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

Report Nos.: 50-348/90-12 and 50-364/90-12

Licensee: Alabama Power Company
600 North 18th Street
Birmingham, AL 36291

Docket Nos.: 50-348 and 50-364 License Nos.: NPF-2 and NPF-8

Facility name: Farley 1 and 2

Inspection Conducted: April 11 - May 10, 1990

Inspection at Farley site near Dothan, Alabama

Inspectors: Peter A Balmain for G. F. Maxwell, Senior Resident Inspector — 5-29-90 Date Signed

Peter A Balmain for W. H. Miller, Jr., Resident Inspector — 5-29-90 Date Signed

Approved by: F. S. Cantrell, Section Chief — 5/29/90 Date Signed
Reactor Projects Branch 1
Division of Reactor Projects

SUMMARY

Scope:

This routine onsite inspection involved a review of operational safety verification, monthly surveillance observation, monthly maintenance observation, installation and testing of modifications, licensee event reports, and action on previous inspection findings. Certain tours were conducted on deep backshift or weekends, these tours were conducted on May 1 and 8 (deep backshift inspections occur between 10:00 p.m. and 5:00 a.m.).

Results:

Unit 1 operated at approximately 100 percent reactor power throughout the reporting period; Unit 2 was shutdown at 12:00 p.m. on April 27, to repair two containment fan cooler motors. While Unit 2 was shutdown, RHR pump 2B motor was replaced with a rebuilt motor and RHR pump 2A motor was refurbished to correct oil usage by these motors. The seal to charging pump 2B was also replaced.

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The 2B RHR pump may not have been capable of performing its long term cooling requirements. This is identified as an unresolved item pending further evaluation by the licensee (paragraph 2.b.(1)). The emergency lighting for the control room was being tested every 18 months in lieu of annually as required by the FSAR. Also, the procedures for maintenance and testing of the Appendix R battery units do not conform to the vendors recommendations (paragraph 2.b.(7)). This is a violation with two examples involving the failure to follow or establish adequate procedures. The licensee conducted a one day conduct of operations training seminar for all plant employees which should improve employee job performance (paragraph 2.b.(5)).

REPORT DETAILS

1. Licensee Employees Contacted

R. G. Berryhill, Systems Performance and Planning Manager
R. M. Coleman, Modification Manager
L. W. Enfinger, Administrative Manager
S. Fulmer, Supervisor, Safety Audit and Engineering Review
R. D. Hill, Assistant General Manager - Plant Operations
D. N. Morey, General Manager - Farley Nuclear Plant
C. D. Nesbitt, Technical Manager
J. K. Osterholtz, Operations Manager
L. M. Stinson, Assistant General Manager - Plant Support
J. J. Thomas, Maintenance Manager
L. S. Williams, Training Manager

Other licensee employees contacted included, technicians, operations personnel, maintenance and I&C personnel, security force members, and office personnel.

Acronyms and abbreviations used throughout this report are listed in the last paragraph.

Other Inspections:

2. Operational Safety Verification (71707)

a. Plant Tours

The inspectors conducted routine plant tours during this inspection period to verify that the licensee's requirements and commitments were being implemented. Inspections were conducted at various times including week-days,nights, weekends and holidays. These tours were performed to verify that: systems, valves, and breakers required for safe plant operations were in their correct position; fire protection equipment, spare equipment and materials were being maintained and stored properly; plant operators were aware of the current plant status; plant operations personnel were documenting the status of out-of-service equipment; there were no undocumented cases of unusual fluid leaks, piping vibration, abnormal hanger or seismic restraint movements; all reviewed equipment requiring calibration was current; and in general, housekeeping was satisfactory.

Tours of the plant included review of site documentation and interviews with plant personnel. The inspectors reviewed the control room operators' logs, tag out logs, chemistry and health physics logs, and control boards and panels. During these tours the inspectors noted that the operators appeared to be alert, aware of changing plant conditions and manipulated plant controls properly.

The inspectors evaluated operations shift turnovers and attended shift briefings. They observed that the briefings and turnover provided sufficient detail for the next shift crew and verified that the staffing met the TS requirements.

Site security was evaluated by observing personnel in the protected and vital areas to ensure that these persons had the proper authorization to be in the respective areas. The inspectors also verified that vital area portals were kept locked and alarmed. The security personnel appeared to be alert and attentive to their duties, and those officers performing personnel and vehicular searches were thorough and systematic. Responses to security alarm conditions appeared to be prompt and adequate.

Selected activities of the licensee's radiological protection program were reviewed by the inspectors to verify conformance with plant procedures and NRC regulatory requirements. The areas reviewed included: operation and management of the plant's health physics staff, "ALARA" implementation, radiation work permits for compliance to plant procedures, personnel exposure records, observation of work and personnel in radiation areas to verify compliance to radiation protection procedures, and control of radioactive materials.

b. Plant Events and Observations

(1) Unit 2 RHR Pumps

In 1983 RHR pump 2B failed due to the loss of lubricating oil to the lower motor bearings. The original 350 HP motor was replaced with a 300 HP motor from another utility. Since this replacement, the lower bearings for RHR pump 2B have had a history of oil usage. In the past, this was attributed to overfilling of the oil reservoir by the system operators. During May of 1989 refueling outage, the inspectors noted this pump lost lubrication oil during long run times and opened Inspector Followup Item 364/89-14-04 to verify RHR pump 2B operability following long run times.

Unit 2 was shutdown to Mode 5 on April 27, 1990. RHR pump 2B was placed in operation at 9:05 a.m. on April 28. At 11:30 p.m. on April 28, after the pump had been operating for about 15 hours, the system operator noted that no oil was visible in the oil sightglass. On April 29 at about 2:00 a.m., approximately 1/2 pint of oil was added to the lower bearing. About 18 hours later, at 8:00 p.m., once again no oil was visible in the sightglass. Pump 2B was removed from service at about 9:00 p.m. on April 29. The lower oil reservoir was drained, flushed and cleaned. The pump was returned to service on April 30, at 5:00 p.m. and about 4.75 hours later there was no oil visible in the sightglass. The pump was removed from service at 9:46 p.m.

The inspectors met with the licensee management on May 1 to discuss their concern about whether RHR pump 2B would accomplish its design function. Following this meeting, the reservoir for the lower bearings was drained, flushed, cleaned and refilled with oil once again. Later, at 5:20 p.m., the pump was started and after 3.2 hours of operation oil was not visible within the sightglass. The licensee removed the pump from service, to repair or replace the pump motor.

The original 350 HP RHR 2B motor which was removed in 1983 was reinstalled. This motor had been rebuilt by the manufacturer and was functionally tested at an off-site vendor facility prior to installation. The pump was satisfactorily tested and returned to service on May 6 at 10:20 a.m. The inspectors requested that the licensee provide sufficient justification to verify that RHR pump 2B had been functional since the 1989 refueling outage.

After RHR pump 2B was removed from service, RHR pump 2A was the only available RHR pump. TS Section 3.4.1.4 was met since one RHR loop was operable, the three reactor coolant loops were filled and two steam generators were maintained greater than 10 percent of the wide range indication. The licensee posted a system operator adjacent to RHR pump 2A to inspect and record the bearing oil levels and temperature every 15 minutes. On May 3, this pump also began to use oil and the bearing temperature began to rise. The licensee elected to remove this pump after pump 2B was reinstalled to investigate the cause of the oil leak. Pump 2A was removed from service on May 6 at 11:48 a.m. The pump shaft was found to be slightly out of alignment. As a result, the rotor was replaced with a new rotor and new bearings were installed. RHR 2A pump and motor were reinstalled and returned to service on May 9. The licensee is evaluating the repairs made to this pump to determine the cause of the oil usage.

Based on the above, the inspectors questioned the ability of RHR pump to meet the long term cooling requirements of 10 CFR 50.46.b(5), without periodically adding oil to the motor bearings. FSAR Section 5.5.7.3.5 states that the RHR system is designed to operate for up to a year pumping water from the containment sump, cooling it and returning it to the containment to cool the core. However, the addition of oil to the RHR pumps following a design based accident event would probably not be possible, in that FSAR Section 12.1.7.4.2 and Figure 12.1-27 indicates that the radiation dose rate for the area outside the RHR pump rooms would be from 500 to 5,000 rem/hr.

This is identified as an unresolved item, Operability verification of RHR pump 2B. 348,364/90-12-04. The licensee is evaluating the motor removed from RHR pump 2B to determine the cause of the apparent excessive oil usage.

(2) Containment Cooler Fans - Unit 2

As reported in NRC Report 348,364/90-10, one of the four containment cooler fans failed on February 23 and a second fan failed on April 5. On April 27, Unit 2 reactor was ramped to minimum load and was removed from the grid to repair the motors for containment cooler fans 2A and 2C. All four containment cooler fans and motor assemblies were removed from containment for repairs or refurbishment. The motor for cooler 2A appears to have failed due to inadequate grease in the drive bearing. A new fan and motor assembly was provided for cooler 2A.

The motor for cooler 2C appears to have failed due to loose bolts on the motor bearing housing. This motor has been replaced with the motor previously installed on cooler 2B which was refurbished. The motor for cooler 2D was also refurbished and reinstalled on this cooler. These motors were refurbished by the installation of new bearings and performance of detail inspections and operational tests prior to final installation to verify operability.

The motor for cooler 2B has been replaced with a rebuilt motor which is not environmentally qualified. This cooler will be used to help maintain the containment temperature below an average temperature of 120 degrees F, but will not be considered operable to meet the TS requirements. Two independent containment cooling trains with one fan cooler assembly per train is required by TS 3.6.2.3. Therefore, cooler 2B is considered inoperable, but Unit 2 remains within the operability requirements of the TS.

The licensee is evaluating these failed fan motors to determine the root cause of the failures. This evaluation will be reviewed during a future NRC inspection and is identified by previous Unresolved Item 348,364/90-10-01.

(3) Service Water Dilution Flow

During late April the inspectors noted that normal service water discharge flow path to the river had been changed by returning approximately one half of the total flow of about 36,000 gpm to the service water pond for reuse. This was required since the river water pumps were out of service due to dredging operations being conducted at the river water structure. The service water

discharge provides the dilution for the steam generator blowdown discharge. FSAR Section 11.2.8 states that this dilution rate is approximately 16,000 gpm from each unit. If dilution flow is secured, valves RCV-023B in each unit will close by a low flow transmitter to prevent operation of the steam generator blowdown system. To maintain the steam generator blowdown in service, procedures FNP-1/2-16.1 Appendix 1, Defeating the Low Dilution Flow Trip of 1/2-BD-RCV-023B, were developed. These procedures permitted the installation of jumpers to defeat the low dilution flow trip functions. This trip function was apparently provided to assure compliance with the dilution rates specified by the FSAR. When the low flow trip was defeated the procedures require maintaining a service water dilution flow of greater than 16,000 gpm per unit, maintaining a log of service water dilution flow recorded every 15 minutes for the affected unit, and conducting daily grab samples (each 22 hours) as required by the TS.

Originally, procedures 1/2-SOP-16.1 Appendix 1 were only permitted in Modes 5 and 6. In November 1988, these procedures were revised to permit performance in Modes 1-6. At that time a safety evaluation was made and the change was reviewed and approved by the PORC. On April 23, 1990, these procedures were revised to permit a dilution rate of greater than the flow permitted by the Off-Site Dose Calculation Manual (ODCM) or 10,000 gpm whichever is greater. The safety evaluation check list indicated that this change was not a change to the plant as described in the FSAR. However, as noted above the FSAR clearly states that a dilution flow of approximately 16,000 gpm will be maintained. Furthermore, the safety evaluation of 1988 states that, although a dilution flow of 10,000 gpm will meet the ODCM requirements, the actual flow rate of approximately 16,000 gpm will be maintained. Procedure FNP-0-A-1, Development, Review and Approval of Plant Procedures, Section 5 requires an evaluation of procedure changes be made to determine if the change will result in a change to the plant as described in the FSAR. The licensee revised procedures FNP-1/2-SOP-16.1 Appendix 1 which changed FSAR specified conditions, but a safety evaluation was not performed to address the change in dilution flow rate from 16,000 gpm to 10,000 gpm. The licensee stated they would evaluate the FSAR to determine whether a revision was necessary. This item is identified as Inspector Followup Item 348,364/90-12-05, Service water dilution in procedure SOP-16.1 reduced without a safety evaluation.

(4) Unit 2 Main Steam Line Supports

During a Unit 2 containment entry on September 20, 1989, the licensee observed hairline cracks in the gusset plates of the main steam line supports 2MS-R84 and 2MS-R85 for main steam

line C. The licensee's engineering group evaluated this situation and concluded that the stresses on this pipe were within operability allowable limits and that the piping would be capable of performing its intended design function until the Fall 1990 refueling outage.

On April 30 while the inspectors were touring the containment, they observed the licensee performing an inspection of supports 2MS-R84 and 2MS-R85. The hairline crack for steam line support 2MS-R84 was found to have developed into a full crack approximately 1/4-inch wide. The previous safety evaluation remains applicable. However, support 2MKS-R84 has a history of poor performance. Therefore, this problem has been referred to the NRC Region II inservice test inspection personnel for further evaluation.

This is identified as Inspection Followup Item 364/90-12-03, Evaluation of cause and corrective action on the failures of main steam line supports 2MS-R84 and 2MS-R85.

The following documents provide information on the "C" main steam line supports: Drawing Nos. D-205300 and SK-N11-CV-028 and Bechtel letters of September 20, 1989 (AP-16713) and July 19, 1986 (AP11914).

(5) Conduct of Operations Training Seminar

During March and April, all plant employees attended a one-day seminar off site entitled "Conduct of Operations." This course was taught by Westinghouse and each session included approximately 30 employees. The course objective was to increase each employee's awareness of the importance of conducting daily tasks in an attentive, diligent and conscientious manner. The seminar was very motivating and emphasized the importance of professionalism through: pride in performance; attention to detail; positive attitude; good communication; knowing goals and purpose; and taking time to do things right. The inspectors attended one of these training sessions and found the course material to be very good and employee interest high. This course should be beneficial towards helping plant employees maintain a positive work attitude which also should result in improved employee performance.

(6) Unit 2 Containment Inspection

Unit 2 was shutdown on April 27 to repair two inoperable containment fan coolers. The inspectors reviewed the licensee's containment inspection records which listed the boric acid leaks

from the components identified during the containment inspection of April 28. A total of 25 leaks were identified. Most of these involved leaks from pipe caps and valve stems. Valves Q2E21HV8146, normal charging AOV, and Q2E11LCV0459, letdown isolation valve, had more serious leaks which resulted in a moderate accumulation of boron on the floor beneath the valves. The inspectors toured the containment on April 30, and noted that most of the boron had been cleaned up and repairs were in process to correct these leaks. In general, the cleanliness of the Unit 2 containment was good following a plant run of approximately 159 days of continuous operation.

(7) Emergency Lighting

The inspectors reviewed the maintenance and test program for the plants emergency lighting and inspected the lighting installed within the control room. The emergency lighting installed at Farley is described in FSAR Section 9.5.3.3 and Fire Protection Program Document Section 4.3.4.1.19. The required maintenance, inspections, and tests conducted on the emergency lighting is described by FSAR Section 9B.6 and Table 9B-7. Inspections and tests on the emergency lighting are required to be performed periodically but at least annually to assure that the lighting will properly function and to continue to meet its design criteria.

The emergency lighting for the control room is from DC lighting units supplied from the plant's vital batteries. This lighting system is inspected and tested each 18 months by procedure 0-STP-150.10, Control Room Emergency DC Lighting Operability Tests, in lieu of at least annually as required by FSAR Table 9B-7. The failure to inspect and test this system as required by the FSAR is identified as Violation 348,364/90-12-01, Inadequate emergency lighting operability test.

During an inspection of the control room the inspectors noted that the control room emergency lighting system does not provide coverage for "BOP" control panels located in both Unit 1 and 2 areas of the plant. This does not appear to meet the FSAR commitments and is identified as Unresolved Item 348,364/90-12-02, Control room emergency DC lighting does not provide coverage for the "BOP" panel areas, pending further review by licensee and NRC regional staff.

A walkdown inspection of the licensee's designated Appendix R 8-hour battery powered emergency lighting units for the auxiliary building was conducted by the inspectors on May 9. A

total of 156 Appendix R lighting units are installed in the auxiliary building. The lights in Unit 1 were last inspected in August 1989 and the lights in Unit 2 were last inspected in December 1989. The inspectors on May 9 found six battery units in Unit 1 and eight battery units in Unit 2 to have a low electrolyte level. Two units in Unit 1 were found inoperable and would not illuminate upon test. The units low on electrolyte were as follows:

BATTERY TAG NO.	ROOM NO.
1296	409
1292	208
*1135	213
1295	218
1121	234
**1143	193
1152	Stair No. 1
2035	2247
2000	2225
2180	2254
2330	2208
2135	2189
***N/A	2190
N/A	2983
2136	2194

Notes:

*Unit inoperable due to battery charger disconnected and removed for repairs on April 20, 1990.

**Unit low on water and unit also failed illumination test.

***No tag No. on battery unit.

The above represents approximately 10% of the battery units installed in the auxiliary building. The battery units were not scheduled to be reinspected until August 1990 for Unit 1 and December 1990 for Unit 2. Battery units with low electrolyte level probably would not meet their 8-hour illumination requirement.

The procedures, 1/2-EMP-1381.01, Maintenance of Emergency Lighting Unit 1/2, Appendix "R", referenced a manual for "Holophane" units whereas "Teledyne Big Beam" units are actually

installed. Furthermore, the "Teledyne" maintenance manual identifies monthly, quarterly and annual tests to be performed on the emergency lighting units. The licensee's procedures only require an annual inspection and test which includes the vendor's monthly inspection and test items. The procedures do not include the vendors 2-hour quarterly or 8-hour annual operability test.

Based on the above walkdown, the procedures for maintenance and testing of emergency 8-hour battery pack lighting appear to be inadequate. This is considered another example of violation 348,364/90-12-01, Inadequate emergency lighting system operability test.

Except as noted, no other violations or deviations were noted.

3. Monthly Surveillance Observation (61726)

The inspectors witnessed the licensee conducting maintenance surveillance test activities on safety-related systems and components to verify that the licensee performed the activities in accordance with TS and licensee requirements. These observations included witnessing selected portions of each surveillance, review of the surveillance procedures to ensure that administrative controls and tagging procedures were in force, determining that approval was obtained prior to conducting the surveillance test, and the individuals conducting the test were qualified in accordance with plant-approved procedures. Other observations included ascertaining that test instrumentation used was calibrated, data collected was within the specified requirements of TS, any identified discrepancies were properly noted, and the systems were correctly returned to service. The following specific activities were observed:

0-STP-80.2	Diesel Generator 2C Operability Test.
1-STP-1.0	Operations Daily and Shift Surveillance Requirements Modes 1,2,3,4.
1-STP-20	Penetration Room Filtration System Train A (B) Quarterly Operability and Valve Inservice Test.
1-STP-70	Containment Sump Surveillance.
1-STP-80.1	Diesel Generator 1B Operability Test.
2-STP-1.0	Operations Daily and shift Surveillance Requirements Modes 1,2,3,4.
2-STP-2.6	Boric Acid Pump 2A Quarterly IST.
2-STP-9.0	RCS Leakage Test.

2-STP-20.2	Penetration Room Filtration System Train A Monthly Operability Test.
2-STP-21.3	Turbine Driven Auxiliary Feedwater Pump Steam Supply Valves Inservice Test.
2-STP-22.19	AFW Normal Flow Path Verification.
2-STP-22.16	Turbine Driven Auxiliary Feedwater Quarterly Inservice Test (TAVG 547 degrees F).
2-STP-22.23	Turbine Driven Auxiliary Feedwater Pump Trip Throttle Valve Indication Operability Test.
2-STP-80.1	Diesel Generator 2B Operability Test.

On April 23, diesel generator 2B failed the administrative operability test due to a slow start from both headers. However, the diesel did start within the time limits, less than 12 seconds, required by the TS. The diesel was removed from service on April 25 and investigation found that the slow start was due to a clogged filter in the air line in the No. 1 header to the distributor. This filter was replaced and the diesel was satisfactorily retested on April 26.

No violations or deviations were identified. The results of the inspections in this area indicate that the program was effective with respect to meeting the safety objectives.

4. Monthly Maintenance Observation (62703)

The inspectors reviewed maintenance activities to verify the following: maintenance personnel were obtaining the appropriate tag out and clearance approvals prior to commencing work activities; correct documentation was available for all requested parts and material prior to use; procedures were available for all requested parts and material prior to use; procedures were available and adequate for the work being conducted; maintenance personnel performing work activities were qualified to accomplish these tasks; activities reviewed were not violating any limiting conditions for operation during the specific evolution; post-maintenance testing activities were completed; and that equipment was properly returned to service after the completion of work activities. Activities reviewed included:

MWR 178434	Disassemble CCW 1B room cooler safety relief valve Q1P16V025B and replace relief spring with new spring per PCN 89-1-5586.
MWR 205544	Remove and repair motor bearing oil leak on RHR pump 2A.

MWR 206983	Repair motor for containment cooling fan 2A.
MWR 207115	Diesel generator lube-oil pump leaking (2C diesel generator).
MWR 207756	Packing leak on steam supply inlet valve for Unit 2 turbine driven auxiliary feedwater pump (valve Q2N12HV 3226).
MWR 208683	Remove RHR pump 2B, replace existing motor with a rebuilt motor and reinstall.
MWR 214279	Installation of 8-inch isolation valve for fire protection loop in turbine building.
MWR 214280	Rework underground fire protection piping between turbine building and auxiliary building. (Included Hydro Test 5476-01-PT).
MWR 214638A	Diesel generator fuel injectors leaking (2C diesel generator).
MWR 216008	Repair motor for containment cooling fan 2B.
MWR 216009	Remove and reinstall containment cooling fan 2B.
MWR 216010	Repair motor for containment cooling fan 2D.
MWR 216011	Remove and reinstall containment cooling fan 2D.
MWR 216012	Remove and reinstall containment cooling fan 2AD.
MWR 216013	Remove and reinstall containment cooling fan 2C.
MWR 217600	Replace motor for containment cooling fan 2C.
WA 94312	Retrieval of skimmer hose from Unit 1 spent fuel pool per procedure 0-ETP-3646.

No violations or deviations were identified. The results of the inspections in this area indicate that the program was effective with respect to meeting the safety objectives.

5. Installation and Testing of Charging Pump Modifications (37828)

The inspectors observed in-process modifications being conducted on the mechanical seals for Unit 2 CVCS charging pump 2B. The modification was authorized by PCN B-87-2-4130 and was considered as an upgrade of the mechanical seals. The modification reduced the number of seal parts,

eliminated the need for external flushing lines, and provided a cartridge design which was built up on a shaft sleeve in the shop and installed as a cartridge into the pump. The upgrade should improve pump reliability and maintainability.

The inspectors evaluated the modification package for PCN B-87-2-4130 and found that Westinghouse completed a safety evaluation checklist to address the charging pump integrity. Additional safety evaluations included the effects of removing seal water piping on the CCW system and removal of the instrumentation associated with the CCW piping which was removed. The inspectors noted that FSAR changes would be required by the PCN (specifically FSAR Sections 6.3. and 9.2).

The licensee is to modify the mechanical seal for all of the charging pumps. These modifications are scheduled to be completed by late Summer of 1990. The inspectors will continue to monitor this work as part of the routine residents inspection program.

No violations or deviations were identified.

6. Licensee Event Reports (92700, 90714)

The following Licensee Event Reports (LER) were reviewed for potential generic problems to determine trends, to determine whether information included in the reports meets the NRC reporting requirements and to consider whether the corrective action discussed in the report appears appropriate. The Licensee action was reviewed to verify that the events were reviewed and evaluated by the licensee as required by the Technical Specifications; that corrective action was taken by the licensee; and that safety limits, limiting safety setting and LCOs were not exceeded. The inspector examined the incident report, logs and records, and interviewed selected personnel. The following reports are considered closed:

Unit 1 (348)

LER 90-03	Personnel error results in incorrect effluent monitor setpoint.
LER 89-04	Potential design inadequacy in the service water system.

Unit 2 (364)

*LER 89-09	Inadequate feedwater flow indication could have prevented proper operation of the high flux level reactor trip.

Note: * This item was closed in NRC Report 50-348,364/90-08.

7. Action on Previous Inspection Findings

(Closed)Inspection Followup Item 364/89-14-04, Verification of RHR pump 2B operability following long run times. This item is closed and is upgraded as an unresolved item. Refer to paragraph 2.b.(1) in this report.

8. Exit Interview

The inspection scope and findings were summarized during management interviews throughout the report period, and on May 14, with the plant manager and selected members of his staff. The inspection findings were discussed in detail. The licensee acknowledged the inspection findings and did not identify as proprietary any material reviewed by the inspectors during this inspection.

Licensee was informed that the items discussed in paragraphs 6 and 7 were closed.

ITEM NUMBER	DESCRIPTION AND REFERENCE
348,364/90-12-01	Violation: Inadequate emergency lighting system operability test - paragraph 2.b.(7)
348,364/90-12-02	Unresolved Item: Control room emergency DC lighting does not provide coverage for BOP panel area - paragraph 2.b.(7).
364/90-12-03	Inspector Followup Item: Evaluation of the cause and corrective action on the failures of main steam line supports 2MS-R84 and 2MS-R85 - paragraph 2.b.(4).
364/90-12-04	Unresolved Item: Operability verification of RHR pump 2B - paragraph 2.b.(1).
348,364/90-12-05	Inspector Followup Item: Service Water dilution in Procedure SOP-16.1 reduced without a safety evaluation - paragraph 2.b.(3).

9. Acronyms and Abbreviations

AFW - Auxiliary Feedwater
AOP - Abnormal Operating Procedure
AP - Administrative Procedure
APCO - Alabama Power Company
CFR - Code of Federal Regulations
CVCS - Chemical and Volume Control System
CCW - Component Cooling Water
DC - Design Change
ECP - Emergency Contingency Procedure
EIP - Emergency Plant Implementing Procedure
EQ - Environmental Qualifications
ESF - Engineered Safety Features

EWR - Engineering Work Request
F - Fahrenheit
GPM - Gallons Per Minute
ISI - Inservice Inspection
IST - Inservice Test
LCO - Limiting Condition for Operation
MOV - Motor-Operated Valve
MOVATS - Motor-Operated Valve Actuation Testing
MWR - Maintenance Work Request
NCR - Nonconformance Report
NRC - Nuclear Regulatory Commission
NRR - NRC Office of Nuclear Reactor Regulation
PMD - Plant Modifications Department
QA - Quality Assurance
QC - Quality Control
RCP - Radiation Control and Protection Procedure
RCS - Reactor Coolant System
RHR - Residual Heat Removal
SI - Safety Injection
SAER - Safety Audit and Engineering Review
S/G - Steam Generator
SSPS - Solid State Protection System
SOV - Solenoid Operated Valve
SPDS - Safety Perameter Display System
STP - Surveillance Test Procedure
SW - Service Water
TS - Technical Specification
TSC - Technical Support Center
WA - Work Authorization