due to Poor Communication.

d. (Closed) LER 254/90019-LL: Missed Technical Specification Surveillances on the Main Steam Line Radiation Monitors Due to Operator Error.

e. (Closed) LER 254/90020-LL: Missed Technical Specification Continuous Fire Watch Due to Misinterpretation of Technical Specification Requirement.

In addition to the foregoing, the inspector reviewed the licensee's Deviation Reports (DVRs) generated during the inspection period. This was done in an effort to monitor the conditions related to plant or personnel performance, potential trends, etc. DVRs were also reviewed for proper initiation and disposition as required by the applicable procedures and the QA manual.

No violations or deviations were identified.

4. Regional Request (92701)

R. L. Dickherber Remediation Training Program (40704)

As addressed by a letter dated July 11, 1990, the licensee, (in response to Mr. Dickherber's unauthorized fuel movement event) has completed Phase 1 of Mr. Dickherber's "Individual Performance Monitoring and Improvement Plan". Phases 2 and 3 remain to be completed. Mr. Dickherber has successfully completed all Phase 1 aspects of the NRC approved training program. Monthly licensee management evaluations of Mr. Dickherber's performance were performed with satisfactory results. Mr. Dickherber's training included observing and evaluating procedural adherence of specific licensee activities, housekeeping inspections, and conducting a tailgate discussion addressing the vital importance of procedural adherence. Phases 2 and 3 of the program will be completed in the first quarter of 1992. At this time the inspector has no further concerns with this issue. Phases 2 and 3 of the program will be evaluated upon completion.

No violations or deviations were identified.

5. Operational Safety Verification (71707)

During the inspection period, the inspectors verified that the facility was being operated in conformance with the licenses and regulatory requirements and that the licensee's management control system was effectively carrying out its responsibilities for safe operation. This was done on a sampling basis through routine direct observation of activities and equipment, tours of the facility, interviews and discussions with licensee personnel, independent verification of safety system status and limiting conditions for operation action requirements (LCOARs), corrective action, and review of facility records.

On a sampling basis the inspectors daily verified proper control room staffing and access, operator behavior, and coordination of plant activities with ongoing control room operations; verified operator adherence with the latest revisions of procedures for ongoing activities; verified operation as required by Technical Specifications (TS); including compliance with LCOs, with emphasis on engineered safety features (ESF) and ESF electrical alignment and valve positions; monitored instrumentation recorder traces and duplicate channels for abnormalities; verified status of various lit annunciators for operator understanding, off-normal condition, and corrective actions being taken; examined nuclear instrumentation (NI) and other protection channels for proper operability; reviewed radiation monitors and stack monitors for abnormal conditions; verified that onsite and offsite power was available as required; observed the frequency of plant/control room visits by the station manager, superintendents, assistant operations superintendent, and other managers; and observed the Safety Parameter Display System (SPDS) for operability.

During tours of accessible areas of the plant, the inspectors made note of general plant/equipment conditions, including control of activities in progress (maintenance/surveillance), observation of shift turnovers, general safety items, etc. The specific areas observed were:

a. Engineered Safety Features (ESF) Systems

Accessible portions of ESF systems and components were inspected to verify: valve position for proper flow path; proper alignment of power supply breakers or fuses (if visible) for proper actuation on an initiating signal; proper removal of power from components if required by TS or FSAR; and the operability of support systems essential to system actuation or performance through observation of instrumentation and/or proper valve alignment. The inspectors also visually inspected components for leakage, proper lubrication, cooling water supply, etc.

b. Radiation Protection Controls

The inspectors verified that workers were following health physics procedures for dosimetry, protective clothing, frisking, posting, etc., and randomly examined radiation protection instrumentation for use, operability, and calibration.

c. Security

The inspectors, by sampling, verified that persons in the protected area (PA) displayed proper badges and had escorts if required; vital areas were kept locked and alarmed, or guards posted if required; and personnel and packages entering the PA received proper search and/or monitoring.

d. Housekeeping and Plant Cleanliness

The inspectors monitored the status of housekeeping and plant cleanliness for fire protection, protection of safety-related equipment from intrusion of foreign matter and general protection.

The inspectors also monitored various records, such as tagouts, jumpers, shiftly logs and surveillances, daily orders, maintenance items, various chemistry and radiological sampling and analysis, third party review results, overtime records, QA and/or QC audit results and postings required per 10 CFR 19.11.

No violations or deviations were identified.

6. Installation and Testing of Modifications (37828)

The Inspectors reviewed onsite activities and hardware associated with the installation of the Unit 1 Emergency Diesel Generator (DG) Prelubrication Modification (MD4-1-88-019).

The purpose of the DG Prelube Modification is to upgrade the lube oil system to provide continuous lubrication to the engine crankshaft and turbocharger bearings, and maintain the lube oil system accessories filled with oil at all times.

The inspector ascertained that selected modification activities were in conformance with the Technical Specification requirements, 10 CFR 50.59, and 10 CFR 50 Appendix B, Criterion III, "Design Control".

The inspector verified through direct observation and interviews with workers that work was accomplished with approved instructions, procedures and drawings; that QC hold points and witness points were included and executed; and that properly calibrated tools were being used when required. The inspector also reviewed QC Inspector certification and welder's certification records, and tool calibration records.

During prelube pump installation it was discovered that the pump did not align with its drive motor. Subsequent reviews identified that a drawing discrepancy existed. On-Site Corporate Engineering is currently reviewing the drawing discrepancy.

No violations or deviations wre identified.

7. Monthly Maintenance Observation (62703)

Station maintenance activities affecting the safety-related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, Regulatory Guides and industry codes or standards, and in conformance with Technical Specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from and restored to service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and fire prevention controls were implemented. Work requests were reviewed to determine the status of outstanding jobs and to assure that priority is assigned to safety-related equipment maintenance which may affect system performance.

The following maintenance activities were observed and reviewed:

Unit 1

1R Residual Heat Removal Pump Rotor Maintenance

Major Ten Year Pump Motor Environmental Qualification of G.E. 4 KV ECCS Motor (QCEMS 250-18)

Drywell Ventilation Valve Number 1601-23 Replacement

Diesel Engine Cylinder Head and Power Pac Inspection (QMPM 6600-1 Rev. 1)

Unit 2

WR Q88665, Unit 2 Reactor Manual Control System Sequence Timer Replacement

The inspectors monitored the licensee's work in progress and verified that it was being performed in accordance with proper procedures, and approved work packages, that 10 CFR 50.59 and other applicable drawing updates were made and/or planned, and that operator training was conducted in a reasonable period of time.

No violations or deviations were identified.

8. Monthly Surveillance Observation (61726)

The inspectors observed surveillance testing required by Technical Specifications during the inspection period and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that results conformed with Technical Specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that with the two exceptions noted below any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

a. Special Test Onsite Review

Associated with the October 27, 1990 Unit 2 reactor scram, the onsite review (OSR) of the turbine torsional special test procedure was reviewed by the inspectors. A concern was identified, relative to the adequacy of the onsite review documentation. Section six of the Technical Specification requires that reports, reviews, investigations, and recommendations prepared and performed for onsite reviews shall be documented. For the special test procedure the only documentation consisted of a test approval sheet which contained the test title, method of validation, and a list of attendees. There was no documented evidence of reviews, investigations or recommendations prepared for the OSR test review. This is considered an unresolved item (265/90021-03 (DRP)).

b. Missed Technical Specification Surveillances

During this reporting period, five examples of missed improperly performed Technical Specification surveillances were identified. Quad Cities Nuclear Power Station Operating Licenses DPR-29 and DPR-30, Section 3.B states that "The licensee shall operate the facility in accordance with the Technical Specifications". Failure to perform surveillances in accordance with the Technical Specifications is a violation of Quad Cities Operating Licenses DPR-29 and DPR-30. The five examples are discussed below:

(1) Unit 1 Technical Specification (TS) 3.12.F.2 requires all penetration fire barriers protecting safety related areas be intact or else a continuous fire watch must be established. On September 20, 1990, the Unit 1 cable tunnel access hatch had been open for approximately six weeks to repair the HPCI/RCIC test return line when the licensee recognized that the 20 minute interval fire watch being performed by contractor personnel did not comply with Technical Specification 3.12.F.2. A Licensee Event Report (LER) was issued by the licensee as required by 10 CFR 50.73.

The cause of the missed fire watch was a personnel error relating to a misinterpretation of the meaning of the term "continuous" fire watch. Upon discovering the error, the licensee established a "continuous" fire watch, and administrative procedure QAP 1170-14 was changed to provide a clear description of a continuous fire watch to avoid future problems (50-254/90022-01a(DRP)).

(2) Unit 2 Technical Specification 4.12.B.1.d requires each Fire Suppression System be demonstrated operable at least once per year by cycling each testable valve in the flow path through at least one complete cycle of full travel. On January 2, 1990, the licensee discovered that an in-line sprinkler system valve, 2-4199-72, had not been hand cycled by operating personnel to verify operability since April 20, 1988, exceeding the once per year Technical Specification requirement. The cause was attributed to a misinterpretation of procedure.

As corrective action, the Shift Engineer instructed operating personnel to cycle valve 2-4199-72. Additionally, the licensee committed to revise procedures QOS 4100-2 and QOS 4100-S12. (50-265/90021-01b(DRP)).

(3) On July 2, 1990 [illegible] 1B reactor recirculation pump was restarted aft[illegible]id tripped. Restarting the pump caused a 519 MW (20.7%) [illegible]al power change in one hour. Unit 1 Technical Specification Table 4.8-1 requires the licensee to take a radiological effluent sample within 24 hours following a thermal power level change exceeding 20% of rated thermal power in one hour. Due to poor communications, the sample was not taken until July 4, 1990, and it showed no increase in activity. The Main Chimney and Reactor Building Ventilation noble gas monitor strip charts were reviewed by the licensee and no abnormalities were observed. Chemistry procedure QCP 100-S8 will be revised to add a sign off step for the Shift Engineer to verify that the samples are taken. (50-265/90021-01c(DRP))

(4) While reviewing operating log QOS 005-S1, "Operations Department Weekly Summary of Daily Surveillance", the Shift Control Room Engineer (SCRE) noticed a missed instrument check. The once-per-shift instrument check of the main steam line radiation monitors was not performed on August 12, 1990 (Shift 3) and on August 14, 1990 (Shift 1). Technical

Specification Table 4.1-1 footnote [2] states that an instrument check shall be performed on high steamline radiation once per shift. The missed surveillance was attributed to personnel error, and as corrective actions, the licensee discussed the event at Operating Department's tailgate meetings and QOS 005-S1 will be revised. (50-254/90022-01d(DRP)).

(5) Unit 1 Technical Specification 4.3.F requires that prior to entering EGC and once per shift while operating in EGC, the EGC operating parameters be reviewed for acceptability. On November 4, 1990, with Unit 1 at approximately 93% power, the Unit NSO was performing a surveillance prior to entering EGC operations when he discovered that the Core Monitoring Code (CMC) had not been run for approximately 24 hours in violation of Technical Specification 4.3.F. The cause of the event appears to be personnel error in that the NSOs on the two previous shifts failed to verify the date and time on the printer that the CMC was run. Instead they relied on information displayed on the operating console monitor which did not display the current date and time. The data recorded was not updated, therefore the surveillance was invalid. The licensee will revise procedures to require the date and time be recorded on the EGC surveillance sheet, and the monitor display format will be corrected to prevent the date and time from scrolling off the screen. An operator aid has also been posted at both units to help operators read the information displayed on the monitor. The licensee determined, through thermal limit calculations and the lack of control rod movements, that the risk of fuel damage was remote. (50-254/90022-01e(DRP))

The inspectors also witnessed portions of the following test activities:

Unit 0

Emergency Diesel Generator Monthly Operability Surveillance (QOS 6600-1)

Station Battery Weekly Surveillance (QOS 6900-01)

Annual and Semi-Annual 8-Hour Emergency Lighting Packs Inspection (QEPM 300-2 and 3)

Unit 2

Standby Liquid Control System Check Valve Operability Testing at Cold Shutdown (QOS 1100-3)

MSIV Closure Monthly Scram Sensor Functional Test (QOS 250-1)

One violation with five examples of failure to meet Technical Specifications were identified in this area.

9. Refueling Activities (60710)

The inspection objective was to ascertain whether pre-refueling activities specified in the Technical Specifications (TS) have been completed and whether refueling activities are being controlled and conducted as required by TS and approved procedures.

The licensee placed Unit 1 in cold shutdown on November 12, 1990. During the report period the inspectors observed and reviewed portions of the following refueling activities:

Fuel receipt and inspection; secondary containment integrity verification; housekeeping, loose object control, and adherence to radiation protection guidelines; refueling bridge interlock testing and adequacy of refuel bridge operation; spent fuel pool temperature monitoring; adherence to overtime guidelines for fuel handling personnel and non-licensed operators; communication between control room and refuel floor operators concerning fuel movements and adherence to nuclear component transfer procedures; containment penetration leak rate testing to ensure proper assessment of as-found containment integrity; outage coordination activities specifically inter-departmental communication and overall outage control; contractor control; core cooling and monitoring capability as required by TS; shift turnovers and briefings related to outage activities; secondary containment penetration status and control; equipment lockout and tagging activities for conformance with written procedures and impact on simultaneous multiple operations performed on equipment or systems.

The following outage related events occurred:

a. On November 15, 1990, it was discovered during Appendix I testing of the 62B feedwater check valve that the containment leakage had exceeded the as-found allowable leakage rate defined by the Technical Specifications (LER 254-90029).

b. On December 6, 1990, the licensee experienced a group II containment isolation resulting from an improper return to service of reactor vessel level instrumentation (LER 254-90025).

c. On November 19, 1990, during spent fuel transfer, an irradiated fuel bundle contacted the bottom ramp of the fuel transfer canal. The apparent cause was that the refuel hoist jammed before reaching the full up position and the operator was not aware of the bundle's jammed condition. As the operator moved the spent bundle toward the transfer canal gate he noticed that the fuel bundle would not clear the gate and shut down the refueling bridge motor. The bottom of the fuel bundle came in contact with the transfer canal ramp as the bridge coasted to a halt. No abnormal rad levels or evidence of fuel bundle damage was found. The licensee halted further fuel movements until the refuel hoist was repaired and tested satisfactorily. This event was of minor safety significance. The inspectors have no further concerns with this issue.

The inspectors reviewed the safety significance of the events, and the licensee's responses which were found adequate.

The inspector's observation and review of the licensee's refueling activities indicated that, with the exception of three minor events, only minor discrepancies involving out-of-service coordination for maintenance group activities have occurred. The outage appears to be adequately managed and the events and discrepancies observed do not appear anomalous for a refueling outage and have had minimal impact on the outage.

No violations or deviations were identified.

10. Cold Weather Preparations (71714)

The objective of this review was to confirm that the licensee has maintained effective implementation of the program of protective measures for extreme cold weather consistent with commitments delineated in their response to I.E. Bulletin 79-24.

The inspectors reviewed the licensee's response which identified five safety-related concerns requiring protective measures. The inspector verified that tank heating elements and heat tracing circuits were energized in a timely manner, were operating properly, and were routinely monitored. The program implementation appears adequate in regards to I.E. Bulletin 79-24 commitments.

No violations or deviations were identified.

11. Training Effectiveness (41400, 41701)

The effectiveness of training programs for licensed and non-licensed personnel was reviewed by the inspectors during the witnessing of the licensee's performance of routine surveillance, maintenance, and operational activities and during the review of the licensee's response to events which occurred during the inspection period. Personnel appeared to be knowledgeable of the tasks being performed, and nothing was observed which indicated any ineffectiveness of training.

No violations or deviations were identified.

12. Report Review

During the inspection period, the inspector reviewed the licensee's Monthly Performance Report for October and November 1990. The inspector confirmed that the information provided met the requirements of Technical Specification 6.9.1.8 and Regulatory Guide 1.16.

The inspector also reviewed the licensee's Monthly Plant Status Report for October 1990.

No violations or deviations were identified.

13. Events (93702)

On November 24, 1990, the licensee experienced a problem with the HPCI electronic flow controller (FC). At 4:00 p.m., the flow controller was verified to be operable by the Unit 2 NSO as part of the panel walkdown, but at 4:22 p.m., the NSO noted the HPCI flow controller fail light was lit and the controller in manual. By 1:20 a.m., on November 25, 1990, the licensee had replaced the Unit 2 FC with the Unit 1 FC and HPCI was declared operable.

The Unit 2 HPCI FC was replaced with a digital electronic FC during the Spring 1990 refueling outage. In June 1990, the FC experienced a similar failure, and per manufacturer recommendation, the licensee replaced the EPROM card in the FC. Dresden uses the same type FCs and has not experienced any failures. The licensee has a spare FC and is considering sending the defective unit back to the manufacturer for testing to determine the cause for the failures. The Resident Inspectors are following the licensee's corrective actions.

No violations or deviations were identified.

14. Management/Plant Status Meeting

On December 7, 1990, an Enforcement Conference was held in the Region III office regarding the circumstances associated with the Unit 2 scram on October 29, 1990. Two separate conferences were held, one for the utility Part 50 license and the other for operator Part 55 licenses.

A meeting was held on December 14, 1990, between Wayne Shafer, Chief, Branch 1, Division of Reactor Projects, Region III, and Dick Bax, Station Manager, and members of each of their staffs. The purpose of the meeting was for the licensee to provide an update on the status of the Performance Enhancement Program.

No violations or deviations were identified.

15. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, open items, deviations or violations. An unresolved item disclosed during this inspection is discussed in Paragraph 8.a.

16. Exit Interview (30703)

The inspectors met with the licensee representatives denoted in Paragraph 1 during the inspection period and at the conclusion of the inspection on December 14, 1990. The inspectors summarized the scope and results of the inspection and discussed the likely content of this inspection report. The licensee acknowledged the information and did not indicate that any of the information disclosed during the inspection could be considered proprietary in nature.