UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos: 50-269/88-08, 50-270/88-08, 50-287/88-08

Licensee: Duke Power Company
422 South Church Street
Charlotte, N.C. 28242

Docket Nos.: 50-269, 50-270, 50-287 License Nos. DPR-38, DPR-47, DPR-55

Facility Name: Oconee Nuclear Station

Inspection Conducted: March 17 - April 18, 1988

Inspectors: _____ 4/26/88
P.H. Skinner, Senior Resident Inspector Date Signed

_____ 4/26/88
L.D. Wert, Resident Inspector Date Signed

Approved by: T.A. Peebles 5-2-88
T.A. Peebles, Section Chief Date Signed
Division of Reactor Projects

SUMMARY

Scope: This routine, announced inspection involved resident inspection on-site in the areas of operations, surveillance, maintenance, physical security, radiation protection, engineered safeguards features lineups, nonroutine reporting, meeting with public officials, and confirmatory order review.

Results: Of the nine areas inspected, one violation was identified (Failure to provide procedures to perform component verification on components requiring maintenance, paragraph 6.b).

# REPORT DETAILS

1. Persons Contacted

Licensee Employees

*M. Tuckman, Station Manager
J. Davis, Technical Services Superintendent
*W. Foster, Maintenance Superintendent
T. Glenn, Instrument and Electrical Support Engineer
C. Harlin, Compliance Engineer
D. Hubbard, Performance Engineer
J. McIntosh, Administrative Services Superintendent
*F. Owens, Assistant Engineer, Compliance
*R. Sweigart, Operations Superintendent
L. Wilkie, Integrated Scheduling Superintendent

Other licensee employees contacted included technicians, operators, mechanics, security force members, and staff engineers.

NRC Resident Inspectors:

*P.H. Skinner
L.D. Wert

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on April 15, 1988, with those persons indicated in paragraph 1 above.

The inspectors described the areas inspected and discussed in detail the inspection findings listed below. Dissenting comments were not received from the licensee. Proprietary information is not contained in this report.

| Item Number | Status | Description/Reference Paragraph |
|---|---|---|
| IFI 269,270,287/ 88-08-01 | Open | Improvement in Cable Room Fire Detection System |
| UNR 287/88-08-02 | Open | All Three Low Pressure Injection Pumps Inoperable |
| IFI 269,270,287/ 88-08-03 | Open | RBCU Dropout Plate Inspection |

| Item Number (cont'd) | Status | Description/Reference Paragraph |
|---|---|---|
| IFI 269/88-08-04 | Open | Functional Verification Testing of the Reactor Building Cooling System Drop Out Plate |
| VIO 269,270,287/ 88-08-05 | Open | Failure to Provide an Adequate Procedure to Identify Components Requiring Maintenance |
| UNR 287/88-08-06 | Open | Runback During CRD System Maintenance |
| Bulletin 88-BU-01 | Closed | Defects in Westinghouse Circuit Breakers |
| LIV 269,270,287/ 88-08-07 | Open | Lack of Adequate Procedures for Isolation of Equipment Containing EPSL Components |

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in this inspection.

4. Plant Operations (71707)

a. The inspectors reviewed plant operations throughout the reporting period to verify conformance with regulatory requirements, technical specifications (TS), and administrative controls. Control room logs, shift turnover records, Unit 2 Refueling log and equipment removal and restoration records were reviewed routinely. Discussions were conducted with plant operations, maintenance, chemistry, health physics, instrument & electrical (I&E), and performance personnel.

Activities within the control rooms were monitored on an almost daily basis. Inspections were conducted on day and on night shifts, during week days and on weekends. Some inspections were made during shift change in order to evaluate shift turnover performance. Actions observed were conducted as required by the Licensees Administrative Procedures. The complement of licensed personnel on each shift inspected met or exceeded the requirements of TS. Operators were responsive to plant annunciator alarms and were cognizant of plant conditions.

Plant tours were taken throughout the reporting period on a routine basis. The areas toured included the following:

Turbine Building
Auxiliary Building
Units 1,2, and 3 Electrical Equipment Rooms

Units 1,2, and 3 Cable Spreading Rooms
Station Yard Zone within the Protected Area
Standby Shutdown Facility
Units 1,2, and 3 Penetration Rooms
Unit 2 Containment
Condenser Circulating Water Intake Structure

During the plant tours, ongoing activities, housekeeping, security, equipment status, and radiation control practices were observed.

Unit 1 - Unit 1 began this reporting period operating at 100% power. The unit reduced power to about 98% on March 27 due to a problem on the feedwater 1E1 heater drain pump. The problem was corrected and the unit returned to 100% on March 29 where it operated for the remainder of the reporting period.

Unit 2 - Unit 2 began this reporting period in an outage condition. On April 7 the unit was taken critical and zero power physics testing was performed. On April 12 power was increased to 40% and problems developed on the Alterex coupling and with turbine vibrations causing the generator to be taken off the line. The generator was brought back on the line on April 14 and power was escalated slowly to 100% by April 15.

Unit 3 - Unit 3 began the reporting period operating at 100% power. The unit experienced a Asymmetric Rod Runback to 96% power on March 29 due to a communications problem between the operator and a technician. The unit returned to 100% power on March 30. On April 5, power was reduced to 88% due to load considerations. The unit continued to operate at that level until April 17 when the tube leak in 3A steam generator increased from .08 gpm to 1.35. An Unusual Event was declared at 0115 on April 18 and the unit was shutdown and cooled down to cold conditions. The shutdown was performed in accordance with the licensees emergency operating procedures and operating procedures. The unit was on line for 351 days prior to this event.

b. Fire In Unit 1 Cable Room

At approximately 8:30 a.m. on March 22, 1988, a small fire was discovered in a Unit 2 computer cabinet (not safety related), in the Unit 1 cable room which is located just beneath the Unit 1/Unit 2 Control Room. Unit 2 was at cold shutdown. Initial discovery of the fire was due to an individual working in the Unit 2 cable room reporting smoke. The unit supervisor and shift supervisor identified the source of the smoke as a smoldering computer terminal board in

Unit 2 computer cabinet G-2. Apparently incorrect wiring during recent maintenance caused the fire. The fire brigade was dispatched and the computer board was maintained cool with carbon dioxide extinguishers until smoldering was extinguished within five minutes by cutting the terminal leads to the board. No open flames were observed but smoke was described as light to medium and could be smelled in the control room. After the initial fire brigade efforts were completed, the resident inspector entered the cable room. Some smoke still remained in the cable room and deposits on adjacent surfaces and cables indicated that the smoke emitted was more than a minimal amount. The inspector along with operating supervisors was concerned that a fire detector located approximately five feet away in the overhead did not alarm. Subsequent Instrument and Electrical testing of the detector indicated that it was functioning properly. An hourly fire watch was stationed in the cable rooms as a precautionary measure and the licensee requested their fire protection engineers review the situation. After evaluation by the fire protection engineers, it was concluded that the system is fully operable and meets all current requirements. The fire watch was secured. The licensee feels strongly that detector sensitivity and testing could be improved through installation of a more up to date detection system and is considering a Nuclear Station Modification to accomplish this. During the review by fire protection and safety engineers a fire door was discovered open in the vertical cable shaft in the Unit 1 cable room. This shaft connects several levels of the auxiliary building including the equipment room and cable room and is posted with a fire barrier sign. The door was shut immediately upon discovery. The issue was promptly reported to the resident inspector. The licensee has been unable to determine how long the door was open or why it was opened. The resident inspectors routinely check fire barriers on a daily basis and this door is often checked and has not previously been found open. The inspectors have not frequently found fire barrier doors left open and feel that generally a high level of attention is given to fire protection equipment at the station. Because of the serious potential consequences of a fire in the cable room, resolution of future action on the detection system is identified as an Inspection Followup Item 50-269,270,287/88-08-01; Improvement of Cable Room Fire Detection Systems. The inspectors will continue to monitor the status of fire barriers particularly in the cable and equipment room areas.

c. All Three Low Pressure Injection Pumps Administratively Inoperable (Unit 3)

At 8:00 a.m. on April 6, 1988, it was discovered that during the previous night shift maintenance personnel had lubricated the fast couplings of all three low pressure injection (LPI) pumps and post maintenance performance testing had not been completed. Unit 3 was

at 88% power during this period. Technical Specification 3.3.2 requires under the existing plant conditions that two independent LPI trains shall be operable. Additionally it permits tests or maintenance to be performed on any component of the LPI system if the redundant LPI train is operable. All three LPI pumps were declared inoperable at 8:00 a.m. because if incorrect lubrication had been performed the ability of the pumps to function as required would have been impaired. The resident inspector was in the Unit 1/2 Control Room at the time and was immediately informed. The licensee called the NRC Operations Center as required by 50.72.b.2. iii(B). Performance testing to verify proper lubrication and pump operability was completed on one LPI pump by 10:30 a.m. and by approximately 11:30 testing of all three pumps had been satisfactorily completed. Due to the short time interval required to verify operability and no reason to suspect that the pumps would not actually perform as required if necessary, Unit 3 remained at 88% power. (Technical Specification 3.0 would have required the unit to be in hot shutdown within 12 hours.) Initial investigation indicates that the maintenance workers did not correctly follow station procedures and that poor training and/or communications contributed to this incident. Pending licensee and inspector followup investigation, this item is identified as Unresolved Item 287/88-08-02: All Three Low Pressure Injection Pumps Inoperable.*

5. Surveillance Testing (61726)

a. Surveillance tests were reviewed by the inspectors to verify procedural and performance adequacy. The completed tests reviewed were examined for necessary test prerequisites, instructions, acceptance criteria, technical content, authorization to begin work, data collection, independent verification where required, handling of deficiencies noted, and review of completed work. The tests witnessed, in whole or in part, were inspected to determine that approved procedures were available, test equipment was calibrated, prerequisites were met, tests were conducted according to procedure, test results were acceptable and systems restoration was completed.

Surveillances reviewed or witnessed in whole or in part:

| | |
|---|---|
| PT/2/A/261/07 | Emergency Condenser Cooling Water Gravity Flow Test (Unit 2) |
| PT/3/A/202/11 | High Pressure Injection Pump Performance Test (Unit 3) |
| PT/0/A/160/03 | Reactor Building Cooling System Engineered Safeguards Test (Unit 2) |
| PT/2/A/600/22 | Motor Driven Emergency Feedwater Pump Suction Check Valve Test (Unit 2) |

*Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations.

PT/0/A/600/15 Control Rod Drive Movement (Unit 1)
TT/2/A/0711/10 Low Power Physics Testing-Measurement of Temperature Coefficients.

b. Reactor Building Cooling System Dropout Plates

In response to observations made during the review of a licensee's Problem Investigation Report (PIR) concerning maintenance on the Reactor Building Cooling Unit (RBCU) dampers, the inspectors looked into the operation and testing of the RBCUs. The Reactor Building Cooling (RBC) System is provided to remove heat from the reactor building (RB) following an accident and to cool the RB during normal operation. The Reactor Building Spray system also removes RB heat following an accident. The RBCU system consists primarily of 3 axial flow fans, motor-operated discharge dampers, fusible linked dropout plates and associated distribution ductwork. The discharge dampers are not treated as safety related components because between the outlet of each cooler and its motor-operator discharge damper is a dropout plate. These plates are attached to the RBCU ductwork with a hinged bracket and fusible metal link arrangement. The fusible links are designed to melt at approximately 150 degrees F, releasing the hinged brackets and allowing the plates to drop clean of the ductwork to provide an RBCU exhaust path (regardless of damper or lower ductwork condition). The inspector after discussion with the licensee noted that functional testing of the dropout plates had not been performed, and no preventive maintenance or surveillances had been performed on these plates since their installation. It should be noted that the licensee had recently formulated a plan to functionally test the RBC system. This test will probably include a test of the fusible dropout plate, operation of the fans and coolers and airflow measurements through the fusible patch pathways at elevated containment pressures (simulating "accident" pressures) following conduct of the Integrated Leakrate Test (ILRT). This test is tentatively scheduled for the End of Cycle 11 Unit 1 outage (the next scheduled ILRT outage).

The inspector during a tour of the RB examined the dropout plates, particularly the hinged bracket and fusible link arrangements. As a result of concerns expressed by the inspector, the licensee also conducted an inspection of the dropout plates (Work Request 53447G) just prior to RB closeout. This inspection verified that the pathway was clear for the plates to drop, connecting hardware on the fusible links was correctly installed, and retaining cables were of sufficient length to allow the plate to drop free of the opening if actuated. A sampling of the fusible links was examined to ensure that the links were the proper type. The bracket hinges were cleaned and lubricated. While the favorable results of this inspection answered the inspector's questions about the operability of the

dropout plates, such operability checks should be performed each refueling cycle. Although each plate is 30 square feet in area, with full fan outlet pressure against it if the dampers or ductwork are blocked and the plates operation is mostly passive in nature, their correct functioning is relied upon for removal of RB heat under accident conditions. A simple verification that the ability of the plates to dropout has not been defeated should be required. This item is identified as Inspection Followup Item 269,270,287/88-08-03: RBCU Dropout Plate Inspection.

The inspectors agree that the licensees planned functional testing of the RBCU's will more thoroughly verify the post-accident capabilities of the RBC system and should be conducted as planned at the next ILRT outage. This item is identified as Inspection Followup Item 269/88-08-04: Functional Verification Testing of the Reactor Building Cooling System Dropout Plates.

No violations or deviations were identified.

6. Maintenance Activities (62703)

a. Maintenance activities were observed and/or reviewed during the reporting period to verify that work was performed by qualified personnel and that approved procedures in use adequately described work that was not within the skill of the trade. Activities, procedures and work requests were examined to verify proper authorization to begin work, provisions for fire, cleanliness, and exposure control, proper return of equipment to service, and that limiting conditions for operation were met.

b. Failure to Properly Identify Component Prior to Performing Maintenance

On February 11, 1988, a spill of 400-600 gallons of radioactive water occurred as a result of operator error during maintenance on a High Pressure Injection (HPI) System instrument root valve. Details of the incident are set forth in Inspection Report 269,270,287/88-01. The inspectors have reviewed the results of the licensees investigation into the incident and the completed and planned corrective actions. Although errors made by personnel in the operation, maintenance, and planning and scheduling departments contributed to this incident, the inspectors concur with the root cause identified as failure on management's part to ensure an adequate component verification program was implemented. Through a series of errors, an orange tag (used to help locate and identify equipment needing repairs) was attached to the incorrect instrument root valve (Unit 1 instead of Unit 2). The procedure which addresses orange tags gives no guidance as to how this tag is to be used. Additionally, a

photograph of the wrong valve was attached to the work request and some incorrect location guidance was written on the work request. These errors occurred primarily due to poor communications, personnel error and the fact that both valves (Unit 1 HPI instrument root valve and Unit 2 HPI instrument root valve) are located at opposite ends of the same room and are identical unlabeled valves. When maintenance workers entered the HPI room to work on the Unit 2 HPI instrument root valve, they compared the number on the work request with the work request number on the posted orange tag. They also compared the photograph of the valve to the actual valve. Satisfied that they had located the correct component, they began mistakenly working on the Unit 1 HPI instrument root valve. Since Unit 1 was operating at full power the ensuing spill occurred as the valve packing was loosened. Despite the numerous personnel errors which contributed to this incident, the emphasis must always be placed on the vital role of absolute correct component verification by workers about to begin maintenance on any safety related equipment. The importance of this verification process has long been recognized as an essential contribution to plant safety especially at this three unit site. The resident inspectors closely monitor the implementation of this process and other licensee measures to prevent wrong unit or wrong train events.

On February 25, 1988, valve 2MS-83, a 6" main steam check valve in the supply line to the turbine driven emergency feedwater pump on Unit 2, was removed in error. The valve that was supposed to be removed was 2MS-85 (another 6" check valve). This problem occurred, in part, because the orange tag was on a column in the general area of the valve and a photograph was taken of MS-83 not MS-85. Adding to this problem was that the tags and labels had been removed when the lagging was removed.

On February 20, 1988, workers entered an incorrect room to begin maintenance on an important primary valve, discovered their mistake during component verification and immediately corrected themselves. This error was recognized by the workers although no procedure has been developed for assuring that correct component verification has been performed prior to commencing work on a component.

The licensee has implemented a component verification documentation system to provide some assurance that the component is the correct component, but there are no instructions provided to workers detailing methods to perform this verification. This is a very important process, especially at a three unit station where many instrumentation valves are not labeled. The lack of a formal documented program for performing correct component verification is identified as Violation 269,270,287/88-08-05; Failure to Provide Procedures to Perform Component Verification on Components Requiring Maintenance.

c. Runback During Control Rod Drive system Maintenance (Unit 3)

A Unit 3 control rod (Group 4, Rod 2) position indication reed switch malfunctioned on March 27, 1988. This caused an erroneous indication of that rods Absolute Position Indication (indicated less than fully withdrawn). Since the rod was indicating greater than 7 inches difference between its position and the average position of Group 4 rods, an "asymmetric fault" signal was generated within the rod control circuitry. Since the unit was operating at greater than 60 percent of full power a Control Rod Drive (CRD) "Out Inhibit" condition was activated. The Integrated Control System (ICS) cannot automatically move Group 7 rods outward. Under normal operation the ICS automatically positions Group 7 rods to control reactivity as required by the ICS generated "neutron error" signal. Operation of Unit 3 has continued with the rod control station being placed in manual if outward rod motion is required. Inward rod motion and rod trip functions have not been affected. On March 29 at approximately 1:00 p.m. an Instrument and Electrical (I&E) Technician performing trouble shooting of this problem inadvertently caused a reactor runback. The apparent cause of the runback was that the outlimit fuse for Rod 2 of Group 4 was pulled out of the circuit. Since the ICS was in automatic and an "asymmetric fault signal" was present, a runback was initiated. The control room operators immediately took action to verify that an actual dropped rod had not occurred and began taking the ICS to manual. The technician replaced the fuse and the runback was terminated at about 96 percent full power. The licensee has initiated a Problem Investigation Report addressing the event. The reason for the fuse being pulled while the ICS was still in automatic is being investigated. Pending further examination by the licensee and the inspectors, this item is identified as Unresolved Item 287/88-08-06: Runback During CRD System Maintenance.

7. Resident Inspector Safeguards Inspection (71881)

In the course of the monthly activities, the Resident Inspectors included review of portions of the licensee's physical security activities. The performance of various shifts of the security force was observed in the conduct of daily activities which included; protected and vital areas access controls, searching of personnel, packages and vehicles, badge issuance and retrieval, escorting of visitors, patrols and compensatory posts. In addition, the inspectors observed protected area lighting and protected and vital areas barrier integrity, and verified interfaces between the security organization and operations or maintenance.

No violations or deviations were identified.

8. Inspection of Open Items (92701)

The following open items are being closed based on review of licensee reports, inspection, record review, and discussions with licensee personnel, as appropriate:

(Closed) 88-BU-01: Defects in Westinghouse Circuit Breakers. Based on the licensee's response dated March 7, 1988, which states that Oconee Nuclear Station does not utilize Westinghouse DS circuit breakers in any class 1E applications, this item is closed.

9. Radiation Protection Procedures for the Resident Inspector (71709)

The inspector continued to look closely at selected radiological protection program activities to ensure compliance with requirements and licensee procedures. Because of the Unit 2 refueling outage and its associated work in radiological areas, the inspector had frequent opportunities to observe implementation of radiological protection procedures. The inspectors noted an apparent inconsistency in the wearing of personnel monitoring equipment. It was observed that many personnel wear both their film badge and direct reading dosimeter on a neck chain inside their Anti-C coveralls. This is contrary to posted examples and training conducted on the proper way to don coveralls and wear dosimetry equipment. The concerns are that the beta detection window on the film badge may not be facing outward and also that it is difficult for personnel to check the reading on their pocket dosimeter once inside areas if it is worn inside the coveralls on a neck chain. The inspector discussed these observations with licensee management. After some analysis, the licensee acknowledged that enforcement of proper wearing of personnel monitoring equipment has been inconsistent. The station manager issued a Staff Note to all station personnel prohibiting the use of neck chains for dosimetry devices whenever cloth coveralls (with a pocket) are being worn.

The inspectors will continue to observe radiological protection activities with emphasis on correct wearing of dosimetry equipment.

10. Meeting With Public Officials (94600)

On March 21 at 4:00 p.m., the inspectors met with local officials from Pickens County. At the county council meeting held in the Pickens Courthouse, the residents made a presentation that introduced the inspectors and discussed the NRC responsibilities both in Washington and Region II. The inspectors also provided the officials with names of NRC supervisory personnel and phone numbers locally and in Atlanta.

The following local representatives were present at the meeting:

Mr. Robert R. Nash, Pickens County Council Chairmen
Mr. Weyman B. Dublin, Jr., Vice Chairman
Mr. Charlie D. Grant, Councilman
Mr. Claude V. Marchbanks, Councilman
Mr. Marion C. Owens, Councilman
Mr. Weldon Day, Administrator
Mr. Bill Hendricks, S.C. State Representative

Copies of the outline attached to Inspection Report 269,270,287/88-01 were provided to interested personnel present at the meeting.

The resident inspector met individually with Mr. Larry Abernathy, Mayor of Clemson at Clemson City Hall on March 31. Mr. Abernathy was given a copy of the above outline and the inspector held a discussion with him covering the material presented at the two previous county council meetings.

11. Confirmatory Order Concerning Reactor Building and Decay Heat Removal Coolers

Problems caused by fouling of reactor building cooling units (RBCU) and low pressure injection (LPI) decay heat removal coolers and lake water temperatures have been a subject in several reports in 1987, including Report Nos. 50-269,270,287/87-13,17,25,29,30 and 44. NRC Confirmatory Orders of April 10, 1987 and August 19, 1987, placed restrictions of Operation on Oconee Unit 2. The orders required that Unit 2 not be operated at any power levels after the end of cycle 9 until the LPI and RBCU coolers had been cleaned and tested and had been approved for full power operation by Region II.

The licensee cleaned and tested the coolers during the EOC 9 refueling shutdown. The licensee determined that Unit 2 could be safely operated at power levels up to 100% with Lake Keowee water temperatures up to 85 degrees F. Region II personnel witnessed cleaning and testing and reviewed the findings. On April 7, Region II lifted the restrictions imposed by the Confirmatory Orders.

12. Information Meeting With DPC Staff Concerning Emergency Power Switching Logic At Oconee

On April 12, 1988, Duke Power Company met with Region II staff in the Atlanta office to provide information concerning a situation identified by DPC in which Oconee had operated outside of their design basis for a limited period of time. This concerned the very complex Emergency Power Switching Logic (EPSL) which is designed to insure a reliable source of power is available to safety-related components required to maintain the plant in a safe condition. At this meeting, DPC personnel provided a

basic explanation of how the EPSL system functioned and the events that identified how the operation outside of the design basis occurred. The information provided showed that the conditions needed to place the plant in this situation were very rare and had occurred only five times since the plant commenced operation and each of these times were for less than 24 hours. In addition, a probabilistic risk analysis was performed for this condition and the results indicated an E-7 core melt frequency. The licensee is developing detailed procedures to assure the plant is not placed into this condition during future maintenance involving components associated with the EPSL system. Additional information concerning this occurrence is contained in LER 269/88-04 dated April 6, 1988.

The licensee has performed additional review of this subject and has concluded that the root cause of this problem is not a design deficiency as described in LER 269/88-04, but is due to an inadequate procedure. They will be submitting a revision to this LER in the near future. Based on the Licensee's discussion in Region II, the information provided in LER 269/88-04, and the resident inspectors in depth review of this occurrence, this item is identified as a Licensee Identified Violation (LIV) 269,270,-287/88-08-07: Lack of Adequate Procedures for Isolation of Equipment Containing EPSL Components. This is based on the guidance provided in 10 CFR 2 Appendix C section V.A which allows the NRC to not issue a violation that meets the following tests:

(1) It was identified by the licensee - this was identified by the licensee while performing a design engineering review of a Technical Specification Interpretation requested by the operating staff at the plant.

(2) It fits a severity level IV or V - due to the extreme improbability of this series of events occurring (i.e. a LOCA and a loss of offsite power within 20 to 25 seconds - anything less than 20 seconds or greater than 25 seconds would not create this problem, while work was being conducted causing these control power fuses to be removed), which was calculated to be E-7, the severity level would appear to be level IV.

(3) It was reported - the report was made as required by 10 CFR 50.72 section (2)(iii)(D).

(4) It is being corrected - procedures are being developed to prohibit activities that will allow this condition to occur. Interim corrective actions have also been established.

(5) It was not a violation that could reasonably be expected to have been prevented by the licensee's corrective action for a previous violation.

13. Unit 2 End of Cycle 9 Refueling Outage (71711) (Unit 2)

The Unit 2 refueling outage was completed on April 6 approximately 4 days ahead of schedule. Major work reformed during the outage included chemical cleaning both OTSG's, refueling, installing dams in the primary side of cold legs, eddy current testing and plugging and sleeving of steam generator tubes, work on all four reactor coolant pumps and motors, and various non-safety related work. Portions of the startup and power escalation following the outage were observed by the inspectors. The evolutions observed were conducted in accordance with approved procedures that had been appropriately revised to reflect changes made during the outage period.

No violations or deviations were identified.