U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-010/83-06(DPRP); 50-237/83-07(DPRP); 50-249/83-06(DPRP)

Docket No. 50-010; 50-237; 50-249 License No. DPR-2; DPR-19; DPR-25

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

Facility Name: Dresden Nuclear Power Station, Units 1, 2 & 3

Inspection At: Dresden Site, Morris, IL

Inspection Conducted: February 3 through March 15, 1983

Inspectors: T. M. Tongue 4-12-83

M. J. Jordan 4/12/83

S. Stasek 4-12-83

Approved By: R. D. Walker, Chief 4/12/83
Projects Section 2C

Inspection Summary

Inspection on February 3 through March 15, 1983 (Report No. 50-10/83-06(DPRP); 50-237/83-07(DPRP); 50-249/83-06(DPRP)

Areas Inspected: Routine, unannounced inspection by resident inspectors of previous inspection findings; headquarters/regional requests; operational safety; maintenance; surveillance; licensee events; plant trips; refueling activities; refueling surveillance; refueling maintenance; and inspection during long-term shutdown. The inspection involved a total of 206 inspector-hours on site by three NRC inspectors including 26 inspector-hours on site during off-shifts.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

*D. Scott, Station Superintendent
*R. Ragan, Operations Assistant Superintendent
*J. Wujciga, Assistant Superintendent for Administrative Services and Technical Support
J. Eenigenburg, Maintenance Assistant Superintendent
J. Brunner, Technical Staff Supervisor
M. Wright, Unit 1 Operating Engineer
J. Almer, Unit 2 Operating Engineer
T. Ciesla, Unit 3, Operating Engineer
D. Sharper, Acting Waste Systems Engineer
G. Myrick, Rad-Chem Supervisor
B. Saunders, Station Security Administrator
*R. Stobert, Q. A. Inspector
D. Ruppert, Q. A. Inspector

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

*Denotes those attending one or more of the exit interviews conducted on March 4 and March 15, 1983, and informally at various times throughout the inspection period.

2. Followup on Previous Inspection Findings

a. (Open) Noncompliance (237/82-06-01(DPRP) and 249/82-06-01(DPRP)): Failure to have a Calibrated Flowmeter for Testing the Standby Liquid Control System.

The licensee's response letter dated August 27, 1982, stated a review of operating surveillances will be done to verify that instruments used to satisfy operability surveillance are calibrated. The Resident Inspector (RI) determined that hydrometer and thermometer used in performing the weekly surveillance requirements of the Technical Specifications for the station batteries are not calibrated. The licensee stated that a corporate committee, called the D. C. Task Force Committee, was looking into the proper action to be taken on calibration of hydrometers and thermometers as a result of this same problem being identified at LaSalle Nuclear Power Station.

The Station Superintendent was also given a copy of a letter dated January 12, 1983, from D. G. Eisenhut to R. L. Spessard concerning stopwatch calibration and ASME requirements on transient analysis.

The licensee uses stopwatches for timing several Technical Specification required items such as containment valve closure times. According to the subject letter, these stopwatches should be calibrated. The licensee is evaluating the action that needs to be taken to calibrate the stopwatches. The licensee agreed to keep the Resident Inspectors informed of the action to be taken concerning the calibration of hydrometers, thermometers, and stopwatches.

b. (Closed) Open Inspection Item (237/82-25-01(DPRP) and 249/82-25-01 (DPRP)): Adequacy of Emergency Diesel Generator Room Ventilation Systems to Prevent Exceeding Maximum Design Ambient Temperature.

The Station Nuclear Engineering Department and the Technical Staff Supervisor were unable to locate the original analysis performed by Sargent and Lundy about 15 years ago. Therefore, a reanalysis was conducted taking into account the engine and generator and it was found that adequate ventilation existed and no modification is necessary. This analysis was conducted for Dresden and Quad-Cities Nuclear Power Stations.

c. (Open) Open Item (237/82-23-01(DPRP) and 249/82-23-01(DPRP)): Wedging Alarm Acknowledge Switch on the Process Computer Panel.

The licensee provided an adequate response describing a number of corrective actions; however, it will be some time before they are all accomplished. On March 7, 1983, the Senior Resident Inspector entered the control room at about 3:20 p.m. and noted the same condition on the Unit 2 process computer panel. At that time fuel was being transferred into the reactor vessel. Upon questioning, one of the Nuclear Station Operator's removed the wedge and removed the nuisance alarm from the computer. When station management personnel were approached a short time later, they wrote an instruction to all Shift Control Room Engineers/Shift Technical Advisors to take steps to prevent this poor practice in the future.

No items of noncompliance or deviations were identified in this area.

3. Followup on Headquarters/Regional Requests

a. Followup On Possible Problems With Reduced Load Capacity Of Standard Components Hangers And Supports

A 10 CFR 50.55(e) report from Washington Public Power Supply System dated February 9, 1982, stated that vendors had reduced the load capacity of their standard components (hangers and supports) as stated on the ASME Section III Load Capacity Data Sheets. In earlier discussions during mid 1982 the Dresden Assistant Superintendent for Maintenance stated that the vintages of the Dresden Reactors were prior to the existance of ASME Section III and Load Capacity Data Sheets were not provided. However, subsequent modifications were made under

that portion of the ASME code. A review was conducted by their contractor, EDS, and no evidence of load reductions was found.

b. Followup On Potential Generic Defect In Differential Pressure Regulators Used In The Containment Hydrogen Monitoring Systems

A potentially generic defect was identified in the Conoflow differential pressure regulators that are used in the containment hydrogen monitoring systems supplied by Comsip-Delphi Systems Division. The failure was split diaphrams in four of eight regulators installed at the Oconee Nuclear Power Station, which rendered the analyzers incapable of continuously monitoring hydrogen inside the containment as required by NUREG-0737, Item II.F.1. It was found that Dresden is installing such a system and this notification was brought to the attention of the Station Superintendent and Technical Staff who contacted the Station Nuclear Engineering Department for followup. Their review prompted a letter dated March 10, 1983, from Comsip, Inc., that explained the failures were due to erroneous test procedures used at Duke Power Company. The letter also provided test procedures for the differential pressure regulator to prevent diaphram rupture. The Technical Staff Engineer stated that the Comsip procedure would be incorporated into the Dresden test program after installation of the regulator.

c. Followup On Potential Problems With ITT Barton Differential Pressure Transmitters

A 10 CFR 21 notification dated October 29, 1982, identified that certain ITT Barton differential pressure transmitters, Model 763 and 764, would exhibit unacceptable performance in the form of thermal non-repeatability. It was found that Dresden has the model 764 for monitoring Torus level and Unit 3 Scram Discharge Volume (SDV) level. The Unit 3 SDV level instrument is in a fairly stable temperature environment and replacement is not necessary. Similarly, the Torus level instrument is not subject to large temperature changes and replacement is not warranted.

d. Followup On Potentially Generic Issue Concerning Incorrect Trip Settings

A potentially generic issue concerning incorrect trip settings for High Pressure Coolent Injection (HPCI) system turbine steam line high flow was submitted to the NRC via Licensee Event Report 50-333/82-001 from the James A. Fitzpatrick Nuclear Power Plant. The report showed that the high flow trip set point was set nonconservatively high since startup and was not corrected by actual testing until 1982. This issue was reviewed at Dresden under IE Information Notice 82-16 and is not considered to be a problem at this time.

e. Followup On Fuse Problem With Battery Chargers

A 10 CFR 21 notification was submitted to the NRC from Power Conversion Products, Inc., identifying certain model battery chargers with a potential defect where fuses could blow after lengthy operation. The notice identified specific serial numbers of the chargers and explained that the fuses usually blew after about 8 to 10 hours of operation due to heating effect from the mounting configuration. It recommended replacing the existing 200 amp fuses with 300 amp fuses. At Dresden, the Unit 3 125 volt battery charger is of this type and the replacement fuses have been ordered.

f. Followup On Potential Problem With Signa Lumigraph Indicators

A potential generic issue was identified at San Onofre Unit 1 where aging resistors in Signa Lumigraph Indicators, Model 9270, can cause erroneous indication. The alarm and control functions were unaffected. According to licensee personnel, there are no indicators of this type at Dresden.

g. Followup On Potential Relay Defects

A 10 CFR 21 notification from General Electric stated that certain Liberty Control Company relays used in some General Electric relays were found with defects. The report stated that contact buttons could become separated from the contact arm of the telephone relay. The report provided information as to how to identify and replace the components in question. Review by Dresden Station personnel revealed that this type of relay is used only in the Dresden cooling lake lift station in a nonsafety related application.

h. Followup On Potential Generic Issue With Airlock Doors

A potentially generic issue related to failure of Chicago Bridge and Iron airlocks was identified at Rancho Seco. The failure was in the door latching mechanism interlock whereby both doors could be open simultaneously. This was presented to the Dresden Station Superintendent and is being reviewed for applicability to Dresden. This is an open inspection item (237/83-07-01(DPRP) and 249/83-06-01(DPRP)).

i. Followup On Potential Generic Issue With Agastat Relays

A potentially generic issue was identified at Cooper Nuclear Station concerning certain commercial grade Agastat relays manufactured by Amerace Corporation Control Products Division. The commercial grade relays may be of different design from its nuclear grade counter part. This could affect the environmental and seismic qualification. The licensee is reviewing this matter for applicability to Dresden. This is an open inspection item (237/83-07-02(DPRP) and 249/83-06-02 (DPRP)).

j. Followup On Concerns With Reactor Protection System Circuit Breakers

A regional request was generated to follow up on recent failures of General Electric type AK-2-25 circuit breakers. The failures were found in the undervoltage trip coils in the reactor trip breakers. The shunt trip coils were found to function satisfactorily in the same breakers. Review by the licensee at Dresden revealed numerous breakers of this type; however, they are installed such that the undervoltage trip coils are not utilized. Dresden uses undervoltage relays that activated the shunt trip coils.

k. Followup On Potential Problems With Temporature Indicators

The resident inspectors received a phone notification from Region III of a potential generic problem with calibration of temperature indicators. LaSalle Nuclear Power Station identified a problem with performing calibration of the differential temperature indicators and ambient temperature indicators manufactured by Riley Company. The licensee was informed of this problem and was requested to determine if this manufacturer's temperature indicators are used at Dresden. The Assistant Superintendent of Administration and Support Services reported that the station does not use Riley temperature indicators.

l. Followup On Potential Generic Isolation Problems

The resident inspectors reviewed with the licensee two potentially generic isolation problems which occurred at Browns Ferry Nuclear Power Station. The first problem was that during a Group 1 isolation some of the isolation valves did not automatically close on all initiating signals required by the Technical Specifications. This is not a problem at Dresden because the logic circuit for the valves associated with an isolation signal are all activated by the same relays, and these relays are activated by all of the isolation signals, not a specific isolation signal.

The second problem concerned the High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) system steam line drain valves that would not stay closed after receiving a Low Reactor Water Level signal. The Browns Ferry HPCI/RCIC steam line drain valves automatically returned to the open position when the steam supply valve closed. Dresden does not have a RCIC system. The steam line drain valves in the HPCI at Dresden are not identified in the Technical Specifications nor the Final Safety Analysis Report (FSAR) and are therefore not considered isolation valves. However, the valves close on Low Reactor Water Level or High Containment Pressure and will not automatically open after the reactor level or containment returns to normal. The valves must have the isolation signal manually reset using the reset push button before they will open. This design meets the FSAR and NUREG-0737, Task Action Item II.E.4.2 requirements.

No items of noncompliance or deviations were identified in this area.

4. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the inspection period. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the Unit 3 reactor building and turbine building were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector by observation and direct interview verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the inspection, the inspector walked down the accessible portions of the below listed systems to verify operability:

Unit 2

The Emergency Diesel Generator

Unit 3

The Standby Liquid Control System, Isloation Condenser, and Emergency Diesel Generator

Unit 2/3 (Common)

The Standby Gas Treatment System, and Unit 2/3 Emergency Diesel Generator.

The inspector also witnessed portions of the radioactive waste system controls associated with radwaste shipments and barreling.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under technical specifications, 10 CFR, and administrative procedures.

No items of noncompliance or deviations were identified in this area.

5. Monthly Maintenance Observation

Station maintenance activities of 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 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 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/reviewed:

Unit 2 and Unit 3 Diesel Generator air start motor replacement.

Unit 2/3 Diesel Generator annual maintenance.

Following completion of maintenance on the Unit 2/3 diesel generator, the inspector verified that these systems had been returned to service properly.

No items of noncompliance or deviations were identified in this area.

6. Monthly Surveillance Observation

The inspector observed the following technical specifications required surveillance testing:

Unit 3

Source Range Monitor Rod Block Calibration Check, Reactor Low Level Scram and Low Low Isolation Check, Local Power Range Monitor Amplifier Gain Calibration, and Intermediate Range Monitor Rod Block/Scram Calibration Check.

The inspectors 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 test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

No items of noncompliance or deviations were identified in this area.

7. Licensee Event Reports (LER) Followup

Through direct observations, discussions with licensee personnel, and review of records, that following event reports were reviewed to deter-

mine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with technical specifications.

a. (Open) LER (237/83-11): Torus ring girder fillet weld crack. The licensee has taken appropriate steps to repair the crack in accordance with present codes. This was reviewed by a Region III piping, repair, and NDE expert and found to be satisfactory. The licensee is conducting a study to determine the cause and has committed to submit a supplemental LER. This LER will remain open until the supplemental LER is reviewed.

b. (Open) LER (237/83-12): Mechanical snubber failures on main steam lines. This matter was reviewed extensively by the resident inspectors and a Region III piping specialist. Future operation will be conducted with specialized instrumentation and surveillances in accordance with Technical Specifications. A Confirmatory Action Letter was issued delineating actions to be taken to determine the exact cause of the failure and corrective action to prevent recurrence. The licensee has committed to submitting a supplemental LER. This LER will remain open until the supplemental LER is reviewed.

c. (Open) LER (249/83-05): Failure of the Unit 3 diesel generator. The site declared a Generating Station Emergency Plan (GSEP) Unusual Event at 1:00 a.m., on February 8, 1983. The Unusual Event was declared when both diesels for Unit 3 were determined to be inoperable when the 3 Diesel was surveillance tested and failed to start. The 3 Diesel surveillance was initiated to meet Technical Specification (TS) requirements as a consequence of the 2/3 Diesel being out of service for maintenance. A controlled shutdown was initiated to meet T.S. and GSEP requirements. The shutdown continued until 6:44 a.m., on February 8, 1983, when the 3 Diesel was successfully repaired and tested. The shutdown and the GSEP Unusual Event were terminated at that time. The 3 Diesel had failed to start due to problems with the air start system. The 2 Diesel failed to start after completing maintenance the week before and was also attributed to failure of the air start system.

The licensee investigated the cause of the failures and attributed it to the air start motors. Disassembly of the motors revealed that some of the air motors had excessive lubrication on the bearing which was transmitted to the vanes on the spindle inside the motors. The vanes on some of the motors had excessive oil and were causing a sticky contact between the vanes and the spindle. Also, some of the vanes were found warped and did not have freedom of movement in the spindle. All these problems prevented the vanes free movement to seal the gap between the cylinder and the spindle preventing the air motor from starting.

The licensee had prepared instructions on repair of air start motors. These instructions were included in the work requests package prior to issuing the work package to the mechanic for repair of air start

motors. The instructions were general instructions with no details or proper method of lubrication and detail inspection instructions of parts and the proper method of re-assembly. The mechanical maintenance department is developing a work instruction for the shops manual which will give more detail instructions on how to overhaul the air start motors for the diesel generators. In the interim, the air start motors are being overhauled under the direction of a shop foreman, who is also preparing the work instructions for the shop manual. Proper lubrication and vane clearance with the spindle are typical items the foreman and mechanic observe during reassembly.

After assuring proper reassembly and operation of the air start motors two (2) new rebuilt motors were installed in the 2/3 Diesel prior to returning it to service. The 2 and 3 Diesels were both tested satisfactorily daily from February 7 through February 12 because of surveillance requirements, while the 2/3 Diesel was having maintenance performed. The week of February 21, the 2 and 3 Diesels were removed from service one at a time and two newly rebuilt air start motors using the new guide lines were installed on each diesel. The air regulator and air filter were replaced the evening of February 8 on the Unit 3 diesel generator. The replacement of the air regulator and air filter was an additional precautionary measure against potential failure of the newly installed air motors. The air regulator and air filters were inspected after replacement and no problems were identified. To preclude the possibility of any further unidentified problems with the Unit 3 diesel generator air start system, the licensee has started the diesels about once a week for a month. The RIs have followed the weekly surveillance of the 3 Diesel for mis-starts. This item will remain open until the work instructions for rebuild of the air start motors are issued.

d. (Open) LER (249/83-06): LPCI pump suction valve MO3-1501-5D failure to open. The licensee declared an unusual event at 8:20 p.m. on February 8, 1983, when portions of the Low Pressure Coolant Injection System (LPCI) were declared inoperable concurrently with the 2/3 Diesel being inoperable. The portions of the LPCI system that were declared inoperable were discovered during surveillance testing being performed as a result of the 2/3 Diesel being out of service for maintenance. The unit initiated a controlled shutdown in accordance with the Technical Specification (TS) and continued the shutdown until 3:45 a.m. on February 9, 1983 at which time the LPCI system was declared operable and the unusual event and the reactor shutdown were terminated.

The licensee was performing a valve operability test when the suction valve on one of the LPCI pumps closed and failed to open by use of the remote control in the control room. The valve was manually opened and electrically disarmed to prevent its closure.

During the same valve testing surveillance, one of the Torus Spray valves failed to close by the remote operator in the control room. There was an additional valve downstream of this failed valve which

operated satisfactorily and thus the Torus Spray system would have performed its intended function if called upon and the second valve would have functioned as a containment isolation valve if containment isolation would have been required.

The resident inspectors identified to the licensee that in the Final Safety Analysis Report (FSAR) the suction valve for the LPCI pump was also a containment isolation valve. Although the isolation is not an automatic isolation because of the necessity of maintaining suction to the LPCI pump, the valve should be able to be closed by the remote operator in the control room to maintain containment. The licensee electrically rearmed the valve to allow for containment isolation capabilities and a short time later the valve was made fully operable.

Technical Specification 3.7.D. gives the action to take in case of an inoperable containment isolation valve that is listed in Table 3.7.1. of the Technical Specifications. The LPCI suction valve is an isolation valve identified in the FSAR which is not included in the Table 3.7.1 of Technical Specifications. The action to be taken for this type of valve is not identified in the T.S.. The licensee is preparing instructions to make the operators aware that these valves are containment isolation valves and the action that should be taken in the event one of the valves becomes inoperable. This item is considered an unresolved item pending further NRC review (50-237/83-07-03(DPRP) and 50-249/83-06-03(DPRP)).

e. (Open) LER (249/83-08): 3A Core Spray Pump Failure to Start. On February 12, 1983, at 3:10 a.m., while a daily core spray surveillance was being performed, the 3A pump would not start. Subsequent investigation found the charging switch for the pump breaker in the "off" position. The switch was returned to the "on" position and the pump was then started. The core spray surveillance was being performed daily due to having the 2/3 Diesel out of service for routine maintenance.

The investigation could not determine the cause of the switch being mispositioned. The pump had been satisfactorily tested February 7 through 11. The switch could have been tripped by dragging equipment, bags of anticontamination clothing, etc., by the area and accidentally tripping the switch. To prevent recurrence, the licensee is installing metal guards over the switches to prevent their accidental misposition. This LER will remain open until installation of the guards is completed.

f. (Open) 10 CFR 20.405 Report: Unit 2/3 A Heating Boiler contamination and unplanned discharge of contaminated boiler blowdown. An unplanned discharge of radioactive material to the cooling canal occurred on February 7, 1983, when the Unit 2/3 heating boiler blowdown was directed to the boiler house floor drain system rather than to the Unit 2/3 Radwaste floor drain collector. This event is being reported

to the NRC by the licensee via the 10 CFR 20.405 reporting requirements. This was also reviewed by a Region III Health Physicist and licensee action was found to be acceptable. An issue that remains in question is that the boiler blowdown valves were tagged with "Caution" tags, but, due to the age and the environment, they had deteriorated to where they were completely illegible. Presently there is no provision to conduct periodic reviews of caution tags or out of service tags to verify they are present and legible. This was identified in an INPO audit and the licensee has an April 1, 1983, commitment to implement such an audit program. Followup on this program is an open inspection item (50-237/83-07-04(DPRP) and 50-249/83-06-04(DPRP)).

g. (Open) 10 CFR 20.405 Report: Opened valve MO3-1303-10 (Contaminated Demineralized Water) to the Isolation condenser. The Unit 3 scrammed concurrently with a Group 1 (Main Steam Line) isolation on February 19, 1983, when a contractor employee accidentally jarred an instrument rack activating the main steam line flow detectors. During this event, the isolation condenser activated as required. The operator taking action to make up inventory to the shell side of the isolation condenser, inadvertently induced contaminated demineralized water to the isolation condenser. The boiloff of the contaminated demineralized water caused a radioactive release of approximately 1 millicurie out of the isolation condenser vent. The release was confined to within the site boundaries and was subsequently cleaned up by the licensee. This is being reported to the NRC per 10 CFR 20.405 requirements.

The makeup to the isolation condenser can be achieved from three sources of water. The order of preference in accordance with the procedure for Manual Operation of the Isolation Condenser" is clean demineralized water, then contaminated demineralized water, and finally fire main supply water. The error by the operator in using contaminated demineralized water prior to using clean demineralized water was due in part to valve switch labeling on the control room panel. The contaminated demineralized water was added by a switch labeled "Cond. Fill Inlet". Attached to this switch was a small caution card that stated to tighten down on the valve after use. The caution card was there to assure the valve was fully closed to prevent leakage from the contaminated demineralized water into the isolation condenser. The caution tag covered the dynalabels tape that stated "Contaminated Water". Approximately 3 feet away is the switch for the valve that should have been opened and had dyna-label tape above it that read "Isol. Cond. Make-up Demin Water". The operator glanced down the valve switches directly below the gage showing the isolator condenser water level, and upon seeing the switch label "Cond. Fill Inlet" he knew the caution tag did not prevent its operation and operated the valve.

The procedure for "Manual Operation of the Isolation Condenser" identifies the sequence of adding the types of water. The procedure for "Automatic Operation of Isolation Condenser" gives direction on use of the clean demineralized water only, and does not state the use of the contaminated demineralized water, or fire main supply water.

The licensee is evaluating possible modification to the controls in the control room that needs to be taken to prevent the recurrence of this problem. The licensee is also reviewing the procedure to assure that it is adequate for the operator to perform his work. A Region 3 Health Physicist evaluated the consequences of the release. The results of that inspection can be found in Inspection Report (50-237/83-08(DRMS); 50-249/83-07(DRMS)). This item will remain as an open item (50-237/83-07-05(DPRP) and 50-249/83-06-05(DPRP) until the licensee has completed review of the adequacy of the procedures and possible modifications.

No items of noncompliance or deviations were identified in this area.

8. Plant Trip

Following the plant trip on Unit 3 on February 19, 1983, the inspector ascertained the status of the reactor and safety systems by observation of control room indicators and discussions with licensee personnel concerning plant parameters, emergency system status and reactor coolant chemistry. The inspector verified the establishment of proper communications and reviewed the corrective actions taken by the licensee.

All systems responded as expected, and the plant was returned to operation on February 20, 1983.

No items of noncompliance or deviations were identified in this area.

9. Refueling Activities

The inspector verified that prior to the handling of fuel in the core, all surveillance testing required by the technical specifications and licensee's procedures had been completed; verified that during the outage the periodic testing of refueling related equipment was performed as required by technical specifications; observed four shifts of the fuel handling operations (insertion) and verified the activities were performed in accordance with the technical specifications and approved procedures; verified that containment integrity was maintained as required by technical specifications; verified that good housekeeping was maintained on the refueling area; and, verified that staffing during refueling was in accordance with technical specifications and approved procedures.

While conducting refueling surveillances, the licensee identified several discrepancies. In Unit 2 core position M-2 the fuel support piece was detected missing after the fuel had been replaced in the vessel. This was detected while trying to determine the cause of the failure of the M-2 control rod to move during the control rod friction test. The licensee located the missing fuel support piece in the reactor vessel annulus and suggested that it may have fallen off its special handling tool while it was being replaced in the vessel after control rod swapping. When the special tool is being used to move fuel support pieces, observation of the fuel support piece is extremely difficult due to interference of vision by the handling tool. The licensee has retrieved and inspected

the fuel support piece, removed and inspected the associated fuel assemblies, and replaced the control rod. The licensee has placed the fuel support piece properly in the core, returned the fuel assemblies to the core, and satisfactorily tested control rod movement. The licensee is continuing to investigate this occurrence for corrective actions. This is an open inspection item pending completion of licensee actions and resident inspector review of those actions (50-237/83-07-06(DPRP) and 50-249/83-06-06(DPRP)).

Another discrepancy was the discovery of a bent fuel assembly lifting bail found while refueling the core. This was on a new fuel assembly and the bail was replaced. By comparing marks on the lifting bail, it appears that the lifting hook on the fuel handling crane may have caused the damage. There was no evidence of damage to the fuel. Following evaluation, the fuel assembly was placed in the reactor core. The licensee is evaluating corrective action to prevent recurrence. This is considered an open inspection item pending completion of licensee actions and resident inspector review of those actions (50-237/83-07-07(DPRP) and 50-249/83-06-07(DPRP)).

No items of noncompliance or deviations were identified in this area.

10. Surveillance - Refueling

The inspector observed the 125 Volt Battery Discharge and Snubber surveillance testing on Unit 2 to verify that the tests were covered by properly approved procedures; that the procedures used were consistant with regulatory requirements, licensee commitments, and administrative controls; that minimum crew requirements were met, test prerequisites were completed, special test equipment was calibrated and in service, and required data was recorded for final review and analysis; that the qualifications of personnel conducting the test were adequate; and that the test results were adequate.

No items of noncompliance or deviations were identified in this area.

11. Maintenance - Refueling

The inspector verified maintenance procedures include administrative approvals for removing and return of systems to service; hold points for inspection/audit and signoff by QA or other licensee personnel; provisions for operational testing following maintenance; provisions for special authorization and fire watch responsibilities for activities involving welding, open flame, and other ignition sources, reviews of material certifications; provisions for assuring LCO requirements were met during repair; provisions for housekeeping during the following maintenance; and responsibilities for reporting defects to management.

The inspector observed the maintenance activities listed below and verified work was accomplished in accordance with approved procedures and by qualified personnel.

Unit 2

Snubber evaluation and replacement

Torus crack repair

No items of noncompliance or deviations were identified in this area.

12. Inspection During Long Term Shutdown

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the inspection period. The inspector verified surveillance tests required during the shutdown were accomplished, reviewed tagout records, and verified applicability of containment integrity. Tours of Units 1 and 2 accessible areas, including exterior areas were made to make independent assessments of equipment conditions, plant conditions, radiological controls, safety, and adherence to regulatory requirements and to verify that maintenance requests has been initiated for equipment in need of maintenance. The inspector observed plant housekeeping/cleanliness conditions, including potential fire hazards, and verified implementation of radiation protection controls. The inspector by observation and direct interview verified that the physical security plan was was being implemented in accordance with the station security plan. The inspector reviewed the licensee's jumper/bypass controls to verify there were no conflicts with technical specifications and verified the implementation of radioactive waste system controls.

No items of noncompliance or deviations were identified in this area.

13. Meetings, Training, and Off Site Activities

Dr. Robert Gilbert, Dresden Licensing Projects Manager of NRR, NRC Headquarters, was on site for a familiarization on February 10, 1983.

14. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 7.d.

15. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. Open items disclosed during the inspection are discussed in Paragraphs 3.h, 3.i, 7.f(1), 7.f(2) and 10.

16. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection on March 15, 1983, and summarized the scope and findings of the inspection activities. The licensee acknowledged the findings of the inspection.