



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

Report Nos.: 50-348/92-25 and 50-364/92-25

Licensee: Southern Nuclear Operating Company, Inc.
 P.O. Box 1295
 Birmingham, AL 35201-1295

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

Facility name: Farley 1 and 2

Inspection Conducted: October 5 - November 9, 1992

Inspectors:	<u>For R.W. Wright</u>	11/20/92
	George F. Maxwell, Sr. Resident Inspector	Date Signed
	<u>For R.W. Wright</u>	11/20/92
	Michael J. Morgan, Resident Inspector	Date Signed
Approved by:	<u>Floyd S. Cantrell</u>	11/20/92
	Floyd S. Cantrell, Chief	Date Signed
	Reactor Projects Section 1B	
	Division of Reactor Projects	

SUMMARY

Scope:

This routine monthly inspection involved on-site inspection of operations, maintenance, surveillance, refueling activities, FNP's "STAR" program, actions on previous inspection findings and follow-up of other events. Deep backshift inspections were performed October 12, 20 and 29, 1992.

Results:

On October 20, the on-line main condenser waterbox was inadvertently isolated. This caused problems in the feedwater system, a manual reactor trip was ordered and a non-cited violation was identified, paragraph 3.a. Since November 1, pressurizer safety valve high tailpiece temperature excursions have been observed, paragraph 3.b. On November 2, a hot particle was detected on a maintenance group worker exiting containment, paragraph 3.c. On October 29, a service water leak occurred outside the diesel generator building, paragraph 4.b. The inspectors determined that the lifted leads on the Unit 2 containment spray indicator lights that were identified in Inspection Report Nos. 50-348,364/92-24 have been corrected in an appropriate manner. A non-cited violation for this event was identified, paragraph 4.c. On October 28, during performance of a load shedding surveillance test, an inadvertent actuation of engineered safety features equipment occurred. A non-cited violation for this event was identified, paragraph 5.b. On November 5, special reports were issued because a CO₂ fire suppression system was inoperable more than 14 days and all three high pressure fire pumps were

inoperable, paragraphs 6.a. and 6.b. The inspectors noted incidents where problems were mitigated by FNP's "error reduction program", paragraph 8.

Except as noted, no other deviations/violations were identified. Results of this inspection indicate that actions by management, operations, maintenance and other site personnel were generally adequate.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- R. Coleman, Modification Manager
- L. Enfinger, Administrative Manager
- S. Fulmer, Superintendent, Operations Support
- *R. Hill, General Manager - Farley Nuclear Plant
- *W. Jaasma, Auditor, Safety Audit and Engineering Review
- M. Mitchell, Superintendent, Health Physics and Radwaste
- *C. Nesbitt, Operations Manager
- *J. Osterholtz, Technical Manager
- *L. Stinson, Assistant General Manager - Plant Operations
- *J. Thomas, Maintenance Manager
- L. Williams, Training Manager
- *B. Yance, Systems Performance Manager

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

*Attended exit interview

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

2. Plant Status

a. Unit 1 Status

Unit 1 continued with scheduled refueling outage No. 11. This outage is expected to continue until approximately November 30.

b. Unit 2 Status

Unit 2 operated at approximately 100 percent power for most of the reporting period. However, on October 20, a manual reactor trip was initiated due to a loss of main condenser hotwell level, a subsequent cavitation of the associated unit condensate pumps and a degradation of main feedwater flow.

c. NRC/Licensee Meetings and Inspections

- o During the week of October 19, Region II, Division of Reactor Safety, Operations Branch personnel conducted an initial operating examination for five facility licensee operator candidates. Results of the exam are contained in Examination Report 50-348,364/92-302.
- o During the week of October 19, Region II, Division of Radiation Safety and Safeguards, Radiological Protection personnel performed a review of FNP's radiation protection

and incident reporting programs. Results of the inspection are contained in Inspection Report 50-348,364/92-27.

- o During the week of October 19, Region II, Division of Reactor Safety, Engineering Branch personnel conducted a review of various inservice inspection items, including the status of licensee erosion and corrosion control programs, and conducted an evaluation of both steam generator and reactor vessel flange repair work. Results of the inspection are contained in Inspection Report 50-348,364/92-28.
- o During the week of October 26, Mr. S.T. Hoffman, NRR Project Manager (Farley) met with Southern Nuclear Operating Company (SNC) and plant management personnel to discuss the status of various licensing actions and to evaluate current plant conditions.

d. Changes in Southern Nuclear Operating Company Management Personnel

- o On November 1, Mr. J.M. Farley, Director and Chairman of the Board of Southern Nuclear Operating Company (SNC) and Executive Vice President and Corporate Counsel of The Southern Company, retired. Prior to Alabama Power Company's reorganization with SNC, Mr. J.M. Farley served as President and Chief Executive Officer of Alabama Power.
- o On November 4, Mr. J.K. Osterholtz, was named to the position of Assistant General Manager (Farley) - Plant Support. He is to assume these duties after the Unit 1 refueling outage and he will report to the Plant General Manager, Mr. R.D. Hill.

3. Operational Safety Verification (71707)

The inspectors conducted routine plant tours to verify licensee requirements and commitments were being implemented. The inspection tours included reviews of site documentation, interviews with plant personnel and an on-going evaluation of licensee self-assessment. The inspectors reviewed the circumstances related to the following events.

a. Manual Reactor Trip Due to Inadvertent Closure of the "AB" Main Condenser Waterbox Outlet Isolation Valve - Unit 2

On October 20, 1992, the plant was ramped to about 65 percent power in order to isolate the "AA" main condenser waterbox in preparation for leak detection work within the waterbox.

During associated isolation activities, an on-line main condenser waterbox, the "AB" waterbox, was erroneously isolated. The total loss of circulating water to the main condenser resulted in a lowering of hotwell level to a rate beyond normal hotwell makeup capability. The loss of the hotwell level also resulted in a cavitation of the condensate pumps, a loss of steam generator feedwater pump (SGFP) suction pressure and a severe degradation in main feedwater flow. Because of the severe degradation of feedwater flow, the shift supervisor directed the main control board operators to perform a Unit 2 manual reactor trip.

The inspectors noted, after discussions with staff personnel and after review of event root cause analysis information, that following the isolation of the "AA" waterbox, the "AB" waterbox outlet isolation valve was closed. The inspectors have determined that this condition occurred due to operation of the local "AB" isolation valve control switch during condenser isolation activities.

FNP staff root cause evaluation and follow-up inspection by the resident inspectors noted that the labeling of the control switches and the switch position relative to the physical location of the respective isolation valves may have contributed to the event. The orientation of the control switches is reversed physically from that of the waterbox isolation valves and the labeling is located on the side of the control switch box rather than on the face of the box. Investigation also revealed that the light bulb for the closed indication on the "AA" outlet valve was burned out and that the procedure used for isolating the "AA" waterbox contains no requirement for verification that all other waterboxes are in service prior to isolation of a waterbox valve.

As part of the root cause evaluation, the suggested corrective actions required the removal of electrical power from all condenser waterbox isolation valves after the valves are opened for normal plant operation. This should prevent inadvertent closures during power operations.

The following measures are also being evaluated by the licensee:

- o Revision of the procedure used for waterbox isolation. These revisions may include power removal once the valves are open and verification that all waterboxes are in service prior to isolation of any waterbox.
- o Upgrading of associated pushbutton control station labeling. This upgrade may include front-mounted labeling and location and numbering of the power supply breaker in case the valve requires "powering up" in an emergency.

On October 21, Unit 2 was placed back into power operation. This isolation of the "AB" main condenser waterbox outlet isolation

valve by operations personnel is identified as a non-cited violation and will not be subject to enforcement action because of the licensee's efforts in identifying and correcting the violation met criteria specified in Section VII.B of the Enforcement Policy. This item is identified as non-cited violation (NCV) 50-364/92-25-02, Manual reactor trip due to closure of the "AB" condenser waterbox outlet isolation valve. An LER is being prepared to document this event.

b. Code Safety Valve High Tailpiece Temperatures - Unit 2

On November 1, at approximately 2:57 p.m., the "B" pressurizer (PZR) code safety tailpiece alarm actuated. A peak tailpiece temperature of approximately 210 degrees F was noted and recorded by the board operators. The alarm setpoint is approximately 20 degrees F above local ambient temperature, (about 140 to 160 degrees F). The alarm cleared at 10:02 p.m. on November 1. No measurable RCS leakage was noted from any of the code safeties or PORVs. Since the initial excursion, the operations staff has consulted with the NSSS vendor and determined that a small "weeping" or "wiping" action may be occurring from the "B" code safety valve. Currently, operations is recording "B" safety valve peak temperature excursions and trending temperatures for all code safety valves. The inspectors were informed that an incident report (IR 2-92-398) was drafted for this event. The inspectors will continue to monitor licensee actions for this event and will note further activities in a future report. Until the inspectors can fully determine the extent of these high tailpiece temperatures this item is identified as inspector followup item (IFI) 50-364/92-25-02, High pressurizer (PZR) "B" code safety valve tailpiece temperature excursions.

c. Hot Particle Detected on Maintenance Worker - Unit 1

On November 2, a hot particle was detected during a whole body frisk of a FNP maintenance worker who had exited containment during reactor vessel head removal operations. The hand-held pancake probe indicated 600,000 dpm on the worker's center forehead area. The particle was immediately removed from the worker's forehead by Health Physics (HP) personnel to further reduce the radiological hazard. Isotopic analysis of the particle indicated that it contained zirconium and may have originated from the fuel cladding. Air sample isotopic content results, in the area of the vessel head removal, were consistent with the isotopic analysis of the hot particle.

Health physics personnel concluded that the worker became contaminated with the hot particle while seating the vessel head on the reactor vessel head stand. Preliminary exposure calculations, using the VARSKIN program, indicated a 6.713 Rem dose. FNP has continued to evaluate this exposure and is continuing to try to verify the true source of the hot particle. No regulatory limits were exceeded.

Region II radiation protection personnel, who followed-up the licensee's actions regarding this incident, noted that the full safety significance was determined and that required licensee actions were completed.

A non-cited violation was identified involving the closure of the "AB" condenser waterbox outlet isolation valve which subsequently required a manual reactor trip. The results of inspections in the operations and plant radiation protection area indicate a need for increased management followup of activities in accordance with applicable procedures.

4. Monthly Maintenance Observation (62703)

The inspectors reviewed various licensee preventative and corrective maintenance activities, to determine conformance with facility procedures, work requests and NRC regulatory requirements.

a. Portions of the following maintenance activities were observed:

- o MWR-258834; "2B" D/G intake filter housing chipped/flaking

Inspectors observed craft personnel preparing, cleaning and painting the intake filter in accordance with painting procedure FNP-0-M-72. Work performed was satisfactory and in accordance with directions contained in the MWR.

- o MWR-260031; Unit 2 containment moisture indication reading higher than expected - investigate and repair

Inspectors observed trouble-shooting efforts associated with this indication. Output (inverse to reading) of the instrument card was reading slightly lower than normal. The card was adjusted and output was corrected. Work performed was satisfactory and in accordance with directions contained in the MWR.

- o MWR-268733; "2C" CCW pump outboard bearing bubbler damaged

Inspectors observed repair efforts associated with the pump. The damaged bubbler was removed and replaced with a "new" oil bubbler gasket/assembly. Work performed was satisfactory and in accordance with directions contained in the MWR.

- o MWR-269296; "2B" PZR code safety valve - elevated tailpiece temperatures - investigate

Inspectors observed trouble-shooting efforts associated with the "2B" PZR safety valve. PZR safety tailpiece temperatures were continuously monitored. A replacement valve was in stock and inspected should such repairs become necessary. Preparation work was satisfactory and in accordance with directions contained in both the MWR and the technical manual for the code safety valve.

- b. Service Water System Chlorination Line Leak - Unit 1

On October 29, at 4:07 p.m., the Unit 1 shift supervisor received a call from contractor (outage) personnel. They reported that a large amount of water was coming from an area located near the entrance to the diesel generator (D/G) building. This entrance is located on the north side of the D/G building. The unit shift supervisor immediately dispatched an operator and the unit shift foreman to the area to determine both the source of the leak and the amount. After isolation of the "B" train 24-inch service water system (SW) piping to the turbine building, (a non-safety portion of the SW), the leakage ceased. On October 31, after maintenance personnel excavated the soil from the area of the leak, personnel determined that SW was leaking from an abandoned" portion of 4-inch non-code piping, an "old" chlorination system line. The hole in the chlorination piping appeared to be the result of corrosion in an area where the original piping coating had been scraped away during construction. The piping was cut near the main 24-inch branch of the SW line and a cap was welded over the opening. Inspectors observed that the work performed was satisfactory and in accordance with directions contained in the work package.

- c. Lifted Leads On Containment Spray and Phase "B" Actuation Test Lamps - Unit 2 (Update)

On September 22 the inspectors received and evaluated a plant incident report (IR 2-92-145) which noted that in April, 1992, during performance of containment spray system tests, the main control board indications for containment spray phase "B" did not illuminate during testing. Upon investigation of the cause, electrical maintenance personnel determined that the cables for the lamps had been lifted and taped, (See Inspection Report 50-348,364/92-24, Paragraph 4.). The inspectors noted that these lights were not the only indications available for determining successful completion of the test. The inspectors also noted that this portion of the test procedure was being run for the first time. Based upon the licensee's investigation of this event, it was not possible to specifically determine when these cables were de-terminated.

The most probable time of occurrence was somewhere during the last Unit 2 outage. This may have been part of authorized maintenance activity or as part of a design change activity. This practice of taping leads in this manner was common to both electrical maintenance and PMD personnel.

A walkdown of all Unit 2 control room cabinets, to identify spare leads, was performed and this walkdown identified 460 de-terminated cables. A record review of these leads verified that all 460 were spare by design. All accessible de-terminated conductors were tagged as spares.

A walkdown of other cabinets, in order to identify, verify and tag leads if appropriate, is currently in progress. This issue was previously identified as unresolved item (UNR) 50-364/92-24-03, Lifted leads discovered during surveillance testing of the containment spray system and is now closed, (See paragraph 9). This item is identified as a non-cited violation (NCV) and will not be subject to enforcement action because of the licensee's efforts in identifying and correcting the violation meet the criteria specified in Section VII.B of the Enforcement Policy. This item is now identified as NCV 50-364/92-25-03, Unit 2 lifted leads discovered during surveillance testing of the containment spray system.

No deviations or other violations were identified in this area. Results of inspections in this area indicate that personnel generally conducted assigned maintenance activities in accordance with applicable procedures.

5. Monthly Surveillance Observation (61726)

Inspectors witnessed surveillance test activities performed on safety-related systems and components in order to verify that such activities were performed in accordance with facility procedures and regulatory requirements.

a. Portions of the following surveillance activities were observed:

- o 1-STP-1.0, Operations Daily/Shift Surveillance
- o 2-STP-1.0, Requirements Modes 1, 2, 3, and 4

Inspectors routinely observed unit operators while parameters were monitored, documented and evaluated.

- o 1-STP-40.2; "B" Train Sequencer SI with Off-site Power Available and Load Shedding Circuit Test

Inspectors evaluated preparations for this load shedding test. During these preparations, the events described in paragraph 5.b., occurred.

Except as noted in paragraph 5.b., below, the surveillance activities were performed satisfactorily and in accordance with written procedures.

b. Inadvertent ESF Actuation - Unit 1

On October 28, with the plant in a defueled condition and during performance of FNP-1-STP-40.2; "B" Train Sequencer SI with Off-site Power Available and Load Shedding Circuit Test, a "B" train loss of site power (LOSP) load shed signal was generated while attempting to (by procedure) jumper circuitry contacts for the associated relay. The maintenance electrician inadvertently allowed a jumper to make contact with a relay terminal adjacent to the one on which he was attempting to install the jumper. The spurious contact resulted in generation of a load shed signal on the "B" train electrical busses. Off-site electrical power to the "B" train busses was lost, "1B" and "2C" diesel generators started, and the "1B" diesel generator tied onto and energized the "1G" bus. All other ESF equipment which could have been affected by this event was out of service as part of the test. Following the actuation power sources were returned to their normal electrical line-ups.

The inspectors determined that the electrician failed to properly shield the relay terminals from possible inadvertent electrical contact. FNP management noted that a comparable occurrence was described in LER 87-006. Precautions stated in the current revision (Rev. 3) of EMP-1906.01 were apparently the result of events described in LER 87-006.

The plant staff have noted that the following may have contributed to the event:

- o The placement of the jumper was physically difficult. The terminals are very close together, approximately 1/2 inch and the vertical clearance for installing the jumper was minimal. Access to the terminals and location of the relay in the cabinet required the electrician to be in an awkward position.
- o The pre-made package, containing the jumpers necessary for the surveillance, included a jumper which was made with an unshielded alligator clip.

The plant staff has recommended the following as corrective actions for this event:

- o Jumpers obtained are to be fully shielded and easier to attach to the terminals.

- o Annual retraining on EMP-1906.01 will stress not only installation and removal of jumpers, but also, the potential consequences of accidental contact.
- o Procedures have been revised to note care in the attachment of jumpers.
- o Continue to stress the importance of pre-job briefings, especially for jobs which entail "infrequently performed evolutions".

As demonstrated by FNP management actions, (meetings attended by the plant general manager, maintenance manager, operations manager, and root cause analysis personnel, immediately following the event at 12:30 a.m., on October 29), supervisory awareness and response to events such as this has been heightened. The site resident inspectors also attended the above meeting.

This item is identified as a non-cited violation (NCV) and will not be subject to enforcement action because of the licensee's efforts in identifying and correcting the violation meet the criteria specified in Section VII.B of the Enforcement Policy. This item is identified as NC' 50-348/92-25-01, Personnel error causes actuation of engineered safety feature equipment.

No deviations or other violations were identified in this area. Results of inspections in this area indicate that personnel generally conducted assigned activities in accordance with applicable procedures.

6. Fire Protection/Prevention Program (64704)

- a. Special Report - CO2 Isolated To Safety-Related Bus "1J" For Greater Than 14 Days - Unit 1

On November 5, a special report was submitted to the NRC, because the CO2 system to the "1J" 4160V safety-related bus was not restored to an operable status within 14 days.

On September 27, at approximately 8:45 a.m., the 5 ton CO2 unit for the D/G Building was isolated to allow for investigation of an inadvertent system discharge into the bus. On October 2, at approximately 11:30 a.m., the CO2 unit was unisolated. However, the CO2 protection for the bus remained disabled to allow for further troubleshooting and repair. Investigation revealed a possible DC system ground because of a loose terminal inside the master valve box and defective heat sensors.

Due to operational constraints, the "1J" bus was not de-energized to allow for replacement of the defective detectors. All required TS actions were met for the period in which the 5 ton CO2 unit was isolated.

On October 25, at approximately 4:00 p.m., corrective maintenance actions were completed and the system was returned to operable status. All required TS actions were met for the period in which the CO2 system to the "1J" bus was isolated.

The inspectors evaluated work activities and noted that the work that was performed was satisfactory and in accordance with directions contained in the associated MWR and technical manuals for the detectors, sensors and CO2 unit.

b. Special Report - Inoperable Fire Suppression Water Pumps

On November 5, a special report was submitted to the NRC, because all facility fire suppression water pumps were inoperable for approximately 36 minutes on October 26, 1992.

On October 26, from approximately 8:34 p.m. to approximately 9:10 p.m., all three high pressure fire pumps were inoperable. However, one diesel driven fire pump (DDFP) was capable of starting and running if called upon to operate. The motor driven fire pump (MDFP) was also out of service. However, the number 1 DDFP and the system jockey pump were running to maintain system pressure.

On October 26, fire suppression header pressure was noted to be decreasing and personnel were dispatched to investigate. The number 1 DDFP had a decreasing rpm and a clogged fuel filter was suspected as the cause. The pump was declared inoperable. The number 2 DDFP was started and a packing leak was noted. This pump was declared inoperable, and maintenance was started for the packing replacement. Fire protection system pressure was maintained throughout the event by the jockey pump. The number 2 DDFP was returned to service at approximately 9:00 p.m., October 26, the MDFP was returned to service at approximately 4:12 a.m., October 28 and the number 1 DDFP was returned to service at approximately 4:56 p.m., October 30.

The above and other associated fire protection items were discussed with regional personnel for further evaluation. A followup inspection is scheduled.

7. Training For Emergency Preparedness (82206)

On October 21, the inspectors observed portions of a "full-scale" training exercise. This exercise was conducted as part of training for one of the designated emergency preparedness response groups. The plant general manager - operations, served as the emergency director during the exercise and all designated personnel responded appropriately and expeditiously to the emergency alarms and the overall drill scenario.

8. FNP's Error Reduction Program (STAR)

During this reporting period, the inspectors noted four incidents which occurred that reduced the licensee's safety margin controls for tagging orders. In the following incidents, use of the principles of the "STAR" (STOP, THINK, ACT, REVIEW) program, by contractor/licensee personnel prevented further problems:

- o Prior to breaching a penetration, an FNP craftsman and a contract QC inspector noticed that the penetration breach form erroneously indicated the wrong penetration. Work was stopped, the job coordinator notified and the correct penetration was identified.
- o A chemistry technician noted, during a QC check of the counting room's analyzer, that the detector's energy spectrum had shifted. While this QC check was not required to be completed, the technician's good practice spotted the problem early. If not done, analysis using this instrument would have been erroneous and would have then required re-analysis.
- o The HP manager, while reviewing upcoming waste and decon outage work, noted that the setup for the steam generator manway tests was scheduled concurrent with an expected crud burst peak dose rate. The setup of the steam generator manway tests was postponed until after the peak dose rate had subsided.
- o A chemistry technician, while obtaining a procedure from document control, questioned document control personnel on whether this procedure was the current revision. Document control personnel noted that the master had not been updated and that the technician was given an "old" procedure. Document control personnel corrected the error and issued the technician an updated procedure.

9. Action on Previous Inspection Findings (92702)

(Closed) Inspector Follow-up Item (IFI) 50-348,364/90-03-01, DC load profile

In a team inspection at the corporate office in the area of design control and other areas in the spring of 1990, it was identified that the licensee did not have good control over loading on the safety-related batteries. At the time, a seven-point action plan was agreed to by the licensee and the NRC to resolve the concern.

At a meeting on January 4, 1991, the licensee stated that all seven items of the action plan had been completed, except the testing to be completed during the Unit 1 outage. The Electrical Distribution System Functional Inspection (EDSFI) team in July, 1992, performed a thorough review of battery loading, including the results of the aforementioned testing. The EDSFI team concluded that the licensee had improved their control over battery loading. The team did; however, have some concerns

in the area of battery loading which are contained in UNR 50-348,364/92-17-07, Auxiliary building battery voltage is marginal for present load requirements. At this time, it is appropriate to close the original IFI 50-348,364/90-03-01, since it has been superseded by a later UNR. This UNR embodies all present concerns with the DC load profile.

(Closed) IFI 50-348,364/90-03-02, EDG loading conditions.

In a team inspection at the corporate office in the area of design control and other areas in the spring of 1990, a potential problem with diesel generator loading was identified. The concern revolved around the alignment of certain motor control centers and the operating procedure which controlled alignments. In response to the concern MCC "IX" has been realigned to Unit 2 and FNP-1-SOP-36.3 has been revised to include a precautionary note about MCC "IX". The Electrical Distribution System Functional Inspection (EDSFI) team in July, 1992, performed a thorough review of diesel generator loading. The team concluded that four of the five diesel generators shared between the two units, had calculated maximum coincidental loading less than the continuous rating of the diesel generator sets. Unit 1 train "A" diesel generator had a maximum coincidental load of 54 kW over the continuous rating of 2850 kW based on a conservative study. A transient analysis demonstrated that the diesel generators could accept the design load profile. In consideration of these facts, IFI 50-348,364/90-03-02 is closed.

(Closed) IFI 50-348,364/90-03-04, Revised AC load analysis.

In a team inspection at the corporate office in the area of design control and other areas in the spring of 1990, a potential concern about the need to include a particular scenario (or case) in the AC system voltage analysis was expressed in this IFI. The case being postulated by the team was to analyze system performance for simultaneous starting of a large plant load such as a condensate pump and the load blocks associated with a safety injection actuation signal. The action required by the IFI was for the NRC to determine whether or not such a scenario is within the design basis requirements for the plant. Region II Plant System Section personnel have reviewed this issue and concluded the case postulated by the inspection team goes beyond the requirements. Thus, the licensee was correct in deleting this particular case from the array of analyzed cases. Therefore, IFI 50-348,364/90-03-04 is closed.

(Closed) Unresolved Item (UNR) 50-364/92-24-03, Lifted leads discovered during surveillance testing of the containment spray system.

Monthly inspection by the resident inspectors determined that the licensee has adequately identified and corrected this problem of containment spray system indication lifted leads. A non-cited violation 50-364/92-25-03, Unit 2 lifted leads discovered during surveillance testing of the containment spray system was issued, (See paragraph 4.c.). This unresolved item is closed.

10. Exit Interview

The inspection scope and findings were summarized during management interviews throughout the report period, and on November 10, 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 items discussed in paragraph 9 were closed.

<u>ITEM NUMBER</u>	<u>DESCRIPTION AND REFERENCE</u>
364/92-25-01 (IFI)	High pressurizer (PZR) "B" code safety valve tailpiece temperature excursions.
364/92-25-02 (NCV)	Manual reactor trip due to inadvertent closure of the "AB" condenser waterbox outlet isolation valve.
364/92-25-03 (NCV)	Unit 2 lifted leads discovered during surveillance testing of the containment spray system.
348/92-25-01 (NCV)	Personnel Error Causes Actuation of Engineered Safety Feature Equipment.

11. Acronyms and Abbreviations

AFW	-	Auxiliary Feedwater
ALARA	-	"As Low As Reasonably Achievable"
AOP	-	Abnormal Operating Procedure
AP	-	Administrative Procedure
APCO	-	Alabama Power Company
BTRS	-	Boron Thermal Regeneration System
CFR	-	Code of Federal Regulations
CVCS	-	Chemical and Volume Control System
CCW	-	Component Cooling Water
CRDM	-	Control Rod Drive Mechanism
CS	-	Containment Spray System
DDFP	-	Diesel Driven Fire Pump
D/G	-	Emergency Diesel Generator
DRP	-	Division of Reactor Projects
DPM	-	Disintegration Per Minute
ECP	-	Emergency Contingency Procedure
EIP	-	Emergency Plant Implementing Procedure
EMP	-	Electrical Maintenance Procedure
ENN	-	Emergency Notification Network
EOF	-	Emergency Operations Facility
EP	-	Emergency Preparedness
EPA	-	Environmental Protection Agency
EQ	-	Environmental Qualifications

ESF	-	Engineered Safety Features
F	-	Fahrenheit
FNP	-	Farley Nuclear Plant
FSP	-	Fire Surveillance Procedure
GPM	-	Gallons Per Minute
HHSI	-	High Head Safety Injection
HSB	-	Hot Standby
I&C	-	Instrumentation and Controls
IN	-	Information Notice
ISI	-	Inservice Inspection
IST	-	Inservice Test
kW	-	Kilowatts
LCO	-	Limiting Condition for Operation
LHSI	-	Low Head Safety Injection
LLRT	-	Local Leak Rate Testing
LER	-	Licensee Event Report
MCC	-	Motor Control Center
MDFP	-	Motor Driven Fire Pump
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
NSSS	-	Nuclear Steam Supply System
OATC	-	Operator at the Controls
OSHA	-	Occupational Safety and Health Administration
OTDT	-	Over-temperature Differential Temperature
PAP	-	Primary Access Point
PCCV	-	Positive Closing Check Valve
PCN	-	Plant Change Notice
PCR	-	Plant Change Request
PMD	-	Plant Modifications Department
PORV	-	Power Operated Relief Valve
PPB	-	Parts Per Billion
PPM	-	Parts Per Million
PRT	-	Pressurizer Relief Tank
PSID	-	Pressure per Square Inch Differential
PVC	-	Polyvinyl Chloride
PZR	-	Pressurizer
RCP	-	Reactor Coolant Pump
RCS	-	Reactor Coolant System
RHR	-	Residual Heat Removal
RPC	-	Rotating Pancake Coil
RTD	-	Resistance Temperature Detector
RWST	-	Refueling Water Storage Tank
S/G	-	Steam Generator
SI	-	Safety Injection
SAER	-	Safety Audit and Engineering Review
SCS	-	Southern Company Services
SFI	-	Shift Foreman - Inspecting
SFO	-	Shift Foreman - Operating

SGFP	-	Steam Generator Feedwater Pump
SO	-	Systems Operator
SFP	-	Spent Fuel Pool
SNC	-	Southern Nuclear Operating Company
SOP	-	Standard Operation Procedure
SP	-	Systems Performance Group
SPDS	-	Safety Parameter Display System
SS	-	Shift Supervisor
SSPS	-	Solid State Protection System
STAR	-	"Stop, Think, Act, Review"
STP	-	Surveillance Test Procedure
SWS	-	Service Water System
TS	-	Technical Specification
TSC	-	Technical Support Center
UNR	-	Unresolved Item
VCT	-	Volume Control Tank
VDC	-	Voltage Direct Current
WA	-	Work Authorization