

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-341/90017(DRP)

Docket No. 50-341

Operating License No. NPF-43

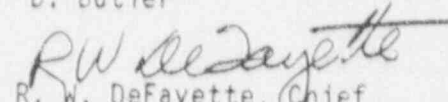
Licensee: Detroit Edison Company  
2000 Second Avenue  
Detroit, MI 48226

Facility Name: Fermi 2

Inspection At: Fermi Site, Newport, MI

Inspection Conducted: October 19 through December 18, 1990

Inspectors: W. G. Rogers  
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Approved By:   
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Reactor Projects Section 2B

JAN 07 1991

Date

Inspection Summary

Inspection on October 19 to December 18, 1990 (Report No. 50-341/90017(DRP))

Areas Inspected Action on previous inspection findings; operational safety; maintenance; surveillance; followup of events; preparations for refueling; and allegation review.

Results: Onshift operator performance was adequate during the inspection period. Major plant evolutions such as the unit shutdown, were properly implemented. Operator cognizance of equipment status has improved from the last inspection period. Weaknesses still exist in certain cases with the level of familiarity operators have with administrative procedures. Control of activities on the refuel floor during new fuel receipt was inadequate and resulted in a violation. Supervisors in the Operations Department were not fully cognizant of license restrictions placed on their Nuclear Supervising Operators (NSOs). Maintenance personnel failed to adhere to administrative procedures in one case during the period which resulted in a non-cited violation. Improvements continue to be noted in managing and controlling the scope of outage related work activities. Certain individuals appear to have violated radiation protection requirements by eating and smoking within the RCA. Licensee management has initiated actions to identify those individuals and prevent future occurrences of this type. Engineering support during the current maintenance outage has been good overall. However, coordination of a recent change to the Technical Specifications was weak. One non-cited violation was identified (Paragraph 4) and one violation was identified (Paragraph 7). One unresolved item was identified (Paragraph 3.d).

## DETAILS

### 1. Persons Contacted

#### a. Detroit Edison Company

- \* R. Anderson, Superintendent, Radiation Protection
- \* P. Anthony, Licensing
- \* S. Catola, Vice President, Nuclear Engineering and Services
- \* R. Eberhardt, Outage Manager
- \*# G. Cranston, General Director, Nuclear Engineering
- \*# P. Fessler, Superintendent, Technical Engineering
- # D. Gipson, Assistant Vice President, Nuclear Operations
- \*# L. Goodman, Director, Licensing
- \* J. Korte, General Supervisor, Security Operations
- \*# A. Kowalczyk, Maintenance Superintendent
- \* R. Laubenstein, Nuclear Shift Supervisor
- R. May, Director, Nuclear Materials Management
- \*# R. McKeon, Plant Manager, Nuclear Production
- \* W. Miller, Director, NQA
- \* E. Nickolite, General Supervisor, I&C
- G. Ohlemacher, Principal Engineer, Licensing
- \*# W. Orser, Senior Vice President, Nuclear Operations
- J. Pendergast, Compliance Engineer
- # G. Preston, Director, Nuclear Training
- \* T. Schehr, Operations Engineer
- B. Sheffel, Nuclear Production, Technical Engineering ISI
- F. Svetkovich, Operations Support Engineer
- \* R. Stafford, General Director, Nuclear Assurance
- W. Tucker, Assistant to the Vice President
- \* J. Walker, General Supervisor, Plant Engineering

#### b. U.S. Nuclear Regulatory Commission

- # W. Rogers, Senior Resident Inspector
- \*# S. Stasek, Resident Inspector
- P. Byron, Senior Resident Inspector, Davis-Besse
- R. Walton, Resident Inspector, Davis-Besse
- # G. Drouin, Project Inspector, RIII
- J. Butler, Reactor Inspector, RIII
- # J. Stang, Project Manager, NRR
- # B. Clayton, Chief, Branch 2
- # A. Bert Davis, Regional Administrator, RIII
- # E. Greenman, Director, DRP

\*Denotes those attending the exit meeting on December 19, 1990.

#Denotes those attending a periodic management meeting on October 23, 1990.

The inspectors also interviewed others of the licensee's staff during this inspection.

2. Action on Previous Inspection Findings (92701)

- a. (Closed) Open Item (341/88027-03(DRS)): This item relates to the Emergency Diesel Generator (EDG) output breaker logic closing time and breaker anti-pump logic.
1. Procedure POM 24.307.31, "Emergency Diesel Generator No. 12-24 Hour Run Followed by Loss of Offsite Power," did not verify the EDG output breaker closing time. The licensee added a step with appropriate acceptance criteria to the procedure.
  2. The NRC was concerned that the EDG output breaker charging spring motor time may increase during the lifetime of the breaker. The charging motor time must be less than the EDG output breaker closure circuit time delay of 2.8 seconds. The licensee added a step with appropriate acceptance criteria to each EDG output breaker's switchgear-breaker and control relay preventive maintenance task to determine this time.
  3. The NRC requested the licensee to perform an analytical evaluation on whether a relay/contact race condition could exist between the EDG output breaker closure circuit, tripping circuit and auxiliary contacts during EDG sequencer operation. The licensee performed an analysis that looked at a loss of offsite power (LOOP) concurrent with a loss of coolant accident (LOCA) at various times before and after EDG output breaker closure. The licensee's analysis used conservative assumptions and actual component operating time when available. In conclusion, the Fermi 2 EDG breakers were not susceptible to the breaker's anti-pump lock-out feature during a LOCA concurrent with a LOOP scenario and sequencer operation.

Based on the above, this item is considered closed.

- b. (Closed) Violation (341/89030-02(DRP)): Inadequate Independent Verification. As referenced in Inspection Report 341/90005, licensee corrective actions appeared adequate to address the violation. However, two areas were identified requiring further action. The first involved a licensee commitment to allow only operations and maintenance personnel to perform independent verifications of field hardware. Upon inspector review it was found that the new requirement had not been included in appropriate administrative procedures. Subsequently, the licensee revised Fermi Management Directive FMD PR1, "Procedures, Manuals, and Orders" to address this matter.

The second matter involved ensuring all personnel required to review the associated formal critique had done so. Initial inspector review of the associated required reading forms found that a number of individuals had not signed as completing the review. Subsequently, the licensee provided further documentation that the subject personnel had completed the required reading. This item is closed.

- c. (Open) Violation (341/90005-06(DRP)): NIAS valve out of position. The inspector performed an initial review of the NPPD Rounds Evaluation Program and implementation during the inspection period. The program goals included as a minimum that two evaluations per week be performed with either a NSS, NASS, or NSO accompanying a NPPD during completion of one set of rounds. Additionally, evaluation of the evaluations were to be performed as directed by the Superintendent-Operations and a process of feedback to the training department provided. At the time of review, the program had been in effect approximately two months. Onshift evaluation sheets were reviewed by the inspector and all appeared appropriately completed. However, the additional evaluations to be done by Operations Department management above the NSS level had not been initiated to date nor had feedback been provided to the Training Department. The NPPD Evaluation Program will receive further review upon completion of program implementation.
- d. (Closed) Open Item (341/90011-05(DRP)): Improvements to medical drills. The licensee has reviewed its medical drill schedule for three medical drills during 1991. One will be held during the first, third and fourth quarters. One drill will be without the station medical staff and another will be a combined medical and fire drill. In addition, the licensee has committed to give first aid training to the Radiological Control Technicians during the third quarter of 1991. This item is closed.
- e. (Closed) Open Item (341/89021-06(DRP)): Adequacy of preventive maintenance (PM) event evaluation. The licensee reviewed the periodicity of the CCHVAC fan PM, as documented in DER 89-1151. The inspector reviewed DER 89-1151 and interviewed the CCHVAC system engineer and the DER evaluator. The licensee determined that the contractor evaluation of the PM event was flawed because it did not consider the specific type of bearings (SKF type SAF bearings) nor the required post LOCA run time. Evaluation by the licensee's staff did determine, however, that a 36 month periodicity between relubrications of the CCHVAC fan would have been adequate, if implemented, based on accumulated run times of the fan. The licensee decided that although a periodicity of 36 months for CCHVAC fan lubrications was possible, a 36 month period between inspections and PMs for not routinely accessible, safety-related equipment was not prudent. The periodicity for the CCHVAC fan PM was returned to 18 months. The licensee concluded that the cause of fan bearing damage was most likely improper bearing installation, that is, failure to verify the reduction in radial clearance of the bearings. The improper installation could have led to a premature lubrication related failure from excessive heating.

The licensee also reviewed other contractor recommended PM event changes where relubrication periodicities were increased by fifty percent or more to address the initial NRC concern regarding adequacy of PM events for similar equipment. No equipment similar to the CCHVAC fans T4100C047 and T4100C048 was reviewed by the contractor.

Four PM events which the contractor recommended for increased relubrication intervals were not implemented because the equipment was not readily accessible and could only be inspected at the time of the PM event and the inspection interval (36 months) was considered excessive. The licensee concluded that the contractor errors in evaluating the periodicity of the CCHVAC fan PM events were isolated events, and the other PM lubrication recommendations made by the contractor were adequate.

The inspector verified that PM events U414 and U415 (CCHVAC fans) have an 18 month relubrication periodicity and are scheduled for Refueling Outage 2, (due date: March 24, 1991). The inspector also reviewed the work request (WR) packages U414891221 and U415891221 to insure that WR instructions were consistent with the corrective actions described in DER 89-1151, i.e., verification of bearing clearing reduction, new grease, etc. Maintenance and operational histories were reviewed on the CCHVAC fans since December, 1989, with no indication of bearing lubrication problems.

The licensee's corrective actions to preclude future similar bearing damage appeared to be adequate. The licensee's conclusion that other contractor PM event evaluations were adequate appeared appropriate.

- f. (Closed) Unresolved Item (341/90009-03(DRP)): The designation of certain sections of maintenance procedures as non-applicable by non-supervisory maintenance personnel during maintenance activities. In July, 1990, an NRC inspector observed non-supervisory maintenance personnel deleting non-applicable sections of generic procedures while performing work activities in the field. The inspector believed that the deletion of procedure sections may have been unauthorized.

The licensee initiated DER 90-0466 to follow-up on the NRC concern. The licensee determined that field workers had deleted sections of the procedures, that a supervisor had reviewed the work prior to work closure, and that procedure NPP-MA1-04, Revision 4, "Conduct of Maintenance" did not specifically allow nor prohibit the practice. The licensee concluded that any changes to work in the field should be at the direction of management to assure proper work control. NPP-MA1-04, Revision 5, was approved on October 31, 1990, which requires all work to be performed in accordance with procedures and work request instructions and any procedures not to be performed in their entirety shall be designated prior to performing the procedure in the field. The maintenance staff was trained on the procedure change.

The inspector agreed with the licensee's conclusion that the practice of deleting procedure sections in the field was neither allowed nor prohibited. The licensee's actions in response to the NRC concern appeared prudent and adequate.

3. Operational Safety Verification (71707) (40500)

The inspectors observed control room operations, reviewed applicable logs and conducted discussions with control room operators throughout the inspection period. The inspectors verified the operability of selected safety-related systems, reviewed tagout records, and verified proper return to service of affected components. The inspectors observed a number of control room shift turnovers. The turnovers were conducted in a professional manner and included log reviews, panel walkdowns, discussions of maintenance and surveillance activities in progress or planned, and associated LCO time restraints, as applicable.

The inspectors conducted tours of the reactor, auxiliary and turbine buildings. During these tours, observations were made regarding plant equipment conditions, fire hazards, fire protection, adherence to procedures, radiological controls and conditions, housekeeping, tagging of equipment, ongoing maintenance and surveillance activities, containment integrity, and availability of safety-related equipment. Walkdowns of the accessible portions of the following systems were conducted to verify operability by comparing system lineups with plant drawings, as-built configuration or present valve lineup lists; observing equipment conditions that could degrade performance; and verifying that instrumentation was properly valved, functioning and calibrated.

- o Standby Gas Treatment System - Divisions I and II
- o Emergency Diesel Generator No. 11
- o CRD Hydraulic Control Units - South Bank
- o Standby Liquid Control System

Additionally, the inspectors observed implementation of portions of the licensee's security program during the inspection period including: badging of personnel; access control; security walkdowns; security response (compensatory actions); visitor control; security staff attentiveness; and operation of security equipment.

Significant observations and reviews included the following:

- a. In a previous inspection report (341/90013, paragraph 3.b) the inspector noted that remnants of chewing/eatable materials were discovered in the radiological control area (RCA), contrary to good health physics practices and procedures. This problem appears to be continuing as evidenced by several new instances discovered by the inspector and by the licensee of candy wrappers and cigarette butts in the RCA. Although the licensee believes the problem may be due to a few isolated individuals, actions were initiated by the licensee to reemphasize to all work groups the necessity to comply with radiation protection requirements. More plant walk-arounds were also initiated by the licensee in the hopes of observing the individuals at fault.
- b. During a review of the medical qualifications of selected licensed operators during the inspection period, the inspector noted that a

number of operators had restrictions placed by the NRC on their licenses for medical reasons but that Operations Department management personnel were unaware of the restrictions. Further followup by the inspector and by the Operations Superintendent with the Training Department determined that the status of all license holders and associated restrictions were documented and maintained by the Training Department. However this information was not routinely communicated to the Operations Department. This was a weakness in that the Operations Department management personnel, including the Nuclear Shift Supervisors (NSSs), were not fully cognizant of limitations of those licensed operators under their responsibility. Subsequently, a memorandum was prepared by the Training Department to Operations Department management outlining all license restrictions. The inspector was informed that distribution included all NSSs and that the memorandum would be updated periodically as needed. The inspector did not identify any examples of licensed operators performing duties prohibited by license restrictions.

- c. During a routine plant tour of the auxiliary building on November 18, the inspector noted that watertight door R1-8 was missing one of four latching bars; the bar was on the floor by the door. When brought to the attention of the operating authority, initial evaluation of door operability was made as to flood protection for the designated area. The determination was made that due to its mounting configuration, the door remained operable as a flood barrier with 3 of 4 latches in place. A work request was then initiated to replace the latching bar. Further review by the inspector determined that door R1-8 was also designated as a fire door. This information was also brought to the attention of onshift personnel who confirmed that R1-8 was a fire door; appropriate compensatory measures per technical specifications were then taken (including verification of fire detector operability on one side of the door and establishment of an hourly fire watch).

Although appropriate corrective actions were eventually taken per the technical specifications to the identified problem, the NRC had two concerns relative to the matter. The first was that the licensee apparently had not identified the missing latch, or at least if any member of the licensee's staff had identified it, no work request was initiated until the inspector brought it to its attention (the last routine surveillance of the door by the licensee had not identified any discrepancies). Secondly, even after it was brought to the licensee's attention, the first reaction was to consider only the flood protection properties; the fact that the door also was a fire door was also identified by the inspector. This may be another example of a continuing concern the NRC has with inattention to detail by plant staff.

- d. While reviewing the matter discussed in paragraph c., the inspector noted that a floor plug located in the same area as door R1-8 was sealed around its edges with a caulking material. Through discussions with onshift operators, the inspector ascertained that the floor

plugs were located directly above the HPCI room and were a secondary containment boundary. The operators indicated that the caulking was placed in aid of maintaining secondary containment integrity. A review of surveillance procedure NPP 24.428, "Secondary Containment Integrity Verification," determined that a periodic check is required to verify the caulking is still in place. However, questioning of the engineering authority revealed that the original basis for placing the caulking could not be reconstructed. A new evaluation was subsequently initiated and initial determination made that the caulking should remain in place. Currently, engineering department personnel are completing their review of this matter. This will remain as an unresolved item (341/90017-01(DRP)) pending completion of that review and subsequent inspector review.

- e. On October 28, during a routine review of required operator reading, the inspector noted that Amendment 59 to the Fermi Technical Specifications, which had recently been issued, was incorporated for use onsite on or about October 23. This amendment incorporated certain aspects of the 10 CFR 50 Appendix R Fire Protection Program into the Technical Specifications and replaced a DECo letter that the operators had been using to assure compliance with the particular requirements. The inspector further noted that surveillance procedure NPP-24.415 "Drywell Cooling Fans 1 and 2 Operability Test" revision 20, which implemented a required test per the DECo letter, was being conducted but it had not been revised to assure conformance with the new Technical Specifications. This observation was communicated to the Nuclear Shift Supervisor (NSS) who initiated actions to verify that no Technical Specification requirements had been violated and to conduct a review to determine if other surveillance procedures needed revision per the Technical Specification change. The review found that a small family of surveillance procedures which should have been revised at the time Amendment 59 was implemented had not been issued. Actions subsequently were taken to issue those procedure revisions. Although no Technical Specification requirements were violated in this case, the implementation process for Technical Specification changes was not fully coordinated between incorporation of the change itself and revision of the associated surveillance procedures. The licensee confirmed this and shortly thereafter modified the TS implementation process so the licensing group retained a higher level of cognizance over the process and better coordinates all aspects of TS changes.
- f. During a control room walkdown on December 5, while the reactor was in cold shutdown, the inspector noted differing flowrate indications for reactor vessel jetpumps 5 and 10. Given the plant configuration at the time, both jetpump indications should have been consistent since they are on the same recirculation loop. When questioned about the matter, control room operators indicated they were unaware of the problem but initiated actions to troubleshoot the discrepancy. At the conclusion of the inspection period, the problem had not been resolved. The inspector will follow up resolution of it.



- g. On November 25, due to increasing vibration levels on the main turbine, the licensee elected to begin a controlled unit shutdown in preparation for inspection/repair activities. The inspector observed control room activities during the shutdown evolution and noted a high level of operator performance, good plant response through the lower power operating regimes, and a well thought out, controlled sequence for taking the main turbine off-line.
- h. On November 2, the inspector attended a meeting of the Onsite Review Organization (OSRO). The meeting was convened to review Licensee Event Report (LER) 90-011-00 which documents the reactor scram that occurred on October 6 (described in Inspection Report 50-341/90013). A quorum was verified present with each committee member appearing familiar with the event. All members communicated well and an in-depth discussion of the event ensued. Substantive comments were made relative to commitments of future actions to prevent recurrence. Subsequently, the inspector performed an initial review of the finalized LER and found all OSRO comments had been incorporated.

No violations or deviations were identified in this area.

4. Monthly Maintenance Observation (62703)

Station maintenance activities on safety-related systems and components listed below were observed to ascertain that they were conducted in accordance with approved procedures, regulatory guides, 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 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 was assigned to safety-related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

- o WR 004D901029 Repair Reactor Vessel Jetpump no. 10 Flow Indicator
- o WR 008D900725 New Fuel Receipt Inspection
- o WR 004D900914 Replacement of ASCO Solenoids in COHVAC Div II
- o PM X056900827 Inspection of RHR Cooling Towers
- o PM B304901017 Check of Brushes and Collector Ring in RR MG Set A

Regarding WR 004D900914, the inspector noted during performance of work on Division II Control Complex Heating, Ventilation and Air Conditioning

System (CCHVAC) that a number of solenoid valve electrical and mechanical disconnects/reconnects were made. This was done without the work package specifying independent verification requirements of the as-left conditions. The inspector was concerned that valve positions may not have been properly verified after maintenance was completed and prior to operability testing. Following discussions with maintenance management personnel, the inspector was later informed that the subject valves would have been checked via a valve verification sheet in accordance with procedural requirements. However, the verification sheet was not specified in the work package but would be added.

The inspector also noted that although the work being performed did not require a Red Tag Record, a No Protection Record sheet was not initiated as required by administrative procedure NPP-OP1-12, "Tagging and Protective Barrier System," Section 6.4 prior to the start of the job. Upon being informed of the problem, the maintenance supervisor had a No Protection Record sheet initiated. Subsequently, Instrument and Control (I&C) technicians were counselled of the need to complete this sheet when no protection was provided. The failure to initiate a No Protection Record sheet as required by NPP-OP1-12 is considered a violation (341/90017-02(DRP)). However, after reviewing the licensee's corrective action and assessing the safety significance of this event, the inspector determined that the criteria specified in 10 CFR 2 Appendix C, Section V.A were satisfied and therefore, no Notice of Violation was issued.

One non-cited violation was identified in this area.

5. Bimonthly Surveillance Observation (61726)

The inspectors observed/reviewed the following Technical Specification required surveillance testing.

- 24.137.01 Main Steam Line Isolation Channel Functional Test
- 24.402.01 Drywell and Suppression Chamber Breaker Operability Test
- 24.707.01 Reactor Water Cleanup (RWCU) Valve Operability Test

The following items were considered during the inspection: the testing was performed in accordance with approved procedures; that test instrumentation was calibrated; that test results conformed with Technical Specifications and procedure requirements and were reviewed by personnel other than the individual directing the the test; and that any deficiencies identified during the testing were reviewed and resolved by appropriate management personnel.

The inspectors also performed a record review of the completed surveillance tests listed below. The review was to determine that the test was accomplished within the required time interval, procedural steps were properly initialled, the procedure acceptance criteria were met, independent verifications were accomplished by individuals other than those performing the test, and that the test was signed in and out of the control room surveillance log book.

- 24.000.02, ATT 1 Shiftly, Daily, and Weekly Required Surveillances
- 24.138.06 Jet Pump Operability Test
- 24.307.014 Emergency Diesel Generator No. 11 - Start and Load Test
- 24.307.34 DGSW and DFOT Pump and Valve Operability Test - EDG No. 11
- 42.309.001 Division I/II Weekly 130/260 VDC Battery Check
- 42.501.01 Diesel Fire Pump Battery Inspection - Weekly
- 44.020.103 NSSSS - Fuel Pool Ventilation Exhaust Radiation Monitor, Division I, Channel C Functional Test
- 47.000.02 Mechanical Vibration Measurements for Trending

Regarding 24.307.014, the inspector noted that in procedure step 5.1.12 a flow rate entry was made in GPM. However, there was a note included stating that the indicator referenced to provide the reading was labelled in percent, not in GPM. Discussions with the Nuclear Shift Supervisor (NSS) revealed that a conversion factor had been applied in the past relating the two quantities. This had been recognized and in the last procedure change for each EDG, the conversion had been added. However, this particular step had been inadvertently missed. At the time of inspector review, no document change request (DCR) or temporary change notice (TCN) had been initiated to correct the last discrepancy. When questioned as to the reason for this, the NSS indicated that someone such as the system engineer, normally would identify discrepancies of this type during subsequent reviews of completed surveillance test packages and follow up to ensure they were corrected. However, this appeared to be inconsistent with the intent of administrative procedures NPP-PR1-02, "Temporary Change Notices", which addresses the methodology for initiating such changes. Subsequently, the NSS committed to initiate the change request.

No violations or deviations were identified in this area.

#### 6. Followup of Events (93702)

Although not requiring notification to the NRC pursuant to 10 CFR 50.72, the licensee experienced several events during the inspection period. The inspectors pursued the events onsite with licensee and/or other NRC officials. In each case, the inspectors verified that the licensee was taking prompt and appropriate actions, that activities were conducted within regulatory requirements and that corrective actions would prevent future recurrence. The specific events are as follows:

- October 26 - Three MSR Stub Tube Pieces Found in the Startup Level Control Valve.
- October 31 - Step Change in Main Turbine Vibration.

- November 5 - Increase in Drywell Nitrogen Usage.
- November 9 - Step Change in Main Turbine Vibration.
- November 30 - Two Bolts Found Broken on MSR Cold Reheat Piping.

No violations or deviations were identified in this area.

7. Preparation for Refueling (60705)

On November 28, the inspector observed new fuel receipt and inspection activities associated with Asea Brown Boveri (ABB) lead assemblies. During the upcoming operating cycle the reactor core will include four such ABB fuel assemblies. ABB provided vendor support for the handling, inspection and channeling operations. ABB procedures were reviewed by DECo reactor engineering and validated prior to use at Fermi. Throughout the fuel handling, inspection and channeling activities, members of the Operations, Maintenance, Reactor Engineering, Radiation Protection, and Quality Assurance Departments were in attendance.

Although the actual inspection activities appeared to be adequately conducted, two areas of weak performance were noted during the handling of the fuel/channels near the spent fuel pool area. The first involved personnel not properly accounting for material near the pool as required by administrative procedure NPP-OP1-13, "Conduct of Refueling and Core Alterations." Enclosure A of the procedure titled "Housekeeping Requirements" specifies that all material entering the RPV or spent fuel pool area shall be accounted for on a material accountability log. The inspector noted that although a number of tools and instruments were moved into the restricted area, material accountability was not implemented until personnel on the floor were questioned by the inspector. Even after it was implemented material accountability was found to be incomplete because a number of pre-existing materials already in the restricted area were not accounted for. These included hard hats, a ladder and protective clothing disposal bins.

The inspector identified improper implementation of material accountability around the spent fuel pool on two previous occasions. The first incident occurred on September 18, 1989 during the first refuel outage (reference Inspection Report 341/89025). The second occurred on August 29, 1990, during activities related to the cutting up of control rod blades for offsite disposal (reference Inspection Report 341/90013). In both of the earlier incidents, once the inadequacies were identified to licensee personnel, sufficient corrective actions were taken to preclude further problems of the same sort at the time. However, since the actions taken as a result of the prior events were not sufficient to prevent the November 28 procedural violation of NPP-OP1-13, the occurrence was considered a violation of both Criteria V and XVI of 10 CFR 50, Appendix B. (341/90017-03(DRP))

The second weakness involved the traversing of equipment into and out of the contaminated area surrounding the spent fuel pool. Although the new

fuel grapple was used to move fuel and channels from the "clean" area into and through the contaminated area, no checks were made of the grapple or associated control box upon their removal from the contaminated area and before their subsequent handling by personnel on the "clean" side. When personnel were questioned on the matter, they indicated they assumed the grapple and control box remained "clean" while in the contaminated area due to compensatory measures taken such as usage of double pairs of gloves while handling the control box and the limited handling of the grapple by those personnel in the area. Although subsequent checks determined that, in fact, no spread of contamination had occurred, no verification of the status of contamination was made at the time the equipment moved from the contaminated to the clean side.

As a result of the inspector's observations, the licensee conducted a formal critique of the subject activities. At the close of the inspection period, a critique writeup was being finalized. Root cause determination and followup recommendations/corrective actions were to be included in the writeup. The inspector will review the critique once it is issued.

One violation was identified in this area.

## 8. Review of Allegations

(Closed) Allegation No. RIII-90-A-0117: Failure of management to adhere to NRC commitments. On November 13, 1990, Region III received an anonymous allegation 1) that a weekly delinquent findings report (DFR) was not issued and 2) that licensee management had a repetitive problem in satisfying and/or adhering to commitments made to the NRC.

### BACKGROUND

In NRC Inspection Report 80-011, NRC inspectors noted that the licensee failed to take corrective action on 25 Quality Assurance (QA) audit findings which had been open 6 to 18 months and a notice of violation (341/86011-05) was issued. One of the licensee corrective actions to ensure the timely resolution of QA audit findings was the issuance of a weekly DFR which tracked QA audit findings open longer than 90 days. On April 23, 1990, the licensee notified the NRC by letter that in order to provide a more reasonable response time to resolve QA audit findings, the weekly DFR would now track open audit findings which were approaching 180 days old or exceeded 180 days. The licensee had discussed the change with Region III management on April 5, 1990.

### REVIEW

On November 28, 1990, the NRC inspector reviewed weekly DFRs from June 5, 1990, through November 20, 1990, at the Quality Program Assurance (QPA) offices. The inspector determined a DFR was issued for every week during the period with the exception of September 5, 1990. Both the primary and alternate QPA representatives responsible for issuing the DFR on September 5, 1990, were in training that week resulting in the omission

of the weekly DFR. A review of the DFRs from August 29, 1990, and September 12, 1990, identified no QA audit finding resolution which was impacted by the omitted DFR. The QPA supervisor now ensures that appropriate QPA personnel are available to generate and issue the weekly DFR.

The inspector reviewed licensee commitments to the NRC contained in the licensee's Integrated Information Resource Network (I<sup>2</sup>R) under the Regulatory Action Commitment Tracking System (RACTS) program to determine whether an acceptable level of commitment adherence was achieved. The RACTS program contains all commitments by the licensee to the NRC and to other agencies and identifies the reference document, such as an NRC violation, NRC open item, or NRC Information Notice, that required the commitment and describes the actions to be taken (with completion dates) to resolve the issue. The inspector reviewed a sample of RACTS commitments and reviewed related documents (procedures, Technical Specification Clarification Statements, etc.) to ensure that corrective actions had been completed as described in RACTS. The inspector identified no example of a licensee commitment not being implemented or non-compliance with an implemented licensee commitment.

#### CONCLUSION

The allegation that a weekly DFR (September 5, 1990) was not issued as required by licensee commitment was substantiated. There was no safety significance to the omitted DFR since any relevant commitments were highlighted in the preceding DFR (August 29, 1990) and following DFR (September 12, 1990). The omitted DFR did not result in untimely corrective action to any QA audit finding which was the intent of the DFR commitment. The licensee initiated appropriate corrective action to prevent recurrence and no further action is required.

The allegation that the licensee repeatedly fails to adhere to commitments made to the NRC was not substantiated.

Allegation RIII-90-A-0117 is considered closed.

#### 9. Management Meeting (30702)

On October 23, 1990, the licensee and NRC management met in NRC Region III for a periodic management meeting. The agenda included:

- ° Plant Performance - The licensee provided its latest performance data. The discussion included a number of LERs and violations and their causal factors, safety system actuations, accumulated radiation exposure, as well as unit capacity and availability factors for the year.
- ° Plant Status - The licensee briefly summarized plant status since the last periodic meeting. The recent maintenance outage to locate and repair tube leaks in the feedwater heaters and in the main condenser was discussed as well as the problems encountered during

unit restart resulting in the October 6 scram. The licensee indicated that its most significant problem currently was resolution of main turbine vibration.

- ° October 6 Scram - The licensee summarized the events leading up to the scram, operator and plant response to the scram and outlined proposed longterm followup actions. A discussion ensued involving trending of water level deviations and licensee actions on filling and/or flushing instrument lines during extended shutdowns. The licensee indicated that it had monitored the reactor water level instrumentation during the post scram restart and concluded that the level discrepancies occurred at low reactor pressures. A commitment was made to refill the reactor vessel level instrument legs again during the next shutdown and to revise startup procedures to take the level discrepancies into account. It was mentioned that a licensee event report (LER) was forthcoming and would more completely describe the event including followup actions.
- ° HPCI Reliability - A summary of HPCI unavailability was presented by the licensee which outlined reasons HPCI was out of service by calendar quarter. Goals for HPCI availability were discussed and a comparison between INPO, NRC, and licensee availability statistics was presented. The licensee discussed its proposed actions to improve HPCI availability including oil sampling program changes on plant specific requirements to make them more consistent with industry requirements, and to evaluate the preventative maintenance schedule to reduce scheduled downtime. NRC management stated it would continue to monitor the licensee's performance for the expected improvements.

#### 10. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 3.d.

#### 11. Exit Interview

The inspectors met with licensee representatives (denoted in paragraph 1) on December 19, 1990, and informally throughout the inspection period and summarized the scope and findings of the inspection activities. The inspectors also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents/processes as proprietary. The licensee acknowledged the findings of the inspection.