UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

October 29, 2002

EA-02-181

Southern Nuclear Operating Company, Inc.
ATTN: Mr. J. B. Beasley, Jr.
Vice President
P. O. Box 1295
Birmingham, AL 35201-1295

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 50-348/02-04 and 50-364/02-04 and OFFICE OF INVESTIGATION REPORT 2-2002-007

Dear Mr. Beasley:

On September 28, 2002, the Nuclear Regulatory Commission (NRC) completed an inspection at your Farley Nuclear Plant. The enclosed report documents the inspection findings discussed on September 27, 2002, with Mr. Don Grissette and other members of your staff.

This inspection examined activities conducted under your license relating to safety and compliance with the Commission's rules and regulations and the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

One Severity Level IV violation of NRC requirements was identified based upon NRC staff review of an NRC Office of Investigation (OI) Report. A synopsis of the OI Report is enclosed. However, due to the low severity level and because the violation was entered into a corrective action program, this violation meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a non-cited violation (NCV). If you deny this violation, you should provide a response with the basis of the denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington DC 20555-0001; and the NRC Resident Inspector at the Joseph M. Farley Nuclear Plant.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be publicly available in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is

accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Stephen J. Cahill, Chief
Reactor Projects, Branch 2
Division of Reactor Projects

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

Enclosures: 1. NRC Integrated Inspection Report 50-348/02-04
and 50-364/02-04 w/Attachment
2. Office of Investigation Report 2-2002-007 Synopsis

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U. S. NUCLEAR REGULATORY COMMISSION (NRC)

REGION II

Docket Nos.:	50-348 and 50-364
License Nos.:	NPF-2 and NPF-8
Report Nos.:	50-348/02-04 and 50-364/02-04
Licensee:	Southern Nuclear Operating Company, Inc. (SNC)
Facility:	Farley Nuclear Plant, Units 1 and 2
Location:	7388 N. State Highway 95 Columbia, AL 36319
Dates:	June 30, 2002 to September 28, 2002
Inspectors:	T. Johnson, Sr. Resident Inspector (SRI) C. Rapp, Senior Project Engineer T. Ross, SRI St. Lucie R. Chou, Reactor Inspector (Sections 1R07, 1R08, and 4OA5) G. Hopper, Sr. Licensing Examiner (Section 1R11.2) S. Rose, Licensing Examiner (Section 1R11.2) J. Blake, Sr. Project Manager (Section 1R08 and 4OA5) L. Mellen, Sr. Licensing Examiner (Sections 1R14.2, 1EP1,4, and 4OA1.2) W. Sartor, Sr. Emergency Preparedness Specialist (Sections 1EP1,4 and 4OA1.2)
Approved by:	Stephen J. Cahill, Chief Reactor Projects, Branch 2 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000348/02-04, IR 05000364/02-04, OI 2-2002-007, Southern Nuclear Operating Company, 6/30/2002 - 09/28/2002, Joseph M. Farley Nuclear Plant, other activities.

The inspection was conducted by resident inspectors, regional operator licensing examiners, a regional emergency preparedness specialist, and regional reactor inspectors. The inspectors identified one finding which was a Severity Level IV non-cited violation using the traditional enforcement process. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609 "Significance Determination Process" (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector Identified Findings

Cornerstone: Physical Protection

- A Severity Level IV, non-cited violation of Section 8.3 of the Physical Security Plan and 10 CFR 50.9 was identified in that on February 19, 2002, a security officer failed to perform certain required recurring compensatory patrols of specified areas, but willfully documented that the patrols had in fact been performed.

- Because this issue involved willfulness on the part of a licensee employee and inaccurate information which impacts the regulatory process, it was not subject to the provisions of the Reactor Oversight Process, and was dispositioned in accordance with traditional enforcement. It was greater than minor because it involved willfulness and the loss of one barrier in the physical protection system. (Section 4OA5)

B. Licensee Identified Violation

A violation of very low significance, which was identified by the licensee, has been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. The violation and corrective action tracking number is listed in section 4OA7 of this report.

Report Details

Summary of Plant Status

Unit 1 operated at 100% rated thermal power (RTP) during the period, except for planned maintenance and testing.

Unit 2 operated at 100% RTP throughout the report period except for a planned power reduction to 67% RTP to repair a condenser leak during the period August 11-12. On September 14, the unit was shut down for a planned refueling outage.

1. REACTOR SAFETY
Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

The inspectors evaluated the implementation of licensee procedures FNP-0-AOP-21.0, Severe Weather, and FNP-0-EIP-9.0, Emergency Classification and Actions, to verify the required planning and compensatory measures for equipment affected by high winds and flooding prior to hurricane season were satisfactorily completed. The inspectors walked down safety-related, risk significant, and fire protection equipment to verify adequate measures were taken. The inspectors interviewed selected personnel to assess their training and knowledge relative to hurricane preparedness. The inspectors also reviewed open work orders to verify the work orders did not adversely affect hurricane season readiness for the following systems:

- Building sumps and related pumping systems
- Off site power and switch yard
- On site emergency diesel generators
- DC and AC distribution systems
- Turbine Driven Auxiliary Feedwater (TDAFW) systems

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Partial System Walk Down

a. Inspection Scope

The inspectors performed six partial system walk downs to verify the systems listed below were properly aligned when redundant systems or trains were out of service. The walk downs were performed using the criteria in licensee procedures FNP-0-AP-16, Conduct of Operations - Operations Group, and FNP-0-SOP-0, General Instructions to

Operations Personnel. The walk downs included reviewing the Updated Final Safety Analysis Report (UFSAR), plant procedures and drawings listed in the attachment, and checks of control room and plant valves, switches, components, electrical power line-ups, support equipment, and instrumentation.

- Unit 1 A train and Unit 2 A train Residual Heat Removal (RHR) Systems
- Unit 2 High Head Safety Injection (SI) System
- Unit 1 Component Cooling Water (CCW) System
- Unit 1 A train Penetration Room Filtration (PRF) System
- Unit 1 Service Water System

b. Findings

No findings of significance were identified.

.2 Complete System Walk Down

a. Inspection Scope

The inspectors performed a complete system walk down to verify that the Unit 1 and 2 shared emergency diesel generators (EDG's) and support systems were properly aligned in accordance with site procedures. The walk down include a review of plant normal operating and abnormal/emergency operating procedures, drawings, design documents, and vendor manuals, the UFSAR, and control room and infield checks of valves, switches, components, electrical power, support equipment, and instrumentation. In addition, open maintenance work orders, outstanding design issues, operator work arounds, temporary modifications, hangers and supports, general area housekeeping and material conditions were reviewed. Specific documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Fire Areas Walkdown

a. Inspection Scope

The inspectors conducted a walk down of the six fire areas located in the buildings listed below to verify the licensee's control to transient combustibles, the operational readiness of the fire suppression system, and the material condition and status of fire dampers, doors, and barriers. To verify implementation, the inspectors also checked that compensatory measures, including fire watches, were in place for degraded fire barriers. The requirements were described in licensee procedures FNP-0-AP-36, Fire Surveillance and Inspection, FNP-0-AP-38, Use of Open Flame, and FNP-0-AP-39, Fire Patrols and Watches. The fire areas checked included the following:

- Diesel Generator Building (Fire Area 60)
- Service Water Structure (Fire Area 73)
- Auxiliary Building (Fire Areas 1-4, 2-4, 2-23, 2-41)

b. Findings

No findings of significance were identified.

.2 Plant Fire Drill

a. Inspection Scope

The inspectors observed a fire drill on July 17 to verify the licensee's implementation of Procedures FNP-0-AP-37, Fire Brigade Organization, and FNP-0-TCP-17.21, Fire Brigade Training Initial/Retraining Program Administration and the approved Fire Drill Package, and UFSAR Appendix 9B, Fire Protection Program. The inspectors observed the actions of the Fire Brigade, Fire Drill monitors, and management observers. The inspectors also attended the drill critique.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance

a. Inspection Scope

The inspectors selected risk important heat exchangers or heat sinks and associated components to inspect: Component Cooling Water (CCW) Heat Exchangers, CCW Pump Room Coolers, Diesel Generator Jacket Water Heat Exchangers, and Service Water Storage Pond. The inspectors used accepted industry standards (Electric Power Research Institute Service Water Heat Exchanger Testing Guidelines, TR-107397) or equivalent (NRC Generic Letter 89-13, Service Water System Problems Affecting Safety-Related Equipment) for guidelines.

The inspectors observed water level measurements of the Service Water Storage Pond pieziometers and observation wells which were taken to check for seepage of the pond water. The inspectors walked down and examined the intake structures, wet pits, and pump room equipment. The inspectors also walked around the pond area to evaluate the maintenance and corrosion control for the pond.

The inspectors reviewed selected documents associated with heat exchangers, the Service Water Storage Pond, and related components. The document review included the service water plan, condition reports, work orders, work authorizations, maintenance, inspection, cleaning, functional or performance testing, flow testing, preliminary and final eddy current examination reports, the service water wet pit cleanup report, measurement of macro fouling blockage, macro fouling control treatment, clam report, component failure reports, and the qualification and certification of eddy current examiners.

The inspectors reviewed the documents to determine that: selected heat exchanger testing was adequate; test criteria were appropriate and met; test frequency was appropriate; and test results were acceptable. These reviews were evaluated using Technical Specifications (TS), UFSAR, and Generic Letter 89-13.

b. Findings

No findings of significance were identified.

1R08 Inservice Inspection (ISI) Activities

.1 Unit 2 ISI

a. Inspection Scope

The inspectors observed in-process ISI work activities and reviewed selected ISI records. The observations and records were compared to the TS (TS) and the applicable Code (ASME Boiler and Pressure Vessel Code, Sections V and XI, 1989 Edition, with no Addenda) to verify compliance.

The inspectors observed inspection activities and reviewed the documentation for the following ISI activities:

- Two ultrasonic (UT) examinations in the Flow Accelerated Corrosion (FAC) Progam
- Two visual (VT) examinations of Safety Related piping supports
- Two liquid penetrant (PT) examinations, one on a Control Rod Drive (CRD) housing and one on Reactor Coolant Pump (RCP) A Component Cooling Water (CCW) connection to the pump thermal barrier.
- Two radiographic (RT) examinations of replacement piping for RCP B and C CCW connections.
- Continuing inspection and evaluation of U2 main steam line piping supports effected by vibration.
- Visual examination of cracked CCW piping assemblies removed from RCP B and C.

b. Findings

No findings of significance were identified.

.2 Unit 2 Steam Generator (SG) Inspection

a. Inspection Scope

The inspectors observed collection of Bobbin and Plus-Point eddy current data, and analysis of data by licensee resolution analysts. The inspectors verified the activities were accomplished per the licensee's procedures and adequately screened for potential SG tube defects. Qualification and certification records for examiners, equipment and

consumables, and nondestructive examination (NDE) procedures for the above ISI and SG inspection activities were also reviewed.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

.1 Resident Inspector Observation (Quarterly)

a. Inspection Scope

The inspectors observed portions of the licensed operator training and testing program to verify implementation of procedures FNP-0-AP-45, Farley Nuclear Plant Training Program, FNP-0-TCP-17.6, Simulator Training Evaluation Documentation, and FNP-0-TCP-17.3, Licensed Operator Continuing Training Program. The inspectors observed scenarios conducted in the licensee's simulator for a loss of feed water, loss of instrument air, loss of coolant accident, failure of the reactor protection system, stuck open secondary safety valve, steam generator tube rupture, and an offsite radioactive release. The inspectors observed high risk operator actions, overall performance, self-critiques, training feedback, and management oversight to verify operator performance was evaluated against the performance standards of the licensee's scenario. In addition, the inspectors observed implementation of the applicable emergency operating procedures listed in the attachment to verify that licensee expectations in procedures FNP-0-AP-16 and FNP-0-TCP-17.6 were met.

b. Findings

No findings of significance were identified.

.2 Operator Licensing Requalification Inspection (Annual Specialist Review)

a. Inspection Scope

During the week of July 15, 2002, the inspectors reviewed documentation, interviewed licensee personnel, and observed the administration of simulator operating tests associated with the licensee's operator requalification program. Each of the activities performed by the inspectors was done to assess the effectiveness of the licensee in implementing requalification requirements identified in 10 CFR 55 Operators' Licenses. The evaluations were also performed to determine if the licensee effectively implemented operator requalification guidelines established in NUREG 1021, Operator Licensing Examination Standards for Power Reactors and Inspection Procedure 71111.11, Licensed Operator Requalification Program. The inspectors observed two operator crews and one staff crew during the performance of the operating tests. Documentation reviewed included written examinations, Job Performance Measures (JPMs), simulator scenarios, licensee procedures, on-shift records, licensed operator qualification records, watchstanding records, simulator modification request records,

and medical records. Licensee documents reviewed during the inspection are listed in the atachment.

Following the completion of the annual operating examination testing cycle which ended on September 13, 2002, the inspectors reviewed the overall pass/fail results of the biennial written examination, the individual JPM operating tests, and the simulator operating tests administered by the licensee during the operator licensing requalification cycle. These results were compared to the thresholds established in Manual Chapter 609 Appendix I, Operator Requalification Human Performance Significance Determination Process.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed the issues below to verify implementation of licensee procedures FNP-0-M-87, Maintenance Rule Scoping Manual, FNP-0-SYP-19, Maintenance Rule Performance Criteria, and FNP-0-M-89, FNP Maintenance Rule Site Implementation Manual, and compliance with 10 CFR 50.65. The inspectors assessed the licensee's evaluation of functional failures, maintenance preventable functional failures, repetitive failures, availability and reliability monitoring, and system specialist involvement. The inspectors also interviewed maintenance personnel, system specialists, the maintenance rule (MR) coordinator, and operations personnel to assess their knowledge of the program.

- CR 2002001515, 2B EDG Barring Device Limit Switch Failure
- WO 2003024, 2A RHR Pump Minimum Flow Indication Switch Failure
- WO 2001327, Unit 1 TDAFW Fault

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors assessed the licensee's planning and control for the following six planned licensee activities to verify the requirements in licensee procedures FNP-0-ACP-52.1, Guidelines for Scheduling of On-Line Maintenance, AP-FNP-0-AP-52, Equipment Status Control and Maintenance Authorization, and FNP-0-AP-16, Conduct of Operations - Operations Group, and the Maintenance Rule risk assessment guidance in 10CFR50.65 a(4) were met.

- 1B/2B RHR trains planned maintenance outages

- 2C EDG 24 month overhaul and preventive maintenance outage
- 1B charging pump seal replacement concurrent with 1A SW pump test failure
- 1B EDG six month preventive maintenance outage
- 1C and 1A SW pump repairs
- 1C EDG service water cooler piping replacement

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

.1 Unit 1 Secondary Plant Transient

a. Inspection Scope

The inspectors followed up on the control room operators' recovery from a Unit 1 secondary plant transient that occurred on July 27. The transient was initiated when the 1B heater drain tank level control valve (LCV) failed to close, causing a low suction pressure on the steam generator feedwater pump (SGFPs). Operators started the spare condensate pump, bypassed the LCV, and ramped the unit down about 1% RTP. To determine the adequacy of the operator's actions, the inspectors assessed the licensee's use of operating procedures, annunciator procedures, control room actions, command and control, post transient recovery, management involvement, training expectations, and communication. The inspectors reviewed operator logs, plant computer data, control room strip charts, and discussed actions with operations personnel.

b. Findings

No findings of significance were identified.

.2 Unit 2 Secondary Chemistry Transients

a. Inspection Scope

The inspectors observed control room operators' and chemistry personnel's response to several secondary plant chemistry transients during the period. This included a unit down power to 67% RTP on August 11. The excursions generally started with higher than normal contaminant levels in both the main condenser and the steam generators. The inspectors assessed the licensee's use of abnormal operating procedures, chemistry control guidelines and procedures, control room and chemistry laboratory actions, command and control, management involvement, training expectations, and communication. The inspectors reviewed operator and chemistry logs, trended computer data, chemical control specifications, and discussed actions with operations and chemistry personnel. The inspectors also independently assessed the cause of the contaminants in the condenser and steam generators, likely due to a condenser tube leak. Observations were compared to the requirements specified in licensee procedures listed in the Attachment.

b. Findings

No findings of significance were identified.

.3 Unit 1 Notification of Unusual Event

a. Inspection Scope

The inspectors evaluated the licensee's identification, response, and recovery efforts when the 1C Service Water (SW) pump motor failed causing its supply breaker to trip. Since the 1A SW pump was out of service for a scheduled overhaul, the loss of the 1C SW pump resulted in a loss of Unit 1 A train of SW. This review included observation of operator actions at both the control room and the SW Intake Structure, classification of the event, and subsequent operator actions to recover from the event. Initially, it was reported by maintenance personnel working on the 1A SW pump that the 1C pump motor failure caused a fire. The inspectors observed the licensee's root cause determination and independently assessed the licensee's conclusion that an electrical arc occurred when the 1C SW pump motor failed, but a fire had not actually occurred.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following nine operability evaluations to verify they met the requirements of licensee procedures FNP-0-AP-16 and FNP-0-ACP-9.2, Operability Determination (OD), for technical adequacy, consideration of degraded conditions, and identification of compensatory measures. The inspectors reviewed the evaluations against the design bases, as stated in the UFSAR and Functional System Descriptions (FSD), to verify system operability was not affected.

- CR 2001002715, 1A SW Pump flow rate (Engineering Evaluation dated June 28, 2002)
- OD-02-05, 1C Charging Pump inability to vent
- OD-02-04, Service Water Operability due to PS560 Leak
- OD-02-06, 1C Charging Pump vibrations
- OD-02-07, 2B/2C EDG Service Water leak on the return line V528
- OD-02-08, 1C EDG Inner Cooler Service Water Drain Piping Wall Thinning
- CR 2002001606 and 1641, Unit 1B PRF Operability Determination
- CR 2002001647, Unit 2 SW leak in EDG return line
- CR 2002001662, EDG 1C mechanical governor speed control setting

b. Findings

No findings of significance were identified.

1R16 Operator Work-Arounds

a. Inspection Scope

The inspectors reviewed the following four operator work-arounds to verify that system functional capability or human performance were not affected and the prioritization of required actions met the requirements of licensee procedure FNP-0-ACP-17, Operator Work-Arounds. The inspectors also reviewed the cumulative effects of the operator work-arounds to verify they did not affect the operators' ability to perform actions in both abnormal and emergency operating procedures, did not increase initiating event frequency, and did not affect multiple mitigating systems.

- 1A Charging Pump control in automatic
- CR 2001002715, 1A SW Pump degrading flow rate
- CR 2002001641, 1B heater drain tank LCV
- Unit 1 Charging flow control valve (FCV-122) not in automatic

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed plant modifications to verify the implementation of licensee procedure FNP-0-AP-8, Design Modification Control. This included verification that the design bases, licensing bases, and performance capability of risk significant structures, systems, and components (SSC) would not be degraded through the modifications and the modifications would not place the plant in an unsafe condition. The inspectors also observed the Plant Operations Review Committee (PORC) approval of these Design Change Packages (DCPs), discussed the modifications with engineering and operations personnel, and reviewed the related procedures and drawings. The inspectors reviewed the following DCPs:

- 02-1-9837, 1A SW Pump Motor Replacement
- 02-2-9821, TDAFW UPS Rectifier filter capacitor replacement

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed the criteria contained in licensee procedures FNP-0-ACP-52.1, Guidelines for Scheduling of On-Line Maintenance, and AP-FNP-0-AP-52, Equipment Status Control and Maintenance Authorization, to verify post-maintenance test procedures and test activities for the following nine components were adequate to verify system operability and functional capability:

- 2C EDG post overhaul and maintenance outage test
- 1B and 2B RHR Pumps post lubrication and preventive maintenance outage testing
- 1B and 2B EDG post maintenance outage tests
- 1B Charging Pump seal replacement and preventive maintenance outage testing
- 1C EDG service water replacement post maintenance test
- 1A and 1C SW pumps' post overhaul maintenance testing

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. Inspection Scope

The inspectors reviewed the following activities related to the Unit 2 Fall 2002 2R15 refueling outage for conformance to licensee Procedures FNP-0-UOP-4.0, General Outage Operations Guideline, and FNP-2-UOP-4.1, Refueling Outage Operation. Surveillance tests were reviewed to verify results were within the Technical Specification (TS) required specification. Shut down risk, management oversight, procedural compliance, and operator awareness were evaluated for each of the following activities (procedures are listed in the attachment):

- New fuel receipt, inspection, and transfer
- Refueling risk plans, contingencies, and schedules
- Decay heat removal and spent fuel pool cooling (SFP) system operations
- Core refueling operations
- Outage-related surveillance tests
- Reactor coolant drain down and reduced inventory activities
- Mode changes
- Work and test control, task manager conduct, outage control center oversight and communications, clearance activities, inventory and reactivity control, and operations outage conduct
- Refueling outage risk and safety oversight
- Electrical system alignments and availability
- Problem identification and resolution activities
- Reactor vessel head penetration inspections (see Section 4OA5)

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed surveillance test procedures and either witnessed the test or reviewed test records to determine if the test adequately demonstrated equipment operability and met the TS requirements. The inspectors reviewed the activities to assess for preconditioning of equipment, procedure adherence, and valve alignment following completion of the surveillance. The inspectors reviewed licensee procedures FNP-0-AP-24, Test Control, FNP-0-M-050, Master List of Surveillance Requirements, and FNP-0-AP-16, and attended selected briefings to determine if procedure requirements were met. Surveillance tests either reviewed or witnessed included the following six examples:

- FNP-1(2)-STP-11.2, 1B & 2(B) RHR Pump Inservice Test
- FNP-0-STP-80.19, 2C EDG 24 Hour Load Test
- FNP-0-STP-26.2, Control Room Pressurization Operability Test
- FNP-1-STP-24.1, Unit 1 SW Pumps Inservice Test
- FNP-2-STP-11.1, 2A RHR Pump Quarterly Inservice Test

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed the following seven temporary modifications and minor departures (MD), and associated 10 CFR 50.59 screening criteria against the system design bases information and documentation and the licensee's temporary modifications procedure FNP-0-AP-8, Design Modification Control. The inspectors reviewed implementation, configuration control, post-installation test activities, drawing and procedure updates, and operator awareness for these temporary modifications:

- MD-02-2705, Unit 2 2B Heater Drain pump base flange leak repair
- MD-02-2709, Unit 1 Cooling Tower hose station isolation
- MD-02-2710, Unit 1 A train reactor vessel level system
- MD-02-2712, Unit 1 1B SGFP flow control valve body to bonnet leak repair
- MD-02-2714, Unit 1 1B SGFP discharge valve leak repair
- MD-02-2715, Unit 2 2B SGFP temperature control valve bypass
- MD-02-2716, Service Water Structure closed circuit TV temporary cabling

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness (EP)

1EP1 Exercise Evaluation

a. Inspection Scope

The inspectors reviewed the objectives and scenario for the Farley Nuclear Plant biennial, full-participation 2002 emergency response exercise, to determine whether they were designed to suitably test major elements of the licensee's emergency plan.

During the period August 20-23, 2002, the inspectors observed and evaluated the licensee's performance in the exercise, as well as selected activities related to the licensee's conduct and self-assessment of the exercise. The exercise was conducted on August 21, 2002. Licensee activities inspected during the exercise included those occurring in the Control Room Simulator (CRS), Technical Support Center (TSC), Operational Support Center (OSC), and the Emergency Operations Facility (EOF). The NRC's evaluation focused on the risk-significant activities of event classification, notification of governmental authorities, onsite protective actions, offsite protective action recommendations, and accident mitigation. The inspectors also evaluated command and control, the transfer of emergency responsibilities between facilities, communications, adherence to procedures, and the overall implementation of the emergency plan. The inspectors attended the post-exercise critique to evaluate the licensee's self-assessment process, as well as the presentation of critique results to plant management.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

The inspector reviewed Revision 36 and 37 dated November 5, 2001 and June 3, 2002 respectively, to the Radiological Emergency Plan (REP) against the requirements of 10 CFR 50.54(q) to determine whether any of those changes decreased REP effectiveness.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation

a. Inspection Scope

The inspectors observed an emergency and simulator drill on July 10 to verify the licensee was properly classifying the event, making required notifications, making protective action recommendations, and conducting self-assessments. The drills included activation of all emergency response facilities. The inspectors used licensee procedure FNP-0-EIP-15.0, Emergency Drills, as the inspection criteria.

b. Findings

No findings of significance were identified

3. SAFEGUARDS

Cornerstone: Physical Protection [PP]

3PP3 Response to Contingency Events

The Office of Homeland Security (OHS) developed a Homeland Security Advisory System (HSAS) to disseminate information regarding the risk of terrorist attacks. The HSAS implements five color-coded threat conditions with a description of corresponding actions at each level. NRC Regulatory Information Summary (RIS) 2002-12a, dated August 19, 2002, "NRC Threat Advisory and Protective Measures System," discusses the HSAS and provides additional information on protective measures to licensees.

a. Inspection Scope

On September 10, 2002, the NRC issued a Safeguards Advisory to reactor licensees to implement the protective measures described in RIS 2002-12a in response to the Federal government declaration of threat level "orange." Subsequently, on September 24, 2002, the OHS downgraded the national security threat condition to "yellow" and a corresponding reduction in the risk of a terrorist threat.

The inspector interviewed licensee personnel and security staff, observed the conduct of security operations, and assessed licensee implementation of the threat level "orange" protective measures. Inspection results were communicated to the region and headquarters security staff for further evaluation.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator (PI) Verification

.1 Reactor Safety Cornerstone

a. Inspection Scope

The inspectors reviewed the TS and licensee procedure FNP-0-AP-54, Preparation and Review of NRC Performance Indicator Data to verify the accuracy of the first quarter of 2002 PI data submitted by the licensee. The inspectors assessed both units' safety system unavailability for the residual heat removal systems (RHR) and the high pressure injection systems. The inspectors reviewed portions of Unit 1 and Unit 2 Operator Logs for 2002, the daily morning reports (including the daily Condition Report (CR) descriptions), the monthly operating reports, Licensee Event Reports (LER), NRC Inspection Reports, and several Limiting Conditions for Operation (LCO's). The inspectors also interviewed licensee personnel associated with the PI data collection, evaluation, and distribution. Results wre assessed for compliance with the guidance contained in NEI 99-02, Revision 2, "Regulatory Assessment Performance Indicator Guideline."

b. Findings

No findings of significance were identified.

.2 Emergency Preparedness Cornerstone

a. Inspection Scope

On August 20, 2002, licensee records were reviewed to determine if the data submitted through the second quarter of 2002 for the following PI's were calculated in accordance with the guidance contained in Section 2.4 (Emergency Preparedness Cornerstone) of NEI 99-02, Revision 2, "Regulatory Assessment Performance Indicator Guideline."

- Emergency Response Organization (ERO) Drill/Exercise Performance
- ERO Drill Participation
- Alert and Notification System Reliability

b. Findings

No findings of significance were identified.

4OA2 Problem Identification and Resolution

a. Inspection Scope

The inspectors performed a routine review of the licensee's corrective action program, including the effectiveness of problem identification, root cause analysis, and corrective actions. The inspectors assessed whether equipment, human performance, and program issues were being addressed as required by procedures FNP-0-AP-7, Corrective Action Reporting, FNP-0-AP-22, Nonconformance Control/Deficiency Reporting, FNP-0-AP-30, Preparation and Processing of Condition Reports Program, and FNP-0-ACP-9.1, Root Cause. The following issue was selected for review as one of the allotted annual inspection samples: CR 2002001663, Mispositioning Events and Configuration Control

b. Findings and Observations

No findings of significance were identified. This CR evaluation was thorough and appropriately determined root cause. Corrective actions taken or planned appeared effective and addressed the causal factors.

4OA5 Other Activities

.1 Reactor Vessel Head Penetration (RVHP) Inspection

a. Inspection Scope (TI 2515/145)

The inspectors observed activities relative to inspection of the Unit 2 reactor vessel head penetrations (RVHPs) in response to NRC Bulletins 2001-01 and 2002-02. The guidelines for the inspection were provided in NRC temporary instruction (TI) procedure TI2515/145, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles (NRC Bulletin 2001-01).

The inspection included review of nondestructive examination (NDE) procedures, assessment of NDE personnel training and qualification, and observation and assessment of Ultrasonic (UT) and Remote Visual (VT) examinations. Discussions were also held with contractor representatives and licensee personnel. The activities were examined to verify licensee compliance with regulatory requirements and gather information to help the NRC staff identify possible further regulatory positions and generic communications.

Specifically, the inspectors reviewed or observed:

- UT scanning analysis activities of the inside diameter (ID) of the nozzle for 4 penetrations and
- VT examination of the external surface of the head and the junction of the penetration and head for 12 penetrations.

b. Findings and Observations

There were no indications of RV head or penetration degradation identified by the licensee during the observed inspections.

TI 2515/145-05 Reporting Requirements:

a. Was the examination:

1. Performed by qualified and knowledgeable personnel? (Briefly describe the personnel training/qualification process used by the licensee for this activity.)

   The "bare-metal" visual examinations of the RV head were conducted by contractor personnel working for Westinghouse/Brooks. Personnel involved were certified visual inspectors by Westinghouse or by Brooks.

   The Ultrasonic examinations of the penetration nozzles were conducted by Framatome, using Framatome qualified and certified data collectors and evaluators.

2. Performed in accordance with approved and adequate procedures?

   Bare metal RV head examinations were performed in accordance with licensee reviewed contractor procedure No. MRS-SSP-1332, "Reactor Head Penetration Remote Visual Inspections for J. M. Farley, Unit 2 (APR), Rev. 0, dated July 18, 2002.

   Ultrasonic examinations of the RV head penetrations were conducted in accordance with licensee approved contractor procedure No. 54-ISI-100, "Remote Ultrasonic Examination of Reactor Head Penetrations," Rev. 9, dated Sept, 9, 2002. The procedure was for ACCUSONEX™ μTomoscan based data acquisition system and referenced Procedure Qualifications No. PQ-100-1, 54-PQ-100-2, 3, 4, and 5.

3. Adequately able to identify, disposition, and resolve deficiencies?

   The VT and UT examination techniques were adequately able to identify, disposition and resolve relevant deficiencies in the RV head penetration materials.

4. Capable of identifying the primary water stress-corrosion cracking (PWSCC) phenomenon described in the bulletin?

   The VT equipment was capable of identifying PWSCC phenomenon identifiable through evidence of leakage through annulus between penetrations and RV head base material.

The UT material was not qualified to thoroughly examine the quality of the J-groove welds, but was capable of identifying cracking from the J-groove weld that would have impact on the penetration materials.

b. What was the condition of the reactor vessel head (debris, insulation, dirt, boron from other sources, physical layout, viewing obstructions)?

Majority of the head outer surface was free of obstructions and therefore accessible with a crawler mounted video camera. Peripheral locations were covered by metal insulation shield and some fibrous insulation that could not be easily removed, so where crawler movement was restricted, inspections were conducted with video boroscope.

The condition of the head was relatively clean. There were some evidence of fibrous insulation debris and some dirt.

c. Could small boron deposits, as described in the bulletin, be identified and characterized?

With the lighting available on the remote visual equipment, and the clarity of the pictures, boron deposits, as described in the bulletin, could have been readily identified and characterized.

d. What materiel deficiencies (associated with the concerns identified in the bulletin) were identified that required repair?

No material deficiencies were identified that required repair.

e. What, if any, significant items that could impede effective examinations and/or ALARA issues were encountered?

There were no significant items that could impede effective examinations and/or significant ALARA issues encountered.

.2 Office of Investigations (OI) Report No. 2-2002-007

a. Inspection Scope

The inspectors reviewed the results of OI Investigation No. 2-2002-007 completed on July 16, 2002, regarding the alleged falsification of security logs by a security officer on February 19, 2002. The inspectors reviewed evidence gathered by OI, the licensee's investigation into the issue, and applicable documentation. The licensee's activities were reviewed against Sections 4 and 15 of the Physical Security Plan (PSP), Revision (Rev.) 15, correspondence from the licensee dated November 21, 2001, and 10 CFR 50.9, Completeness and Accuracy of Information.

b. Findings

Introduction: A Severity Level IV, non-cited violation (NCV) was identified in that on February 19, 2002, a security officer failed to perform certain required recurring compensatory patrols of specified areas, but willfully documented that the patrols had in fact been performed.

Description: In its investigation and as documented in the attached OI Report synopsis, OI concluded that a security officer willfully made false entries in a security log to document required compensatory checks which had not been performed. Specifically, during a security computer upgrade project, the licensee implemented security checks at a specified frequency of certain vital area doors and valve boxes to compensate for degraded alarms and security functions. The licensee identified that on February 19, 2002, an officer failed to perform several of the checks at the required frequency between approximately the hours of 12:00 a.m. and 1:15 a.m. The inspectors reviewed the relevant evidence gathered by OI and the licensee and noted the following: (1) the security officer logged two employees into the Emergency Generator Building (EDG) at 12:13 a.m and 12:14 a.m, as documented on the Post 724 Authorization Log dated February 19, 2002, while Compensatory Log (CL) DCP 9254 completed by the officer indicates that at 12:11 a.m. he was at a location approximately 10 minutes away; (2) interviews with several security officers on duty on February 19, 2002, noted the location of the security officer at various times which was contrary to those documented by the officer on DCP 9254; and (3) at approximately 1:30 a.m. the Security Supervisor noted that the CL had been filled out through 1:50 a.m.

Analysis: Because this finding involved willfulness on the part of a licensee employee and inaccurate information which impacts the regulatory process, it is not subject to the provisions of the Reactor Oversight Process, and is being dispositioned in accordance with traditional enforcement. The finding was determined to be greater than minor because it involved willfulness and one barrier (e.g., compensatory measures for inoperable alarms) was lost in the physical protection system.

Enforcement: License Condition 2.D requires that the licensee implement its activities in accordance with the Commission approved Physical Security and Training and Qualification Plan and amendments thereto submitted in accordance with 10 CFR 50.54(p). The PSP, Rev. 15, Section 8.3 states, in part, that during the security computer system replacement project in 2002, compensatory measures will be implemented in accordance with the provisions of this plan. This project will be worked and compensatory measures implemented during each phase as described in docketed correspondence to the NRC.

Docketed correspondence from Dave Morey, Southern Nuclear Operating Company, dated November 21, 2001, states, in summary, that during this installation period the plant will be utilizing compensatory measures described in the PSP. As the project proceeds the compensatory measures necessary will vary based on the functions disabled for each installation phase. The compensatory plan generally consists of the following measures: recurring patrols of “other affected VA [vital area] doors” at a specified frequency. The “other affected vital area doors” included those areas listed on CL DCP 9254.

The PSP, Rev. 15, Section 4.5.4, states that routine security tours and inspections shall be documented and records retained for at least three (3) years. 10 CFR 50.9 (a) states, in part, that information by statute or by the Commission's regulations, orders, or license conditions to be maintained by the licensee shall be complete and accurate in all material respects.

Contrary to these requirements, during the period of approximately 12:00 a.m. and 1:15 a.m. on February 19, 2002, a security officer failed to perform certain required, recurring compensatory patrols, but documented that the patrols had in fact been performed in these areas on the CL DCP 9254, a record required to be maintained by the PSP. The inaccurate information entered in the CL DCP 9254 was material to the NRC in that this record would be relied upon to determine compliance with the PSP and the adequacy of security controls during the computer upgrade project. Although this violation is willful, it was brought to the NRC's attention by the licensee, it involved isolated acts of a low-level individual, and it was addressed by appropriate remedial action. Therefore, this Severity Level IV violation is being treated as non-cited violation NCV 50-348 and 50-364/2002-004-01, Falsification of Security Round Logs, consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's program as Investigation File No. 019-2002.

4OA6 Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. Don Grissette, Plant General Manager, and other members of licensee management on September 27, 2002. The inspectors asked the licensee if any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee Identified Violations

The following finding of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as an NCV:

On July 23, 2002, a relay failed in the Unit 1B train PRF that controls PRF damper positions. The licensee's operability determination (CR 2002001606) concluded that the 1B PRF train was operable. During surveillance testing on July 28, the licensee determined the 1B PRF train was inoperable and had been since July 23. TS 5.4.1.a requires written procedures be established and maintained covering the activities listed in Regulatory Guide 1.33, Rev. 2, Appendix A, February 1978, including equipment control. Licensee procedure FNP-0-ACP-9.2, Operability Determination, requires personnel to adequately assess equipment operability when a degraded condition occurs. The failure to appropriately assess 1B PRF operability was a violation of TS 5.4.1.a. This violation was placed in the licensee's corrective action program as CR 2002001643 (Section 4OA3).

Attachment: Supplemental Information

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

R. V. Badham, Administration Manager
C. L. Buck, Chemistry/Health Physics Manager
R. M. Coleman, Outage and Modification Manager
C. D. Collins, Assistant General Manager - Plant Support
K. C. Dyar, Security Manager
D. E. Grissette, Plant General Manager
J. R. Johnson, Assistant General Manager - Operations
R. R. Martin, Engineering Support Manager
B. L. Moore, Maintenance Manager
C. D. Nesbitt, Training and Emergency Preparedness Manager
W. D. Oldfield, Safety Audit Engineering Review Supervisor
L. M. Stinson, Nuclear Support General Manager, Farley Project
R. J. Vanderbye, Emergency Preparedness Coordinator
T. Youngblood, Operations Manager

NRC
S.J. Cahill, Chief, Branch 2, Division of Reactor Projects

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened/Closed	Item Type	Description
50-348, 364/2002-004-01	NCV	Falsification of Security Round Logs (section 4OA5)

INSPECTION DOCUMENTS REVIEWED

Section 1R04
FNP-1(2)-SOP-7, RHR System
FNP-1(2)-AOP-12, Loss of Train A or B RHR System
RHR System Functional System Description (FSD) - A181002
FNP-0-SOP-38, EDG System
FNP-1(2)-ARP-0001, Main Control Board Annunciator Panel
FNP-1(2)-AOP-5, Loss of A or B Train Electrical Power
FNP-1(2)-AOP-5.1, Contingency Electrical Alignments
FNP-1(2)-AOP-5.2, Degraded Grid
WO 20003376
WO 2002933

FNP-0-SOP-38.1, Emergency Starting of the EDG System
FNP-0-SOP-24, Service water System
FNP-0-SOP-43, EDG Building HVAC
FNP-0-SOP-61.3, Fire Protection - Low Pressure Carbon Dioxide System
FNP-0-SOP-42, EDG Fuel Oil Transfer System
Technical Specifications 3.8.1, 3.8.2
UFSAR Section 8.3
FNP-0-ARP-19.1, Local EDG Control Panel Annunciator Panel
FNP-0-ARP-19.2, Local EDG Control Panel Annunciator Panel
FNP-0-STP-80 and 81 series, EDG Surveillances

Section 1R07

P&ID D-170060
P&ID D-170800-809
FNP-0-IMP-212.2, Service Water (SW) Pump Test with Fluorescent Dye Dilution, Rev. 5
FNP-2-SOP-24.0, Service Water System, Rev. 38
FNP-0-M-82, Service Water Plan, Rev. 5
FNP-0-AP-6, Procedure Adherence
FNP-0-ETP-1007, Service Water Wet Pit Cleanup, Rev. 7
FNP-0-SYP-9, User's Guide for Safety Related Service Water Heat Exchangers (HX) Thermal Performance, Rev. 3
FNP-1-STP-24.1, 1A, 1B, and 1C Service Water Pump Quarterly Inservice Test, Rev. 42, completed 07/23/02
FNP-0-ETP-4389, Service Water Storage Pond Dam Biennial Inspection, Rev. 3, completed 09/22/00
FNP-0-ETP-4381, Service Water Storage Pond Piezometer Well Readings, Rev. 7, completed 04/25/02 and 01/10/02
FNP-0-ETP-4367, Performance Test for Units 1 & 2 Colt-Pielstick (Large) Diesel Generator Jacket Water Heat Exchangers, Rev. 9, completed 07/01/02
FNP-0-ETP-4447, Temperature Effectiveness Test for FNP Safety - Related Room Coolers, Rev. 2, completed 06/25/02
FNP-0-CCP-708, Chemical Addition/Control of the Service Water System, Rev. 46, completed 05/03/02
CR 2000509171, Inadvertent Operation of Q1P16V008F, 04/16/00
CR 2001000669, Elevated Service Water Pump Motor Temperatures due to Loss of Configuration Management of A Train SW Lube and Cooling Strainer Inlet Valve, 03/18/01
CR 2001001841, Unit 1 Service Water Pumps' Vibration Washers Appear Not to be in Orthogonal Orientation, 07/27/01
CR 2001003071, Non-seismic 1B Service Water Pump Breaker was Racked Out to a Seismic (disconnect) Position, 12/13/01
CR 2002000454, 10 Year Breaker PMs that affect the A Train Service Water Lube and Cooling Strainers Postponed due to Planning Reasons, 02/28/02
CR 2002000552, Personnel Not Available to Support Testing when Scheduled for FNP-1-STP-24.2, 03/12/02
CR 2002000565, Operations not prepared to release WA #672344 on the scheduled day due to issues concerning performance indicator impact, 03/13/02

CR 2002001050, Current Planning on Work Orders for Service Water Clogged Sensing Lines is Inadequate, 05/07/02
CR 2002001583, To Address Issues Concerning Discrepancies Involving Performance Curve Drawings, and Pump Serial Numbers for SW Pump 1A, 07/20/02
WR #2004384, B Train Service Water Pump Discharge Strainer Collection Through Overfill, 08/06/02
WR #2004395, Service Water System A Train Mini Flow Line Hanger SW-R776 has a Degraded Baseplate, 08/06/02
WR #20006874, SW Storage Pond concrete spillway needs to be repaired, 08/23/00
WO #1005938, SW Strainer ½ inch Vent Support is Corroded, 07/30/01
WO #1005939, 1C SW Mini Flow Pipe Seismic Support is Corroded on the Base Plate, 07/30/01
WO #1009247, 2A Component Cooling Water (CCW) Heat Exchanger Tube Plugging due to CCW Surge Tank Level Increase and Out of Specification Chloride Concentration in CCW B Train, 12/28/01
WO #2002970, 2A CCW HX Tube Plugging per Engineering Support Recommendations, 05/24/02
WO #557281, SW Leak on 2A CCW Heat Exchanger, 06/25/02
WO #2002893, 2A CCW Heat Exchanger Tube Leak as Indicated by Level Rise in CCW Surge Tank and Chemistry Sample Results, 05/16/02
WO #2003506, 1A CCW Pump Room Cooler Tube Cleanup due to Failed ETP, 06/25/02
WO #M00545803, Accumulation of Moist Rust and Leakage on Valve Q1P16V0716A, 07/03/00
WA #W00691287, Service Water Pond Pieziometer and Observation Well Readings per FNP-0-ETP-4381, 08/08/02
WA #W00677829, Service Water Pond Pieziometer and Observation Well Readings per FNP-0-ETP-4381, 04/25/02
WA #W00635288, Service Water Pond Biennial Inspection per FNP-0-ETP-4389, 08/22/00
WA #W00678140, 2A CCW Heat Exchanger Eddy Current and Epoxy Coating Inspection, 05/26/02
WA #W00652011, 2A CCW Heat Exchanger Cleanup and Inspection, 01/29/01
WA #W00678145, 2C CCW Heat Exchanger Eddy Current and Epoxy Coating Inspection, 05/29/02
WA #W00678143, 2B CCW Heat Exchanger Eddy Current and Epoxy Coating Inspection, 06/01/02
WA #W00678930, 2B Diesel Generator Jacket Water Heat Exchanger Performance Test per FNP-0-ETP-4367, 07/01/02
WA #W00664276, 1A CCW Heat Exchanger Eddy Current and Epoxy Coating Inspection, 08/12/01
WA #W00664278, 1A CCW Heat Exchanger Cleanup, 08/12/01
WA #W00674632, 1A CCW Pump Room Cooler per ENP-1213.01, 04/24/02
WA #W00677539, 1A CCW Pump Room Cooler Test per FNP-0-ETP-4447, 06/25/02
WA #W00672344, Pump Cooling Strainer Supply Breaker Testing, 03/14/02
Preliminary Eddy Current Inspection Report for 1A CCW Heat Exchanger, 08/12/01
Preliminary Eddy Current Inspection Report for 2A CCW Heat Exchanger, 05/26/02
Preliminary Eddy Current Inspection Report for 2B CCW Heat Exchanger, 06/01/02
Preliminary Eddy Current Inspection Report for 2C CCW Heat Exchanger, 05/29/02

Doc # PD04452, Record of Eddy Current Inspection of Component Cooling Water Heat Exchangers 1A, 1B, 1C, 08/2001
Doc # PD4497.01, Record of Eddy Current Inspection of Component Cooling Water Heat Exchangers 2A, 2B, 2C, 05/2002
FNP-0-ACP-52.2, Service Water Visual Inspection/Clam Report for CCW HX 1A, 08/10/01
Cooling Water Storage Pond Dam Biennial Inspection Observations Report, 08/22/00
Unit 1 Service Water Pumps New Vibration Reference Value Report, 10/31/01
Unit 2 Service Water Pumps New Vibration Reference Value Report, 11/30/01
1B Service Water Pump Quarterly Data Trending, 10/97-04/02
Unit 1 Service Water Pumps Degraded Performance Curve, 2000
Unit 1 Train A Service Water Pumps New Baseline Flow Rate Value Evaluation due to Flow Alert Low, 07/27/01
Unit 1 Train A Service Water Pumps Increased Test Frequency Evaluation due to 1A & 1B Combination Flow Alert Low, 07/19/01
Unit 1 Train A Service Water Pumps Increased Test Frequency Evaluation due to 1A & 1B Combination Flow Alert Low, 04/13/00
REA 01-2497, Evaluation of Service Water Supports, 09/13/01
Final Safety Analysis Report
Technical Specifications
Procedure Request Form (PRF) for FNP-2-SOP-24.0, 04/16/01
Service Water System Chlorine Value Daily Chemistry Log, 08/06/02
1B Service Water Pump Component Data and Component Failure Report, 07/20/02
1B Service Water Pump Motor Component Data and Component Failure Report, 07/20/02
A Train CCW Heat Exchanger Service Water Return Header Isolation Valve Q1P16V0008F Component Data, 07/20/02
Unit 2 Train A Lube & Cooling Strainer Inlet Normal Supply Valve Q1P16V0716A Component Data, 07/20/02
Unit 2 Train B Service Water Pump Lube & Cooling Water Strainer Q1P16F0503B Component Data and Component Failure Report, 07/20/02

Section 1R08

Procedures

FNP-0-NDE-100.5, Liquid Penetrant Examination (Color Contrast and Fluorescent), Revision 6,
FNP-0-NDE-100.23, Visual Examination VT-3, Revision 5,
FNP-0-NDE-100.36, Ultrasonic Flow Accelerated Corrosion (FAC) Examination, Revision 7,
AUX-H/F/V-300, Qualification and Certification of Nondestructive Examination Personnel, Revision 14,
FNP-2-M-096, Inservice Inspection Program, Revision 6
Framatome Procedure 54-ISI-100, “Remote Ultrasonic Examination of Reactor Head Penetrations,” Rev. 9, dated Sept, 9, 2002.
Westinghouse/Brooks Procedure No. MRS-SSP-1332, “Reactor Head Penetration Remote Visual Inspections for J. M. Farley, Unit 2 (APR), Rev. 0, dated July, 18, 2002.

Other Documents

Ultrasonic Flow Accelerated Corrosion Report for Component 2-232-14, 1.5", 45-degree elbow on SGFP Turbine Seal Steam Line.
Ultrasonic Flow Accelerated Corrosion Report for Component 2-198-3, 36" x 24" Tee on Main Steam Line
Support Examination Record VT-3 for Support No. EG2-317-2PA-R34
Support Examination Record VT-3 for Support No. EG2-200-2SW-R726
Liquid Penetrant Examination Record for Component No. APR1-1300-58, CRD Housing Weld No. 58.
Inservice Inspection Examiner Qualifications and Certifications
Technical Report No. 01036-TR-04, Farley Unit 2 Main Steam Line Vibrations, Rev. 0
CR Number 2002002230, Unit 2, The 2B RCP Thermal Barrier CCW Outlet Piping is Leaking CCW.
CR Number 2002002236, Unit 2, The 2C RCP Thermal Barrier CCW Outlet Piping is Leaking CCW.

Section 1R11

FNP-1-AOP-6, Loss of Instrument Air
FNP-1-AOP-13, Loss of Main Feed Water
FNP-1-ARP-0001, Main Control Board Annunciator Panel
FNP-1-ESP-0.1, Reactor Trip Recovery
FNP-1-ESP-1.1, SI Termination
FNP-1-EEP-0, Reactor Trip or SI
FNP-1-EEP-1, Loss Reactor Trip or SI
FNP-1-EEP-2, Faulted Steam Generator Isolation
FNP-1-EEP-3, Steam Generator Tube Rupture (SGTR)
FNP-1-ECP-3.1, SGTR With Loss of Reactor Coolant Subcooled Recovery Required
FNP-0-AP-30, Preparation and Processing of Condition Reports and Licensee Event Reports
FNP-0-TCP-17.5, License Administration
FNP-0-TCP-17.6, Simulator Training Evaluation/Documentation
FNP-0-TCP-17.22, Operator License Exam Security Administration
FNP-0-TCP-22.0, Test Development, Administration and Analysis

Section 1R14.1

FNP-1-ARP-0001, Main Control Board Annunciator Panel
FNP-1-AOP-13, Loss of Main Feedwater
FNP-1-AOP-17, Rapid Load Reduction

Section 1R14.2

FNP-2-AOP-25, Abnormal Primary or Secondary Chemistry
FNP-0-CCP-202, Water Chemistry Specifications
FNP-0-ETP-4021, Condenser Tube Leak Detection with the Water Box Isolated
CRs 2002001298, 1789, 1810, 1811
FNP Daily Chemistry Reports July - August 2002
Control Room Reactor Operator’s Logs

Secondary Chemistry Logs
Technical Specifications
FNP-2-GOP-3.1, Power Operation

Section 1R20

FNP-0-FHP-3, Receipt and Storage of New Fuel
FNP-0-FHP-3.1, Shipment of New Fuel
FNP-0-FHP-4, Transfer of New Fuel to Spent Fuel Pit
FNP-2-FHP-5.15, New Fuel Monorail Hoist
FNP-2-FHP-5.16, New Fuel Crane
FNP-2-FHP-5.15, New Fuel Monorail Hoist
FNP-2-FHP-5.17, New Fuel Elevator
FNP-2-FHP-5.15, Spent Fuel Bridge Crane
FNP-2-SOP-7, Residual Heat Removal
FNP-2-SOP-54, SFP Cooling and Purification
Westinghouse Unit 2 Cycle 15 Core Reload Manual
FNP-2-STP-170, Check Valve Inservice Test
FNP-2-STP-151.4, Turbine Generator Overspeed Test
FNP-2-STP-158, Reactor Coolant Check Valves Leakage Test
FNP-2-STP-16.12, Containment Spray Pumps Auto Start Test
FNP-2-STP-151.4, Turbine Generator Overspeed Test
FNP-2-SOP-1.6, Draining the RCS
FNP-0-ACP-47, Outage Implementation
FNP-0-AP-94, Outage Nuclear Safety
FNP-0-UOP-4.0, General Outage Operations Guideline
FNP-2-UOP-4.1, Refueling Outage Operation
2R15 Outage Handbook
2R15 Significant Work Activities and Schedule
Outage Control Center Procedures
DCP 9637, Containment Cooler Level Monitoring System
DCP 9705, TDAFW Pump Monitoring and Testing System
2R15 Readiness Reviews
2R15 Critical Path and Safety Assessment Plan
2R15 Task Managers

Office of Investigation Report 2-2002-007 Synopsis

This investigation was initiated by the U.S. Nuclear Regulatory Commission, Office of Investigations, Region II, on March 6, 2002, to determine whether a nuclear security officer (NSO) at the Joseph M. Farley Nuclear Plant (FNP), Dothan, Alabama, deliberately made false entries in a security log to document required security checks not performed.

Based on a review of the licensee report of investigation, testimony, and documentary evidence developed during the investigation, it was determined that a NSO at FNP willfully made false entries in a security log to document required security checks not performed.

Approved for release on October 28, 2002

Enclosure 2