



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

August 4, 2015

Cheryl A. Gayheart, Vice President
Southern Nuclear Operating Company, Inc.
Joseph M. Farley Nuclear Plant
7388 North State Highway 95
Columbia, AL 36319

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT - NRC INTEGRATED
INSPECTION REPORT 05000348/2015002 AND
05000364/2015002

Dear Ms. Gayheart:

On June 30, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Joseph M. Farley Nuclear Plant, Units 1 and 2. On July 27, 2015, the NRC inspectors discussed the results of this inspection with you and other members of your staff.

NRC inspectors documented three findings of very low safety significance (Green) in this report. These findings involved violations of NRC requirements. Further, inspectors documented a licensee-identified violation, which was determined to be of very low safety significance, in this report. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest these violations or the significance of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at Farley. If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region II; and the NRC resident inspector at Farley.

In accordance with Title 10 of the Code of Federal Regulations 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component

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Sincerely,

/RA/

Shane Sandal, Chief
Reactor Projects Branch 2
Division of Reactor Projects

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

Enclosure: IR 05000348/2015002; 05000364/2015002
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Letter to Cheryl A. Gayheart from Shane Sandal dated August 4, 2015.

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT - NRC INTEGRATED
INSPECTION REPORT 05000348/2015002 AND
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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-348, 50-364

License Nos.: NPF-2, NPF-8

Report No.: 05000348/2015002 and 05000364/2015002

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Joseph M. Farley Nuclear Plant, Units 1 and 2

Location: Columbia, AL

Dates: April 1, 2015 through June 30, 2015

Inspectors: P. Niebaum, Senior Resident Inspector
K. Miller, Resident Inspector
D. Mas, Project Engineer
S. Sanchez, Sr. Emer. Prep. Inspector (1EP2, 1EP3, 1EP4)
C. Fontana, Emer. Prep. Inspector (1EP5, 4OA1)
C. Dykes, Health Physicist (2RS1)
B. Collins, Reactor Inspector (1R08)
R. Carrion, Senior Reactor Inspector (1R08)

Approved by: Shane Sandal, Chief Reactor
Projects Branch 2
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000348/2015002 and 05000364/2015002; April 1, 2015 through June 30, 2015; Joseph M. Farley Nuclear Plant, Units 1 and 2; Fire Protection, Operability Determinations and Functionality Assessments, Radiological Hazard Assessment and Exposure Controls

The report covered a 3-month period of inspection by the resident inspectors and six regional inspectors. There are three findings documented in this report. The significance of these inspection findings are indicated by their color (i.e., Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," (SDP) dated April 29, 2015. The cross-cutting aspects are determined using IMC 0310, "Aspects within the Cross-Cutting Areas," dated December 4, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, revised February 4, 2015. The NRC's program for overseeing the safe operations of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5.

Cornerstone: Mitigating Systems

- Green: An NRC-identified, non-cited violation of 10 CFR 50.48(c) and National Fire Protection Association Standard 805 (NFPA 805), Section 3.3.12, was identified for the licensee's failure to comply with code requirements for design and installation of the Unit 1 Reactor Coolant Pump (RCP) oil collection system. The oil collection system did not include drain troughs that would collect leakage from all leakage points. The licensee installed new oil collection drain troughs to capture potential leakage, and entered the issue into the corrective action program as CR10064368 and CR10064530.

The failure to install drain troughs for the Unit 1 RCP oil collection system that would capture leakage from all potential leakage points was a performance deficiency (PD). The PD was more than minor because it was associated with the protection against external factors (i.e., fire) attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective. Specifically, the inadequate installation of the RCP oil collection system was a degradation of a fire prevention function to not allow an oil leak to reach hot surfaces. The significance of this finding was of very low safety significance (Green) because the exposed fire area contains no potential damage targets that are unique from those in the exposing fire area. The inspectors determined the finding had a cross-cutting aspect of Evaluation in the Problem Identification and Resolution area (P.2) because a previous extent of condition review performed in corrective action report (CAR) 218579 on December 15, 2014, incorrectly concluded that the Unit 1 design did not require the drain troughs. (Section 1R05)

- Green: An NRC-identified, non-cited violation of 10 CFR 50, Appendix B, Criterion V, Instructions, Procedures, and Drawings, was identified with two examples. First, on May 17, 2015, the failure to evaluate the operability impact of condensate water in the steam supply of the Unit 1 turbine driven auxiliary feedwater pump (TDAFWP) as required by NMP-AD-012, "Operability Determinations and Functionality Assessments." Second, on May 21, 2015, the failure to ensure component manipulations were not performed prior to in-service testing of the TDAFWP as required by NMP-ES-013, "Inservice Testing Program." The licensee repaired the drain pot level controller on May 22, 2015, and entered the issues into the corrective action program as CR10087008 and CR10088793.

The failure to evaluate the operability of the Unit 1 TDAFWP as required by NMP-AD-012, "Operability Determinations and Functionality Assessments," on May 17, 2015, and the failure to ensure component manipulations were not performed prior to in-service testing as required by NMP-ES-013, "Inservice Testing Program," on May 21, 2015, were performance deficiencies. The performance deficiencies were more than minor because they were associated with the human performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events. Specifically, the failure to implement the operability evaluation and surveillance test of the TDAFWP while the steam supply drain pot level controller was degraded; resulted in the failure to establish reasonable continued assurance that the pump would have been available to perform its safety-related function following a design basis event. The significance of the finding was of very low safety significance (Green) because the finding did not represent an actual loss of safety function of a single train of the auxiliary feedwater system. The inspectors determined the finding had a cross-cutting aspect of "challenge the unknown" in the human performance area, because operations staff did not consider the need to evaluate the impact to the safety function of the Unit 1 TDAFWP, but instead relied on past practices (H.11). (Section 1R15)

Cornerstone: Occupational Radiation Safety

- Green: A self-revealing, non-cited violation of 10 CFR 20.1501(a) was identified for the failure to perform radiological surveys in Unit 1 containment to ensure that the potential radiological hazards and extent of radiation levels were evaluated which resulted in the failure to barricade and conspicuously post a high radiation area (HRA). The licensee took immediate corrective action following discovery and posted the area as an HRA. The issue was entered into the licensee's corrective action program as CR 10057483.

The licensee's failure to perform radiological surveys to ensure the potential radiological hazards and the extent of radiation levels were understood and controlled was a performance deficiency. The performance deficiency was more than minor because it impacted the program and process attribute of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective. Specifically, the licensee failed to adequately evaluate potential radiological hazards that could be present in a work area and operators were unnecessarily exposed to HRA conditions. The finding was assessed and determined to be of very low safety significance (Green) because it was not an ALARA planning issue, there was no overexposure nor substantial potential for an overexposure, and the licensee's ability to assess dose was not compromised. The inspectors determined that this issue had a cross-cutting aspect of Human Performance, Work Management (H.5) because the licensee failed to recognize potential changes in expected radiological conditions and radiation protection supervisors did not oversee work activities by observing and reinforcing standards and expectations to perform radiological surveys of all possible affected areas following a reactor coolant system drain down evolution. (Section 2RS1)

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

REPORT DETAILS

Summary of Plant Status

Unit 1 started the report period in a refueling outage. On May 4, 2015, Unit 1 started up and tied to the grid on May 7. Later on May 7, Unit 1 shutdown and entered a forced outage due to the loss of the "B" unit auxiliary transformer (UAT). Unit 1 started up on May 8 and achieved 100 percent rated thermal power (RTP) on May 13. On May 26, Unit 1 shutdown for a planned outage to replace the "B" pressurizer safety valve. Unit 1 started up on May 30, tied to the grid on May 31, and achieved 100 percent RTP on June 3, 2015. Unit 1 remained at approximately 100 percent RTP through the remainder of the report period.

Unit 2 started the report period at approximately 100 percent RTP. On May 16, Unit 2 reduced power to approximately 20 percent RTP to improve main steam line vibrations. Unit 2 returned to 100 percent RTP on May 18, and maintained approximately 100 percent RTP through the remainder of the report period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

Summer Readiness of Offsite and Alternate AC Power System: The inspectors reviewed the licensee's procedures for operation and continued availability of offsite and onsite alternate AC power systems. The inspectors also reviewed the communications protocols between the transmission system operator and the licensee to verify that the appropriate information is exchanged when issues arise that could affect the offsite power system. The inspectors reviewed the material condition of offsite and onsite alternate AC power systems (including switchyard and transformers) by performing a walkdown of the switchyard. The inspectors reviewed outstanding work orders and assessed corrective actions for any degraded conditions that impacted plant risk or required compensatory actions. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R04 Equipment Alignment

a. Inspection Scope

Partial System Walkdowns: The inspectors verified that critical portions of the selected systems were correctly aligned by performing partial walkdowns of the following two systems or trains. The inspectors selected systems for assessment because they were a redundant or backup system or train, were important for

mitigating risk for the current plant conditions, had been recently realigned, or were a single-train system. The inspectors determined the correct system lineup by reviewing plant procedures and drawings. Documents reviewed are listed in the Attachment.

- Unit 1 'A' train residual heat removal (RHR) system while 'B' train was inoperable
- Unit 2 'B' train residual heat removal (RHR) system while 'A' train was inoperable

Complete Walkdown: The inspectors verified the alignment of the Unit 1 auxiliary feedwater system. The inspectors selected this system for assessment because it is a risk-significant mitigating system. The inspectors determined the correct system lineup by reviewing plant procedures, drawings, the updated final safety analysis report, and other documents. The inspectors reviewed records related to the system outstanding design issues, maintenance work requests, and deficiencies. The inspectors verified that the selected system was correctly aligned by performing a complete walkdown of accessible components.

To verify the licensee was identifying and resolving equipment alignment discrepancies, the inspectors reviewed corrective action documents, including condition reports and outstanding work orders. The inspectors also reviewed periodic reports containing information on the status of risk-significant systems, including maintenance rule reports and system health reports. Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors evaluated the adequacy of selected fire zone data sheets by comparing the data sheets to the defined hazards and defense-in-depth features specified in the fire protection program. In evaluating the fire data sheets, the inspectors assessed the following items:

- control of transient combustibles and ignition sources
- fire detection systems
- water-based fire suppression systems
- gaseous fire suppression systems
- manual firefighting equipment and capability
- passive fire protection features
- compensatory measures and fire watches
- issues related to fire protection contained in the licensee's corrective action program

The inspectors toured the following five fire areas to assess material condition and operational status of fire protection equipment. Documents reviewed are listed in the attachment.

- Unit 1 component cooling water pump and heat exchanger room, fire area 6
- Unit 1 auxiliary feedwater pump rooms, fire area 6
- Unit 2 component cooling water pump and heat exchanger room, fire area 6
- Unit 2 auxiliary feedwater pump rooms, fire area 6
- Unit 1 reactor coolant pump oil collection system, fire area 55

b. Findings

Introduction: An NRC-identified Green non-cited violation (NCV) of 10 CFR 50.48(c) and National Fire Protection Association Standard 805 (NFPA 805), Section 3.3.12, was identified for the licensee's failure to comply with code requirements for design and installation of the Unit 1 Reactor Coolant Pump (RCP) oil collection system. The oil collection system did not include provisions to collect leakage from all leakage points.

Description: On May 2, 2015, the inspectors performed a Unit 1 containment building closeout inspection during a refueling outage and noted that all three RCP oil collection systems lacked an oil collection trough for the oil pot drain line. The oil collection systems did not include provisions to collect leakage from the piping flange joints at the isolation valves located between the motor lower bearing oil reservoir and the level switch assembly on each of the three RCPs. Each lower bearing reservoir contains approximately 25 gallons of lubricating oil. Without this oil collection trough, oil could leak out of an unprotected flanged joint and come in contact with hot surfaces and ignite.

Analysis: The licensee's failure to adequately install the Unit 1 RCP oil collection systems was a performance deficiency. The PD was more than minor because it was associated with the protection against external factors (i.e. fire) attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective in that the inadequate installation of the RCP oil collection system was a degradation of a fire prevention function of not allowing an oil leak to reach hot surfaces. The significance of this finding was evaluated using IMC 0609, Appendix F, "Fire Protection Significance Determination Process," Attachment 1, "Fire Protection Significance Determination Process Worksheet," dated September 20, 2013. The inspectors determined that the finding was of very low safety significance (Green) because the exposed fire area contains no potential damage targets that are unique from those in the exposing fire area. The inspectors determined the finding had a cross-cutting aspect of Evaluation in the Problem Identification and Resolution area because the extent of condition review performed in corrective action report (CAR) 218579 on December 15, 2014, incorrectly concluded that the Unit 1 design did not require the drain troughs. (P.2)

Enforcement: Farley Nuclear Plant, Unit 1, Operating License Condition 2.C.(4), required, in part, that the licensee shall implement and maintain in effect all provisions of the approved fire protection program (FPP) that comply with 10 CFR 50.48(c), as specified in the license amendment request dated September 25, 2012, and supplements dated December 20, 2012; September 16, 2013; October 30, 2013; November 12, 2013; April 23, 2014, May 23, 2014; July 3, 2014; August 11, 2014; August 29, 2014; October 13, 2014; January 16, 2015, and as approved in the safety evaluation report (SER) dated

March 10, 2015. The 2001 Edition of NFPA-805, Section 3.3.12, Reactor Coolant Pumps, required that the oil collection system shall be designed and installed such that leakage from the oil system is safely contained for off normal conditions such as accident conditions or earthquakes. Leakage points on a reactor coolant pump motor to be protected shall include but not be limited to the lift pump and piping, overflow lines, oil cooler, oil fill and drain lines and plugs, flanged connections on oil lines, and the oil reservoirs, where such features exist on the reactor coolant pumps. Additionally, the UFSAR Appendix 9B, Fire Protection Program, Section 9B.3, Section L, Requirements for Oil Collection System for Reactor Coolant Pump, the lube oil collection systems shall be capable of collecting lube oil from all potential pressurized and unpressurized leakage sites in the reactor coolant pump lube oil systems. Contrary to the above requirements, the licensee failed to comply with the NFPA 805 code requirements for the Unit 1 RCP oil collection system. This condition has likely existed since March of 1983, when the licensee modified the RCP oil collection systems in an effort to comply with the 10 CFR 50 Appendix R requirements. New oil collection drain troughs were installed during the maintenance outage on May 27, 2015. Because the licensee included this deficiency in their corrective action program as CR10064368 and 10064530 and because the deficiency had low safety significance, this finding will be treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy and is identified as NCV 05000348/2015002-01, Failure to Adequately Install an Oil Collection System on Reactor Coolant Pump Motors.

1R08 Inservice Inspection Activities (71111.08)

a. Inspection Scope

Non-Destructive Examination Activities and Welding Activities: The inspectors reviewed implementation of the licensee's in-service inspection (ISI) program for monitoring degradation of the reactor coolant system boundary, risk-significant piping and component boundaries, and containment boundaries in Unit 1. This refueling outage was the first outage of the third period of the fourth ISI 10-Year Interval. The inspectors directly observed the following non-destructive examinations (NDEs) mandated by the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code of Record: 2001 Edition with 2003 Addenda), to evaluate compliance with the ASME Code, Section XI and Section V requirements, and if any indications or defects were detected, to evaluate if they were dispositioned in accordance with the ASME Code or an NRC-approved alternative requirement. The inspectors also reviewed the qualifications of the NDE technicians performing the examinations to determine whether they were current and in compliance with the ASME Code requirements.

- Ultrasonic Testing (UT), Weld ALA1-4302-11-RB (Discharge Leg of 1C Accumulator), Elbow to Pipe, Class 1
- UT, Weld ALA1-4302-12-RB (Discharge Leg of 1C Accumulator), Pipe to Elbow, Class 1
- Penetrant Testing (PT), Weld ALA2-4502-SI-R291(W8) Welded Attachments (Lugs) on RHR/SI Line, Class 2

The inspectors reviewed the following welding activities to evaluate compliance with procedures and the ASME Code, Section XI and Section IX requirements. Specifically, the inspectors reviewed the associated work orders, repair and replacement plans, weld

data sheets, welding procedures, procedure qualification records, welder performance qualification records, and NDE reports.

- Removal of existing stainless steel 1-1/4" balancing line and replace with new stainless steel pipe and fittings on 1A MDAFW pump. (Class 3)
- Weld of Service Water Strainer Backwash Line Leak: "B" Train Strainer Backwash Root. (Class 3)
- Weld 3" Schedule 160 stainless steel, 1B Charging Pump, Chemical and Volume Control System. (Class 2)

During non-destructive surface and volumetric examinations performed since the previous refueling outage, the licensee did not identify any relevant indications that were analytically evaluated and accepted for continued service; therefore, no NRC review was completed for this inspection procedure attribute.

Pressurized Water Reactor Vessel Upper Head Penetration Inspection Activities: The inspectors observed the NDE activities for the volumetric examination of reactor vessel upper head penetration numbers 21, 33, and 54 to determine if the activities, including the disposition of indications and defects, were conducted in accordance with the requirements of ASME Code Case N-729-1, as incorporated by reference in 10 CFR 50.55a(g)(6)(ii)(D). Additionally, the inspectors' review also determined whether essentially 100 percent of the required examination volumes and surfaces were examined, and whether a volumetric or surface leakage path examination was completed. The licensee did not identify any relevant indications that were accepted for continued service. Additionally, the licensee had not performed any welding repairs to the vessel head penetrations since the beginning of the last Unit 1 refueling outage; therefore, no NRC review was completed for these inspection procedure attributes.

Boric Acid Corrosion Control Inspection Activities: The inspectors reviewed the licensee's boric acid corrosion control (BACC) program activities to ensure implementation with commitments made in response to NRC Generic Letter 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants," and applicable industry guidance documents. Specifically, the inspectors performed an onsite record review of procedures, and the results of the licensee's containment walkdown inspections performed during the current spring refueling outage. The inspectors also interviewed the BACC program owner, conducted an independent walkdown of containment to evaluate compliance with licensee's BACC program requirements, and verified that degraded or non-conforming conditions, such as boric acid leaks, were properly identified and corrected in accordance with the licensee's BACC, and corrective action program (CAP). The inspectors also reviewed the BACC program health reports since the last Unit 1 outage to evaluate program trends.

Steam Generator Tube Inspection Activities: The inspectors reviewed the eddy current (EC) examination activities performed in Unit 1 steam generators (SGs) A, B, and C during this current refueling outage to verify compliance with the licensee's Technical Specifications, ASME BPVC Section XI, and Nuclear Energy Institute 97-06, "Steam Generator Program Guidelines." The inspectors reviewed the scope of the EC examinations, and the implementation of scope expansion criteria, to verify that they were consistent with the Electric Power Research Institute (EPRI) Pressurized Water Reactor Steam Generator Examination Guidelines, Revision 7. The inspectors reviewed documentation for a sample of EC data analysts, probes, and testers to verify that

personnel and equipment were qualified to detect the applicable degradation mechanisms, in accordance with the EPRI Examination Guidelines. This review included a sample of site-specific Examination Technique Specification Sheets (ETSSs) to verify that their qualification, and site-specific implementation, were consistent with Appendix H or I of the EPRI Examination Guidelines. The inspectors also reviewed a sample of EC data for SG tubes A-R1C22, B-R4C70, and C-R38C59 with a qualified data analyst, to confirm that data analysis and equipment configuration were performed in accordance with the applicable ETSSs, and site-specific analysis guidelines. The inspectors verified that recordable indications were detected and sized in accordance with vendor procedures.

The inspectors selected a sample of degradation mechanisms from the Unit 1 Degradation Assessment report (i.e., Anti-Vibration Bar wear), and verified that their respective in-situ pressure testing criteria were determined in accordance with the EPRI Steam Generator Integrity Assessment Guidelines, Revision 3. Additionally, the inspectors reviewed EC indication reports to determine whether tubes, with relevant indications, were appropriately screened for in-situ pressure testing. The inspectors also compared the latest EC examination results with the last Condition Monitoring and Operational Assessment report for Unit 1, to assess the licensee's prediction capability for maximum tube degradation, and number of tubes with indications. The inspectors verified that the licensee's evaluation was conservative, and that current examination results were bound by the Operational Assessment projections.

The inspectors assessed the latest EC examination results to verify that new degradation mechanisms, if any, were identified and evaluated before plant startup. The review of EC examination results included the disposition of potential loose part indications on the SG secondary side, to verify that corrective actions for evaluating and retrieving loose parts were consistent with the EPRI Guidelines. The inspectors also reviewed a sample of primary-to-secondary leakage data for Unit 1, to confirm that operational leakage in each SG remained below the detection or action level threshold during the previous operating cycle.

The inspectors' review included the implementation of tube repair criteria and repair methods, to verify they were consistent with plant Technical Specifications and industry guidelines. The inspectors verified that the licensee had selected the appropriate tubes for plugging based on the required plugging criteria.

Furthermore, the inspectors interviewed licensee staff and reviewed a sample of inspection results for the inspection conducted in the secondary side internals of SGs A, B, and C, to verify that potential areas of degradation based on site-specific operating experience were inspected, and appropriate corrective actions were taken to address degradation indications. This review included the results of Foreign Object Search and Retrieval (FOSAR) activities in the SGs, and an evaluation for a potential loose part in the secondary side of SGs A, B, and C.

Identification and Resolution of Problems: The inspectors reviewed a sample of ISI-related issues entered into the CAP to determine if the licensee had appropriately described the scope of the problem, and had initiated corrective actions. The review also included the licensee's consideration and assessment of operating experience

events applicable to the plant. The inspectors performed this review to ensure compliance with 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requirements.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program and Licensed Operator Performance

a. Inspection Scope

Resident Inspector Quarterly Review of Licensed Operator Regualification: The inspectors observed an evaluated simulator scenario conducted for training of an operating crew for regualification on June 16, 2015 in accordance with the licensee's accredited regualification training program. The inspectors assessed the following:

- licensed operator performance
- the ability of the licensee to administer the scenario and evaluate the operators
- simulator performance
- the quality of the post-scenario critique

Resident Inspector Quarterly Review of Licensed Operator Performance: The inspectors observed licensed operator performance in the main control room during Unit 1 low power physics testing conducted on May 4, 2015. The inspectors assessed the following:

- use of plant procedures
- control board manipulations
- communications between crew members
- use and interpretation of instruments, indications, and alarms
- use of human error prevention techniques
- documentation of activities
- management and supervision

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors assessed the licensee's treatment of the issues listed below to verify the licensee appropriately addressed equipment problems within the scope of the maintenance rule (10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"). The inspectors reviewed procedures and records to evaluate the licensee's identification, assessment, and characterization of the problems as well as their corrective actions for returning the equipment to a

satisfactory condition. The inspectors also interviewed system engineers and the maintenance rule coordinator to assess the accuracy of performance deficiencies and extent of condition. Documents reviewed are listed in the Attachment.

- (a)(1) plan for the Unit 2 turbine driven auxiliary feedwater (AFW) pump, TE 908924
- Unit 1, Q1E21V061B, Maintenance Rule Functional Failure Evaluation

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the four maintenance activities listed below to verify that the licensee assessed and managed plant risk as required by 10 CFR 50.65(a)(4) and licensee procedures. The inspectors assessed the adequacy of the licensee's risk assessments and implementation of risk management actions. The inspectors also verified that the licensee was identifying and resolving problems with assessing and managing maintenance-related risk using the corrective action program. Additionally, for maintenance resulting from unforeseen situations, the inspectors assessed the effectiveness of the licensee's planning and control of emergent work activities. Documents reviewed are listed in the Attachment.

- Unit 1, May 15, 2015, replacement of the number 2 power supply for the B train solid state protection system
- Unit 1, May 26, 2015, emergent maintenance associated with broken 603B valve, RHR heat exchanger discharge valve
- Unit 2, June 5, 2015, corrective maintenance on the turbine driven auxiliary feedwater pump
- Unit 1, June 10, 2015, steam generator water level control test per FNP-1-ETP-4450

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments

a. Inspection Scope

The inspectors selected the five operability determinations or functionality evaluations listed below for review based on the risk-significance of the associated components and systems. The inspectors reviewed the technical adequacy of the determinations to ensure that technical specification operability was properly justified and the components or systems remained capable of performing their design functions. To verify whether components or systems were operable, the inspectors compared the

operability and design criteria in the appropriate sections of the technical specification and updated final safety analysis report to the licensee's evaluations. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. Additionally, the inspectors reviewed a sample of corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with operability evaluations. Documents reviewed are listed in the Attachment.

- Unit 2, 2B MDAFW pump performance during quarterly surveillance test, CR 10049482
- Unit 1, 1A 125V DC battery jar covers with small cracks at the positive post, CR 10052039
- Unit 1, Source range detector performance, CR 10062947
- Unit 1, 'B' Pressurizer Safety Valve Operational Decision Making Instruction (ODMI), CR10065279
- Evaluation of Structural Integrity for Reactor Coolant Pump No. 1 Seal Leak-Off Line Piping to address Westinghouse NSAL-15-2, RER SNC655721 and SNC653126

Operator Work-Around Annual Review The inspectors performed a detailed review of the licensee's operator work-around, operator burden, and/or control room deficiency listed below. The inspectors verified the licensee identified operator work-arounds and/or burdens at an appropriate threshold and entered them in the corrective action program. The inspectors verified that the licensee identified the full extent of issues, performed appropriate evaluations, and planned appropriate corrective actions. The inspectors also reviewed compensatory actions and their cumulative effects on plant operation. Documents reviewed are listed in the attachment.

- Unit 1, TDAFW pump steam supply drain pot work around, CR 10070747

b. Findings

Introduction: An NRC-identified Green non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified with two examples. First, for the failure to evaluate the operability impact of condensate water in the steam supply of the Unit 1 turbine driven auxiliary feedwater pump (TDAFWP) as required by NMP-AD-012, "Operability Determinations and Functionality Assessments." Second, for the failure to ensure component manipulations were not performed prior to in-service testing of the TDAFWP as required by NMP-ES-013, "Inservice Testing Program."

Description: On May 19, 2015, the inspectors observed that the TDAFWP steam supply drain pot drain manual isolation valve (normally-open) had been closed on May 17, 2015, due to a malfunction of the drain pot automatic level control system. The licensee had implemented a compensatory action to drain condensate water from the drain pot every four hours using the manual drain valve. With the drain valve closed, the inspectors observed a constant flow of water discharging from the steam trap downstream of the turbine exhaust, indicating condensate was overfilling the drain pot, collecting in the steam line, passing through the steam admission valve, the trip and throttle valve, and governor valve, into the steam turbine. The inspectors questioned the

licensee regarding the adequacy of the 4-hour draining frequency and learned that an Immediate Determination of Operability (IDO) evaluation had not been initiated to determine if the TDAFWP could overspeed and trip during an emergency start due condensate water impingement on the turbine blades. Procedure NMP-AD-012, Section 4.3.1, required the Senior Reactor Operator (SRO) to make a log entry into the condition report (CR) to provide the IDO conclusions. The CR was annotated "Drain pot will be isolated, Rover to blow down every 4 hours, no impact to TDAFWP Operation." The inspectors determined that a technical basis had not been developed to support the adequacy of the 4-hour blowdown frequency. Additionally, the inspectors concluded that the licensee had not evaluated the impact of the condition on the operability of the TDAFWP due to the potential for overspeed and trip of the pump as a result of water entrainment in the steam supply. In response to the inspectors concerns, the licensee initiated the IDO process, but repaired the drain pot level control system on May 22, 2015, prior to completing the operability determination.

On May 21, 2015, the NRC inspectors observed a non-licensed operator (NLO) blow down the steam supply drain pot for the Unit 1 TDAFWP. This was directed by the Unit 1 control room shift supervisor and was performed immediately prior to starting the TDAFWP for its technical specification required in-service test. The inspectors estimated the blow down lasted for approximately ten minutes and observed what appeared to be several gallons of hot condensate and steam being drained into a floor drain. Procedure NMP-ES-013, "Inservice Testing Program," Ver. 5.0, Section 3.7, stated in part that the site operations manager is responsible for ensuring that component manipulations are not performed prior to in-service testing that may be considered preconditioning. The inspectors concluded this component manipulation (i.e., manually draining the condensate from the steam supply immediately before the test) preconditioned the TDAFWP surveillance test because the licensee did not evaluate the volume of condensate that was drained from the system.

The licensee entered the issues into the corrective action program as CR10087008 and CR10088793 and completed a past-operability assessment of the condition following repairs to the drain pot level controller. The inspectors reviewed the licensee's evaluation, "Unit 1 Turbine Driven Auxiliary Feedwater Pump Water Carryover Assessment," dated July 10, 2015. The evaluation concluded that the mass of water that would have been carried over into the TDAFWP turbine was within the governor's response capability and that the pump remained operable while the level controller was degraded.

Analysis: The failure to evaluate the operability of the Unit 1 TDAFWP as required by NMP-AD-012, "Operability Determinations and Functionality Assessments," on May 17, 2015, and the failure to ensure component manipulations were not performed prior to in-service testing as required by NMP-ES-013, "Inservice Testing Program," on May 21, 2015, were performance deficiencies. The performance deficiencies were more than minor because they were associated with the human performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability and capability of systems that respond to initiating events. Specifically, the failure to implement the operability evaluation and surveillance test of the TDAFWP (while the steam supply drain pot level controller was degraded) resulted in the failure to establish reasonable continued assurance that the pump would have been available to perform its safety-related function following a design basis event. The significance of this finding was evaluated using the mitigating systems screening

questions of IMC 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” dated July 1, 2012. The inspectors determined that the finding was of very low safety significance (Green) because the finding did not represent an actual loss of safety function of a single train of the auxiliary feedwater system. The inspectors determined the finding had a cross-cutting aspect of “challenge the unknown” in the human performance area, because operations staff did not consider the need to evaluate the impact to the safety function of the Unit 1 TDAFWP, but instead relied on past practices (H.11).

Enforcement: 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” required, in part, that activities affecting quality shall be prescribed by documented procedures, and shall be accomplished in accordance with those procedures. Licensee procedure NMP-AD-012, “Operability Determinations and Functionality Assessments,” Ver. 12.4, required that there must be a reasonable expectation that the system is operable and the operability determination process will support that expectation. Also, licensee procedure NMP-ES-013, “Inservice Testing Program,” Ver. 5.0, Section 3.7, stated in part that the site operations manager is responsible for ensuring that component manipulations are not performed prior to in-service testing that may be considered preconditioning. Contrary to the above, on two occasions, the licensee failed accomplish activities that affected the quality of the Unit 1 TDAFWP. In the first example, on May 17, 2015, the licensee did not evaluate the effect of water entrainment in the steam supply on the operability of the TDAFWP as required by NMP-AD-012. In the second example, on May 21, 2015, the licensee did not prevent component manipulations that preconditioned an in-service test of the Unit 1 TDAFW pump as required by NMP-ES-013. The degraded drain pot level control system was repaired and returned to service on May 22, 2015. Because the finding was of very low safety significance and was entered into the licensee’s CAP as CRs 10087008 and 10088793, this finding was treated as an NCV, consistent with Section 2.3.2 of the Enforcement Policy and is identified as NCV 05000348/2015002-02, Failure to Evaluate Impacts of Degraded Condition on the Unit 1 TDAFW Pump.

1R18 Plant Modifications

a. Inspection Scope

The inspectors verified that the plant modification listed below did not affect the safety functions of important safety systems. The inspectors confirmed the modifications did not degrade the design bases, licensing bases, and performance capability of risk significant structures, systems and components. The inspectors also verified modifications performed during plant configurations involving increased risk did not place the plant in an unsafe condition. Additionally, the inspectors evaluated whether system operability and availability, configuration control, post-installation test activities, and changes to documents, such as drawings, procedures, and operator training materials, complied with licensee standards and NRC requirements. In addition, the inspectors reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with modifications. Documents reviewed are listed in the Attachment.

- Work Order SNC509544, Fabricate and install piping on auxiliary feedwater pump discharge header per DCP SNC467134, Farley SAM-U1 FLEX Core Cooling

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors either observed post-maintenance testing or reviewed the test results for the six maintenance activities listed below to verify the work performed was completed correctly and the test activities were adequate to verify system operability and functional capability.

- WO SNC655375, Rework 1C emergency diesel generator DC automatic transfer switch with new components, QSR43L0001C
- WO SNC649390, Source range neutron flux channel 2 detector replacement
- WO SNC528586, FCV-603B leaking past closed seat
- WO SNC 657815, Inspect and repair valve Q2E21V061B
- WO SNC664292, Replacement of the number 2 power supply Q1H11NGSSP2506H for the B train solid state protection system
- WOs SNC671426 and SNC671749, corrective maintenance for the Unit 2 turbine driven auxiliary feedwater pump

The inspectors evaluated these activities for the following:

- Acceptance criteria were clear and demonstrated operational readiness.
- Effects of testing on the plant were adequately addressed.
- Test instrumentation was appropriate.
- Tests were performed in accordance with approved procedures.
- Equipment was returned to its operational status following testing.
- Test documentation was properly evaluated.

Additionally, the inspectors reviewed a sample of corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with post-maintenance testing. Documents reviewed are listed in the Attachment.

b. Findings

A licensee identified violation associated with a post maintenance test inspection was identified. The enforcement aspects of this finding are discussed in Section 4OA7.

1R20 Refueling and Other Outage Activities

.1 Unit 1 Refueling Outage

a. Inspection Scope

For the Unit 1 refueling outage from March 29, 2015, to May 7, 2015, the inspectors evaluated the following outage activities:

- outage planning
- refueling, heatup, and startup
- reactor coolant system instrumentation and electrical power configuration
- reactivity and inventory control
- decay heat removal and spent fuel pool cooling system operation
- containment closure

The inspectors verified that the licensee:

- considered risk in developing the outage schedule
- controlled plant configuration in accordance with administrative risk reduction methodologies
- developed work schedules to manage fatigue
- developed mitigation strategies for loss of key safety functions
- adhered to operating license and technical specification requirements

The inspectors verified that safety-related and risk-significant structures, systems and components not accessible during power operations were maintained in an operable condition. The inspectors also reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with outage activities. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.2 Unit 1 Forced Outage

a. Inspection Scope

For the Unit 1 forced outage from May 7, 2015 to May 9, 2015 that resulted from the loss of the "B" unit auxiliary transformer (UAT), the inspectors evaluated the following outage activities:

- shutdown, cooldown, heatup, and startup
- reactivity and inventory control

- containment closure

The inspectors verified that the licensee:

- considered risk in developing the outage schedule
- controlled plant configuration in accordance with administrative risk reduction methodologies
- developed mitigation strategies for loss of key safety functions
- adhered to operating license and technical specification requirements

The inspectors reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with outage activities. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

.3 Unit 1 Planned Maintenance Outage

a. Inspection Scope

For the Unit 1 planned maintenance outage from May 26, 2015, to May 31, 2015, to replace the "B" Pressurizer Safety Valve, Q1B31V031B, the inspectors evaluated the following outage activities:

- shutdown, cooldown, heatup, and startup
- reactivity and inventory control
- decay heat removal and spent fuel pool cooling system operation
- containment closure

The inspectors verified that the licensee:

- considered risk in developing the outage schedule
- controlled plant configuration in accordance with administrative risk reduction methodologies
- developed mitigation strategies for loss of key safety functions
- adhered to operating license and technical specification requirements

The inspectors also reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with outage activities. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed the six surveillance tests listed below and either observed the test or reviewed test results to verify testing adequately demonstrated equipment operability and met technical specification and licensee procedural requirements. The inspectors evaluated the test activities to assess for preconditioning of equipment, procedure adherence, and equipment alignment following completion of the surveillance. Additionally, the inspectors reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with surveillance testing. Documents reviewed are listed in the Attachment.

Routine Surveillance Tests

- FNP-1-STP-40.0A, Safety Injection With Loss of Off-Site Power Test – A Train, Ver. 4.0
- FNP-0-STP-80.2, Diesel Generator 1C Operability Test, Ver. 65.0
- FNP-1-STP-158.0, Reactor Coolant System Pressure Isolation Valve Leak Test, Ver. 32.0
- FNP-1-STP-22.16, Turbine Driven Auxiliary Feedwater Pump Quarterly Inservice Test, Ver. 62.2

Inservice Tests

- FNP-2-STP-22.2, 2B Motor Driven Auxiliary Feedwater Water Pump Quarterly Inservice Test, Ver. 30.0

Containment Isolation Valve

- FNP-1-STP-627.0, Local Leak Rate Testing of Containment Penetrations, Ver. 45.0 for Penetration 45, Component Cooling Water (CCW) to Excess Letdown Heat Exchanger

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Evaluation

a. Inspection Scope

The inspectors evaluated the adequacy of the licensee's methods for testing the alert and notification system. The applicable planning standard, 10 CFR Part 50.47(b)(5) and its related 10 CFR Part 50, Appendix E, Section IV.D requirements were used as reference criteria. The criteria contained in NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of

Nuclear Power Plants, Revision 1, were also used as a reference. The inspectors interviewed personnel responsible for siren maintenance and verified placement of several sirens. This inspection activity satisfied one inspection sample. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1EP3 Emergency Response Organization Staffing and Augmentation System

a. Inspection Scope

The inspectors reviewed the licensee's Emergency Response Organization (ERO) augmentation staffing requirements and process for notifying the ERO to ensure the readiness of key staff for responding to an event and timely facility activation. The qualification records of key position ERO personnel were reviewed to ensure all ERO qualifications were current. A sample of problems identified from augmentation drills or system tests performed since the last inspection were reviewed to assess the effectiveness of corrective actions. The applicable planning standard, 10 CFR 50.47(b)(2), and its related 10 CFR 50, Appendix E requirements were used as reference criteria. This inspection activity satisfied one inspection sample. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

Since the last NRC inspection of this program area, several changes were made to the Radiological Emergency Plan and Emergency Action Levels (EALs). The licensee determined that, in accordance with 10 CFR 50.54(q), the Plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. The inspectors reviewed these changes to evaluate for potential reductions in the effectiveness of the Plan. However, this review was not documented in a Safety Evaluation Report and does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety. The applicable planning standards of 10 CFR 50.47(b), and its related requirements in 10 CFR 50, Appendix E, were used as reference criteria. This inspection activity satisfied one inspection sample. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1EP5 Maintenance of Emergency Preparedness

a. Inspection Scope

The inspectors reviewed the corrective actions identified through the Emergency Preparedness program to determine the significance of the issues, the completeness and effectiveness of corrective actions, and to determine if issues were recurring. The licensee's drill and exercise critique reports, self-assessments, and audits were reviewed to assess the licensee's ability to be self-critical, thus avoiding complacency and degradation of their emergency preparedness program. The licensee's 10 CFR 50.54(q) change process and selected evaluations of Emergency Preparedness document revisions were reviewed to assess adequacy. The inspectors toured facilities and reviewed equipment and facility maintenance records to assess licensee's adequacy in maintaining them. During tours of the main control rooms, the inspectors observed licensee staff demonstrate the capabilities of selected radiation monitoring instrumentation used to detect dose rates of selected areas of the plant to adequately support declaration of the effected EALs. In addition, the inspectors reviewed licensee procedures and training for the evaluation of changes to the emergency plans. The applicable 10 CFR 50.47(b) planning standards and related 10 CFR 50, Appendix E requirements were used as reference criteria. This inspection activity satisfied one inspection sample. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

On June 22, 2015, the inspectors observed a training evolution identified as contributing to Drill/Exercise Performance (DEP) performance indicator. The inspectors observed licensee activities in the simulator to evaluate implementation of the emergency plan, including event classification, notification, and protective action recommendations. The inspectors evaluated the licensee's performance against criteria established in the licensee's procedures. Additionally, the inspectors attended the critique to assess the licensee's effectiveness in identifying emergency preparedness weaknesses and verified the identified weaknesses were entered in the corrective action program. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

2. RADIATION SAFETY

Cornerstones: Public Radiation Safety and Occupational Radiation Safety

2RS1 Radiological Hazard Assessment and Exposure Controls

a. Inspection Scope

Hazard Assessment and Instructions to workers: During facility tours, the inspectors observed labeling of radioactive material and postings for radiation areas, high radiation areas (HRAs), and contamination areas established within the radiologically controlled area (RCA) of the auxiliary building, Unit 1 reactor containment building, and radioactive waste (radwaste) processing and storage locations. The inspectors observed conduct of licensee radiation surveys for selected RCA areas. The inspectors reviewed survey records for several plant areas including surveys for alpha emitters, discrete radioactive particles, airborne radioactivity, gamma, and neutron surveys with a range of dose rate gradients, and pre-job surveys for upcoming tasks. The inspectors also discussed changes to plant operations that could contribute to changing radiological conditions since the last inspection. For selected outage jobs, the inspectors attended pre-job briefings and reviewed radiation work permit (RWP) details to assess communication of radiological control requirements and current radiological conditions to workers. Inspectors followed up on a digital alarming dosimeter dose rate alarm in Unit 1 containment that was greater than 100 mrem. In addition to speaking with the Radiation Protection Manager, inspectors also reviewed condition reports, radiological surveys and the Apparent Cause Determination Report.

Hazard Control and Work Practices: The inspectors evaluated access barrier effectiveness for various Locked High Radiation Area (LHRA) locations. Changes to procedural guidance for LHRA and Very HRA controls were discussed with health physics (HP) supervisors. Controls and their implementation for storage of irradiated material within the spent fuel pool were reviewed and discussed in detail. Established radiological controls (including airborne controls) were evaluated for selected Unit 1 refueling outage tasks including work on the steam generator, in-core thimble eddy current testing, change out of the Unit 1 RCS filter and emergent work in the spent fuel pool. In addition, licensee controls for areas where dose rates could change significantly as a result of plant shutdown and refueling operations were reviewed and discussed.

Through direct observations and interviews with licensee staff, the inspectors evaluated occupational workers' adherence to selected RWPs and HP technician proficiency in providing job coverage. Electronic dosimeter (ED) alarm set points and permissible doses were evaluated against area radiation survey results for selected work activities. The use of personnel dosimetry (ED alarms, extremity dosimetry, multi-badging in high dose rate gradients, etc.) was reviewed. Worker response to dose and dose rate alarms during selected work activities was also evaluated.

Control of Radioactive Material: The inspectors observed surveys of material and personnel being released from the RCA using small article monitor, personnel contamination monitor, and portal monitor instruments. The inspectors discussed equipment sensitivity, alarm setpoints, and release program guidance for release point survey instruments with licensee staff. The inspectors compared recent 10 Code of Federal Regulations (CFR) Part 61 results for the dry active waste (DAW) radioactive waste stream with radionuclides used in calibration sources to evaluate the appropriateness and accuracy of release survey instrumentation. The inspectors also reviewed records of leak tests on selected sealed sources and reviewed the licensee's Nationally Source Tracking System source inventory confirmation.

Problem Identification and Resolution: The inspectors reviewed and assessed Corrective Action Program (CAP) documents associated with radiological hazard assessment and exposure control. The inspectors evaluated the licensee's ability to identify and resolve the issues in accordance with licensee procedures. The inspectors also reviewed recent self-assessment results.

Radiation protection activities were evaluated against the requirements of Updated Final Safety Analysis Report (UFSAR) Section 12; Technical Specifications Sections 5.4 and 5.7; 10 CFR Parts 19 and 20; and approved licensee procedures. Licensee programs for monitoring materials and personnel released from the RCA were evaluated against 10 CFR Part 20 and IE Circular 81-07, Control of Radioactively Contaminated Material. Documents reviewed are listed in the Attachment.

b. Findings

Introduction: A self-revealing Green NCV was identified for failure to perform radiological surveys to ensure that the potential radiological hazards and extent of radiation levels were evaluated and failure to barricade and conspicuously post a high radiation area. Areas for Unit 1 Containment 105' elevation outside the biological shield wall on the Reactor Coolant Drain Tank (RCDT) pump discharge line during after a partial drain down of the Reactor Coolant System (RCS) were not surveyed. This failure resulted in dose rates greater than 100 millirem per hour (mrem/hr) at 30 centimeters from RCDT system piping outside the Unit 1 biological shield wall on Containment 105' elevation.

Description: On April 18, 2015, two shift operators (SOs) received a radiation protection (RP) brief for areas on 105' elevation they needed to enter. The briefs consisted of a high radiation area (HRA) brief for areas inside the biological shield wall and a non-HRA brief for areas outside the biological shield wall. The dose rate alarm was set at 155 mrem/hr. After their briefing, the SOs entered containment. The SOs were going to the outside of the biological shield wall near the RCDT system piping. As one of the SOs approached the RCDT piping he received a dose rate alarm. The SO left the area, notified his coworker and reported the alarm condition to an RP technician. The RP technician went to the RCDT piping area and measured dose rates up to 120 mrem/hr at 30 cm, defining the area as an un-posted HRA. The RP technician notified his supervisor and posted the area as an HRA.

Three days prior to the containment entry an emergent partial drain down of the reactor coolant system had occurred using the residual heat removal (RHR) and the RCDT systems. The RCDT piping outside the biological shield wall that was discovered as the source of HRA was part of the flow path for the RCS drain down. Because this RCS drain down used an abnormal flowpath, RP was notified both before the drain down started and after the drain down was completed. The RP technicians should have been aware of this abnormal flowpath and changed their survey route to include the RCDT piping outside the biological shield wall. However, the RP technicians performed surveys associated with routine RCS drain down. Consequently, the area outside the biological shield wall at the 105' elevation was not surveyed and inaccurate surveys were used during the RP briefings.

Analysis: Inspectors determined that the failure to perform radiological surveys to ensure the potential radiological hazards and the extent of radiation levels were understood and controlled after a partial drain down of the RCS was completed, was a performance deficiency. The inspectors determined that the finding was more than minor because it impacted the program and process attribute of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective in that the licensee failed to adequately evaluate potential radiological hazards that could be present in a work area and the operators were unnecessarily exposed to HRA conditions. The finding was assessed using the Occupational Radiation Safety SDP, dated August 19, 2008, and was determined to be of very low safety significance (Green) because it was not an ALARA planning issue, there was no overexposure nor substantial potential for an overexposure, and the licensee's ability to assess dose was not compromised. The inspectors determined that this issue had a cross-cutting aspect of Human Performance, Work Management (H.5) because the licensee failed to recognize potential changes in expected radiological conditions and RP supervisors did not oversee work activities by observing and reinforcing standards and expectations to perform radiological surveys of all possible affected areas from the abnormal RCS drain down evolution.

Enforcement: 10 CFR 20.1501(a), states in part, each licensee shall make or cause to be made, surveys that may be necessary for the licensee to comply with the regulations in this part and are reasonable under the circumstances to evaluate the magnitude and extent of radiation levels and the potential radiological hazards. Contrary to this, on April 18, 2015, the licensee failed to make surveys to assure compliance with TS 5.7.1, "High Radiation Area," which was in lieu of the requirements of 10 CFR 20.1601. The licensee failed to survey the area on the outside of the biological shield wall on the 105' elevation near the RCDT system piping after a partial RCS drain down. The un-surveyed area led to an un-posted HRA where workers were exposed to dose rates up to 120 mrem/hr at 30 cm. Immediate corrective actions taken by the licensee were to survey the area and post the area as a HRA. Because this finding is of very low safety significance and has been entered into the licensee's corrective action program (CR 10057483), this violation will be treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy: NCV 05000348/2015002-03, Failure to Survey for Radiological Conditions.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed a sample of the performance indicator (PI) data, submitted by the licensee, for the Unit 1 and Unit 2 PIs listed below. The inspectors reviewed plant records compiled between April 2014 and March 2015 to verify the accuracy and completeness of the data reported for the station. The inspectors verified that the PI data complied with guidance contained in Nuclear Energy Institute 99-02, "Regulatory Assessment Performance Indicator Guideline," and licensee procedures. In addition, the inspectors reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with PI data. Documents reviewed are listed in the Attachment.

Cornerstone: Mitigating Systems

- Residual Heat Removal System, Units 1 and 2
- Cooling Water Systems, Units 1 and 2

For the period January 1, 2014, through December 31, 2014, the inspectors examined data reported to the NRC, procedural guidance for reporting PI information, and records used by the licensee to identify potential PI occurrences. The inspectors verified the accuracy of the PI for ERO drill and exercise performance through review of a sample of drill and event records. The inspectors reviewed selected training records to verify the accuracy of the PI for ERO drill participation for personnel assigned to key positions in the ERO. The inspectors verified the accuracy of the PI for alert and notification system reliability through review of a sample of the licensee's records of periodic system tests. The inspectors also interviewed the licensee personnel who were responsible for collecting and evaluating the PI data.

Cornerstone: Emergency Preparedness

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

The inspectors reviewed PI data collected from October, 2014, through March 31, 2015, to determine whether HRA, VHRA or unplanned exposures, resulting in TS or 10 CFR 20 non-conformances, had occurred. In addition, the inspectors reviewed selected personnel contamination event data, internal dose assessment results, and ED data for cumulative doses and/or dose rates exceeding established alarm set-points.

Cornerstone: Occupational Radiation Safety

- Occupational Exposure Control Effectiveness

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution.1 Routine Review

The inspectors screened items entered into the licensee's corrective action program in order to identify repetitive equipment failures or specific human performance issues for follow-up. The inspectors reviewed condition reports, attended screening meetings, or accessed the licensee's computerized corrective action database.

.2 Semi-Annual Trend Reviewa. Inspection Scope

The inspectors reviewed issues entered in the licensee's corrective action program and associated documents to identify trends that could indicate the existence of a more

significant safety issue. The inspectors focused their review on a the trend associated with unplanned shutdown TS limiting condition for operation (LCO) entries but also considered the results of inspector daily condition report screenings, licensee trending efforts, and licensee human performance results. The review nominally considered the 6-month period of December 2014 through May 2015 although some examples extended beyond those dates when the scope of the trend warranted. Additionally, the inspectors reviewed the adequacy of corrective actions associated with a sample of the issues identified in the licensee's trend reports. Documents reviewed are listed in the attachment.

b. Findings and Observations

No findings were identified.

.3 Annual Followup of Selected Issues

a. Inspection Scope

The inspectors conducted a detailed review of condition report CR 10060886, Emergency Core Cooling System (ECCS) throttle valve (Q1E21V061B) binding. The inspectors evaluated the following attributes of the licensee's actions where applicable. Documents reviewed are listed in the Attachment.

- complete and accurate identification of the problem in a timely manner
- evaluation and disposition of operability and reportability issues
- identification of non-conformances or defects and associated Part 21 evaluations
- consideration of extent of condition, generic implications, common cause, and previous occurrences
- classification and prioritization of the problem
- identification of root and contributing causes of the problem
- identification of any additional condition reports
- completion of corrective actions in a timely manner

b. Findings

No findings were identified.

4OA3 Follow-up of Events

.1 (Closed) Licensee Event Report (LER) 05000364/2014-003: Reactor Protection System Actuation due to Invalid Digital Position Indication Signal

a. Inspection Scope

On November 15, 2014, licensed operators were performing a Unit 2 reactor startup from a refueling outage. While manually withdrawing a control rod bank at approximately 50 steps withdrawn, with the reactor subcritical during low power reactor physics testing, the operators noted a Digital Rod Position Indication (DRPI) position

indicator on the control board for one of the control bank rods indicated 90 steps withdrawn. Rod withdrawal was immediately suspended and the reactor was manually tripped by procedure. All control and shutdown rods inserted into the core as expected. The licensee determined that the unexpected position indication for the individual rod was invalid due to a failure of the associated detector/encoder control card. The failed control card was replaced, restoring proper rod position indication. The inspectors reviewed the event and licensee corrective actions, and witnessed the low power reactor physics testing through reactor criticality.

b. Findings

No findings were identified.

4OA5 Other Activities

.1 Operation of an Independent Spent Fuel Storage Installation (ISFSI) (IP 60855.1)

a. Inspection Scope

The inspectors performed a walkdown of the onsite ISFSI and monitored the activities associated with normal operations, radiation protection, and surveillances during the second quarter of 2015. The inspectors reviewed the most recent revision to licensee procedure FNP-0-STP-63.7, Spent Fuel Cask Heat Removal System Monitoring. The inspectors also reviewed surveillance records to verify that daily surveillance requirements were performed as required by technical specifications. Documents reviewed are listed in the attachment.

b. Findings/Observations

No findings were identified.

.2 (Discussed) Unresolved Item (URI) 05000348/2013002-02, Unit 1 Solid State Protection System Modification

a. Inspection Scope

The inspectors reviewed the 50.59 evaluation for the installation of Complex Programmable Logic Cards (CPLD) in the Solid State Protection System (SSPS) to determine if the evaluation was adequate and that prior NRC approval was obtained as appropriate. The inspectors also conducted a review to determine if it met the criteria to be granted enforcement discretion as allowed by Enforcement Guidance Memorandum (EGM) 14-002, Dispositioning Westinghouse Pressurized Water Reactor License Noncompliance with 10 CFR 50.59, "Changes, Tests, and Experiments," for the Installation of Complex Programmable Logic Device (CPLD) Based Solid State Protection System (SSPS) Cards. The inspector's review was not completed at the end of this inspection period due to the complexity of the 50.59 evaluation and some areas that needed additional evaluation. This URI remains open pending completion of the NRC's review.

c. Findings/Observations

No findings were identified.

4OA6 Meetings, Including Exit

On July 27, 2015, the resident inspectors presented the inspection results to Ms. Cheryl Gayheart and other members of the licensee's staff. The inspectors confirmed that proprietary information provided or examined during the inspection period was properly controlled.

4OA7 Licensee-Identified Violations

The following violations of very low safety significance (Green) or Severity Level IV were identified by the licensee and are violations of NRC requirements which meet the criteria of the NRC Enforcement Policy, for being dispositioned as a non-cited violation.

- 10 CFR 50, Appendix B, Criterion V, Instruction Procedures and Drawings, required, in part, that activities affecting quality shall be prescribed by documented instructions, procedures or drawings, of a type appropriate to the circumstances. Contrary to the above, work order SNC556771 which was used to reinstall valve Q1E11HCV603B, RHR Heat Exchanger Discharge Valve, on April 13, 2015, was not appropriate because it did not require proper valve linkage adjustment in the closed position as stated in the vendor manual. As a result, additional valve linkage adjustments were required which contributed to inoperability of the "B" train of RHR while in Mode 6 during a Unit 1 refueling outage on April 26, 2015. This finding screened as very low safety significance (Green) in accordance with IMC 0609, Appendix G, Attachment 1, Shutdown Operations Significant Determination Process Phase 1 Initial Screening and Characterization of Findings, issued May 9, 2014, because all of the screening questions were answered "No." The valve was repaired and operability of the "B" train of RHR was restored on April 28, 2015. This issue was entered into the licensee's corrective action program (CAP) as condition report (CR) 10061313.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel:

J. Andrews, Maintenance Director
E. Aycock, Southern Company Corporate Level III
G. Bell, Licensing Supervisor
E. Berry, Site Systems Manager
T. Burdeshaw, Engineering Supervisor
J. Carroll, Shift Operations Manager
S. Champion, Site SG Program Owner
D. Coffin, Corporate Emergency Preparedness Coordinator
H. Cooper, Engineering Programs Supervisor
C. Cornelius, Corporate Emergency Preparedness Coordinator
D. Davis, Fleet Engineering Programs Director
D. Drawbaugh, EP Supervisor
C. Gayheart, Site Vice President
R. Godwin, Training Director
P. Griffin, Welding Program Owner
E. Groves, Fleet ISI Engineer
D. Harris, Plant Welding Engineer
S. Henry, Operations Director
R. Herrin, Operations Outage Manager
D. Hobson, Shift Operations Manager
T. House, Boric Acid Corrosion Control Program Owner
R. Hruby, Engineering Director
J. Hutto, Plant Manager
V. Locke, Performance Improvement Supervisor
L. Mansfield, EP Corporate Functional Area Manager
A. Martin – Corporate Steam Generator Program
R. Martin, Regulatory Affairs Manager
D. McKinney, Licensing Manager
J. McLean, Licensing Engineer
K. Miller, Performance Improvement
B. Taylor, Nuclear Oversight Supervisor
S. Odom, Corporate Emergency Preparedness Coordinator
C. Reed, Operations Support Manager
J. Perkins, Emergency Preparedness Specialist
C. Pierce, Regulatory Affairs Director
W. Sampson- ISI Program Owner
S. Sampson, Radiation Protection Manager
W. Sampson, Site ISI Program Owner
L. Shaffield, Assistant Maintenance Director
D. Simmons, Sr. Emergency Preparedness Specialist
C. Thornell, Site Projects Manager
T. Smith, Corporate SG Level III
B. Taylor, Regulatory Affairs Manager
C. Thomas, Fleet Engineering Programs

LIST OF REPORT ITEMS

Opened and Closed

NCV 05000348/2015002-01	Failure to Adequately Install an Oil Collection System on Reactor Coolant Pump Motors (1R05)
NCV 05000364/2015002-02	Failure to Evaluate Impacts of Degraded Condition on the Unit 1 TDAFW Pump (1R15)

NCV 05000348/2015002-03	Failure to Survey for Radiological Conditions (2RS1)
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Closed

LER 05000364/2014-003-00	Reactor Protection System Actuation due to Invalid Digital Position Indication Signal (4OA3)
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Discussed

URI 05000348/2013002-02	Unit 1 Solid State Protection System Modifications (4OA5)
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LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures:

FPN-0-AOP-21, Severe Weather, Ver. 41.0
FPN-0-ARP-2.2, Emergency Power Board Annunciator Panel W, Ver. 33.1
FPN-1-AOP-5.0, Loss of A or B Train Electrical Power, Ver. 28
FPN-1-AOP-5.1, Contingency Electrical Alignments, Ver. 10
FPN-1-AOP-5.2, Degraded Grid, Ver. 16.0
FPN-1-ARP-1.13, Main Control Board Annunciator Panel N, Ver. 20
FPN-1-STP-27.1, AC Source Verification, Ver. 38.1
NMP-AD-014-002, NUC-001 Nuclear Plant Interface Coordination for Southern Nuclear Operating Company, Ver. 4.0
NMP-GM-021-001, Plant Farley Switchyard Access and Maintenance Controls, Ver. 1
NMP-OS-020, Station Response to Southern Company System Alert Conditions, Ver. 1.2
NSC NUC-001, Plant Interface Coordination for Southern Nuclear Operating Company, Ver. 2.0

Drawings:

D-169970L, 23-kV Single Line Diagram, Ver. 1.0
D-177000, Unit No. 1 Single Line – Electrical Auxiliary System (4160V & 600V) Ver. 30.0
D-177001, Unit No. 1 Single Line – Electrical Auxiliary System (4160V & 600V) Ver. 22.0
D-183182, Condensed Single Line Diagram for 230KV, 500KV and Low Voltage Yards, Sheet 1, Rev. 56
D-207000, Unit No. 2 Single Line – Electrical Auxiliary System (4160V & 600V) Ver. 25.0
D-207001, Unit No. 2 Single Line – Electrical Auxiliary System (4160V & 600V) Ver. 20.0

Condition Reports 897879, 884833
High Voltage Switchyard Morning Report, April 16, 2015

Section 1R04: Equipment Alignment

Drawings

D-175038, Unit 1 P&ID Safety Injection System, Sheet 1, Ver. 42.0
D-175038, Unit 1 P&ID Safety Injection System, Sheet 2, Ver. 23.0
D-175041, Unit 1 P&ID Residual Heat Removal System, Sheet 1, Ver. 18.0
D-205038, Unit 2 P&ID Safety Injection System, Sheet 1, Ver. 38.0
D-205038, Unit 2 P&ID Safety Injection System, Sheet 2, Ver. 24.0
D-205041, Unit 2 P&ID Residual Heat Removal System, Sheet 1, Ver. 19.0
D-175033, Unit 1 P&ID Main Steam and Auxiliary Steam System, Sheet 1, Ver. 38.0
D-175033, Unit 1 P&ID Main Steam and Auxiliary Steam Systems, Sheet 2, Ver. 26.0
D-175007, Unit 1 P&ID Auxiliary Feedwater System, Sheet 1, Ver. 35.0

Procedures

FNP-1-SOP-7.0A, Residual Heat Removal System, Ver. 10.0
FNP-2-SOP-7.0A, Residual Heat Removal System, Ver. 10.0
FNP-1-SOP-17.0B, Main Steam System, Ver. 7.0
FNP-1-SOP-22.0A, Auxiliary Feedwater System, Ver. 16.0
FNP-1-STP-22.16, Turbine Driven Auxiliary Feedwater Pump Quarterly Inservice Test, Ver. 62.2

Section 1R05: Fire Protection Annual/Quarterly

Drawings:

A-508650, Fire Zone Data Sheet: Unit No. 1 Containment El. 129' – 0", Sheet 47, Ver. 3.0
A-508650, Fire Zone Data Sheet: Unit No. 1 Aux. Bldg. El. 100' - 0" (NW QUAD), Sheet 12, Ver. 2.0
A-508650, Fire Zone Data Sheet: Unit No. 1 Aux. Bldg. El. 100' – 0" (NW QUAD), Sheet 12A, Ver. 1.0
A-508650, Fire Zone Data Sheet: Unit No. 1 Aux. Bldg. El. 100' - 0" (SW QUAD), Sheet 14, Ver. 4.0
A-509018, Fire Zone Data Sheet: Unit No. 2 Aux. Bldg. El. 100' - 0" (NW QUAD), Sheet 12, Ver. 4.0
A-509018, Fire Zone Data Sheet: Unit No. 2 Aux. Bldg. El. 100' - 0" (NW QUAD), Sheet 12A, Ver. 2.0
A-509018, Fire Zone Data Sheet: Unit No. 2 Aux. Bldg. El. 100' - 0" (NW QUAD), Sheet 14, Ver. 5.0

Section 1R08: Inservice Inspection Activities

Procedures

FNP-1-STP-34.0, Containment Inspection (General), Version 36.0
FNP-1-STP-157.0, Inservice Inspection of Class 1, 2 and 3 Systems and Components, Version 19
NMP-ES-019, Boric Acid Corrosion Control Program, Version 10.0
NMP-ES-019-001, Boric Acid Corrosion Control Program Implementation, Version 9.0
NMP-ES-019-003, Boric Acid Deposit Sampling, Analysis and Data Evaluation, Version 1.0
NMP-ES-019-004, Boric Acid Corrosion Control Program - Corrosion Assessment, Version 3.1
NMP-ES-024-201, Visual Examination (VT-1), Version 3.1
NMP-ES-024-202, Visual Examination (VT-2), Version 5.2
NMP-ES-024-203, Visual Examination (VT-3), Version 5.0

NMP-ES-024-301, Liquid Penetrant Examination Color Contrast and Fluorescent, Version 11.0
 NMP-ES-024-401, Magnetic Particle Examination, Version 10.0
 NMP-ES-024-501, PDI Generic Procedure for the Ultrasonic Examination of Austenitic Pipe Welds (Appendix VIII), Version 6.0
 NMP-ES-024-502, PDI Generic Procedure for the Ultrasonic Examination of Ferritic Pipe Welds (Appendix VIII), Version 5.0
 NMP-ES-024-507, PDI Generic Procedure for the Ultrasonic Examination of Dissimilar Metal Pipe Welds (Appendix VIII), Version 4.1
 NMP-ES-024-516, Manual Ultrasonic Examination of Pressure Vessel Welds (Non-Appendix VIII), Version 4.3
 NMP-MA-005-002, General Welding Standard for Pressure Boundary Applications, Version 5.2

CRs 717472, 730280, 823435, 834931, 881925, 888129, 888872, 10015902, 10025966, 10047465, 10050603

Welding Documentation

Welder Performance Qualifications for Harvey, Nelson, and Whiting
 Welding Procedure Specification: Farley – 1.20N, Revision 3 (for Manual GTAW)
 Welding Procedure Specification: Farley – 8.20N, Revision 6 (for Manual GTAW)
 Procedure Qualification Record B06, Manual GTAW, Dated 10/5/1976
 PQR B025, Manual GTAW, Dated 2/11/1977

Work Orders

SNC595865, Remove existing stainless steel 1-1/4" balancing line and replace with new stainless steel pipe and fittings on 1A MDAFW pump. (Class 3)
 SNC602640, 3" Schedule 160 stainless steel, 1B Charging Pump, Chemical and Volume Control System. (Class 2)
 SNC637037, Service Water Strainer Backwash Line Leak: "B" Train Strainer Backwash Root. (Class 3)

NDE Examiner Quals for Reactor Head and Steam Generator Examinations

MISTRAS NDT Certification Record (Carlson), dated 8/25/2012
 MISTRAS NDT Certification Record (Kirshberger), dated 2/20/2014
 MISTRAS Visual Acuity Record (Carlson), dated 8/19/2014
 MISTRAS Visual Acuity Record (Kirshberger), dated 2/26/2015
 NDE Technology Personnel Certification Summary: Eddy Current Level IIA (McLeod), dated 5/23/2012
 NDE Technology Personnel Vision Certification (McLeod), dated 7/14/2014
 NDE Technology, Inc. Personnel Certification Summary: Eddy Current Level IIIA (Wrubleski), dated 6/15/2011
 NDE Technology, Inc. Personnel Vision Certification (Wrubleski), dated 7/23/2014
 System One Holdings, LLC Certificate of Method Qualification: Eddy Current (Hopper), dated 2/24/2015
 System One Holdings, LLC Visual Acuity Examination Record (Hopper), dated 8/5/2014
 WesDyne International Certificate of Qualification: Eddy Current, Ultrasonic (Funyak), dated 1/9/2015
 WesDyne International Certificate of Qualification: Eddy Current, Ultrasonic (Wyffels), dated 1/9/2015
 Westinghouse Certification Record: Eddy Current (Gootz), dated 12/14/2011
 Westinghouse Certification Record: Eddy Current (Mantich), dated 7/27/2012
 Westinghouse Certification Record: Eddy Current (Permuka), dated 7/23/2014

Westinghouse Certification Record: Eddy Current (Skirpan), dated 8/24/2012
 Westinghouse Vision Acuity Examination Record (Funyak), dated 1/6/2015
 Westinghouse Vision Acuity Examination Record (Gootz), dated 1/28/2015
 Westinghouse Vision Acuity Examination Record (Mantich), dated 1/8/2015
 Westinghouse Vision Acuity Examination Record (Permuka), dated 6/24/14
 Westinghouse Vision Acuity Examination Record (Skirpan), dated 6/25/2014
 Westinghouse Vision Acuity Examination Record (Wyffels), dated 1/12/2015

Other Documents

2012 Plant Farley Boric Acid Corrosion Control Program Self-Assessment
 Boric Acid Corrosion Control Program Health Report for 4th Quarter 2013
 Boric Acid Corrosion Control Program Health Report for 1st Quarter 2014
 Boric Acid Corrosion Control Program Health Report for 2nd Quarter 2014
 Boric Acid Corrosion Control Program Health Report for 3rd Quarter 2014
 Boric Acid Corrosion Control Program Health Report for 4th Quarter 2014
 Certificate of Calibration for IR Thermometer, serial number 15060227, Equipment Number 106895, dated 10/23/2014
 Certificate of Calibration for IR Thermometer, serial number 19330361, Equipment Number 30006638, dated 6/26/2014
 Certificate of Certification for No. 8A Red Powder, Batch Number 09A091
 Certificate of Certification for Spotcheck Developer, SKD-S2, Batch Number 13M24K
 Certificate of Certification for Spotcheck Penetrant, Type: SKL-SP1, Batch Number 07H07K
 Certificate of Certification for Spotcheck Cleaner, SKC-S, Batch Number 13M12K
 Certification for Character Resolution Card, Serial Number 2015-FOS-029
 Certificate of Compliance for Ultrasonic Reference Block, serial number A20408, dated 1/23/2004
 Certification for Ten-Pound Weight Lift Test Block (TB-20), Serial Number S/N-20 APC859496, dated 3/5/1993
 Certificate of Certification for UT Couplant, Sonotrace 40, Batch Number: 13F084, dated 6/28/2013
 EPRI Performance Demonstration Program Certificate of Qualification: Procedure WDI-STD-1040 Rev. 5, dated 3/4/2010
 EPRI Performance Demonstration Program Certificate of Qualifications: Procedure WDI-STD-1041 Rev. 3, dated 3/2/2010
 Krautkramer Transducer Certification for Probe Product Code 113-232-591, Serial Number 00YMBD, dated 8/12/2003
 Krautkramer Transducer Certification for Probe Product Code 113-232-591, Serial Number 00YMBK, dated 8/12/2003
 Krautkramer Transducer Certification for Probe Product Code 083-057-462, Serial Number 5746219099, dated 10/19/2005
 NDE Personnel Certification Records for Blecha, Brown, Gbemudu, Grell, Serth, and Vidrih
 Report Number S15F1M001, Magnetic Particle Examination of Weld ALA2-4201-8-RB, (Pipe to Valve weld) on Main Steam Line – Class 2)
 Report Number S15F1V060, Visual Examination of Weld ALA2-4201-8-RB, (Pipe to Valve weld) on Main Steam Line – Class 2)
 Report Number S151U090, Ultrasonic Examination of Weld ALA1-4302-12-RB (Discharge Leg of 1C Accumulator)
 Report Number S151U091, Ultrasonic Examination of Weld ALA1-4302-12-RB (Discharge Leg of 1C Accumulator)
 Report Number S15F1P007, Liquid Penetrant Examination of Weld ALA2-4502-SI-R291(W8) (Welded Attachments (Lugs) to RHR/SI)

Report Number S15F1P008, Liquid Penetrant Examination of Weld ALA2-4502-SI-R291(W8) (Welded Attachments (Lugs) to RHR/SI)
 TE 698438, Check-In Self-Assessment Plan and Report, Prepare for 1R25 ISI NRC Routine Baseline Inspection, dated 11/28/2013
 TE 865005, Check-In Self-Assessment Report, FNP 2R23 and 1R26 ISI NRC Routine Baseline Inspections, dated 10/1/2014
 Temperature gauge; Omega FNP-ODT-9544, calibration due date: 10/15/2015
 Visual Examination Character Card 2015-FOS-029. Dated 12/11/2014
 WCAP-15988-NP, Generic Guidance for an Effective Boric Acid Inspection Program for Pressurized Water Reactors, Revision 2
 WDI-LTR-ENG-11-0018, "Review of WDI-STD-1040 Revision 7 'Procedure for Ultrasonic Examination of Reactor Vessel Head Penetrations'," dated 8/22/2011
 WDI-LTR-ENG-12-0009, "Review of WDI-STD-1040 Revision 8 'Procedure for Ultrasonic Examination of Reactor Vessel Head Penetrations,'" dated 6/13/2012
 WDI-LTR-ENG-12-0010, "Review of Revision 7, to WDI-STD-1041 'Reactor Vessel Head Penetration Ultrasonic Examination Analysis'," dated 6/13/2012
 WDI-LTR-ENG-12-0011, "Review of WDI-STD-1041 Revision 8 'Reactor Vessel Head Penetration Ultrasonic Examination Analysis'," dated 9/5/2012
 WDI-LTR-ENG-12-0012, "Review of WDI-STD-1040 Revision 9 'Procedure for Ultrasonic Examination of Reactor Vessel Head Penetrations'," dated 9/5/2012
 WDI-LTR-ENG-13-0014, "Review of WDI-STD-1040 Revision 10 'Procedure for Ultrasonic Examination of Reactor Vessel Head Penetrations'," dated 6/7/2013
 WDI-LTR-ENG-13-0015, "Review of Revision 9, to WDI-STD-1041 Reactor Vessel Head Penetration Ultrasonic Examination Analysis'," dated 6/7/2013
 WDI-LTR-ENG-13-0020, "Review of WDI-STD-1040 Revision 11 'Procedure for Ultrasonic Examination of Reactor Vessel Head Penetrations'," dated 11/12/2013
 WDI-LTR-ENG-13-0021, "Review of WDI-STD-1041 Revision 10 'Reactor Vessel Head Penetration Ultrasonic Examination Analysis'," dated 11/12/2013

Section 1R11: Licensed Operator Regualification Program

Operations Training Simulator Exam Scenario, Extended Scenario #6, June 9, 2015
 NMP-TR-416, Licensed Operator Continuing Training Program Administration, Ver. 6.0
 NMP-OS-007, Conduct of Operations, Ver. 10.3
 NMP-OS-007-001, Conduct of Operations Standards and Expectations, Ver. 14.3
 FNP-0-SOP-0.0, General Instructions to Operations Personnel, Ver. 160.0
 FNP-1-STP-101, Low Power Reactor Physics Testing, Ver. 25.0
 FNP-1-UOP-1.2, Startup of Unit from Hot Standby to Minimum Load, Ver. 111

Section 1R12: Maintenance Effectiveness

Documents:

CAR 219727, Apparent Cause Determination, Ver. 2
 a(1) plan for Unit 2 Turbine Driven Auxiliary Feedwater Pump (TDAFWP) Turbine, 3/13/2015
 A-181010, Functional System Description Auxiliary Feedwater System, Ver. 31
 A-181009, Functional System Description High Head Safety Injection System, Ver. 39
 NMP-ES-027, Maintenance Rule Program, Ver. 3.1
 NMP-ES-027-001, Maintenance Rule Implementation, Ver. 4.0
 FNP-0-M-50, Master List of Surveillance Requirements, Ver. 29.0

Technical Evaluations:

TE 90627, TE 909653, TE 908924, TE 901199, TE 906151, TE 910627, TE907913, TE 908176, TE 907295, TE 907296, TE 912486, TE 925659

Work Orders:

SNC628280, SNC628281, SNC628279, 1050912317

Drawings:

U-611505, ESI – Turbine Control Schematic, Sheet 3, Ver. 3
 U-611504, ESI – Turbine Control Schematic, Sheet 2, Ver. 3
 D-207188, Elementary Diagram Turbine Driven Auxiliary Feedwater Pump “C”, Ver. 17
 D-175038, Unit 1 P&ID – Safety Injection System, Ver. 44.0

CRs 10027699, 10009536, 897986, 796381, 10085527, 10060886, 10087597, 10087577

Section 1R13: Maintenance Risk Assessments and Emergent Work EvaluationProcedures

NMP-GM-031, On-Line Configuration Risk Management Program, Ver. 2.0
 NMP-GM-031-001, Online Maintenance Rule (a)(4) Risk Calculations, Ver. 2.1
 FNP-0-UOP-4.0, General Outage Operations Guidance, Ver. 50.3
 NMP-OM-002, Shutdown Risk Management, Ver. 2.4
 FNP-1-ETP-4450, Steam Generator Water Level Control Test, Ver. 11.0
 NMP-DP-001, Operational Risk Awareness, Ver. 14.2

Documents

Unit 1 Main Control Room Logs, April 26-27, 2015
 WO SNC664292
 Shutdown Safety Function Risk Assessment Evaluation, April 26-27, 2015
 Operator’s Risk Evaluation for Farley Unit 1 – Rev. 9/Version 4, May 15, 2015
 Operator’s Risk Evaluation for Farley Unit 1 – Rev. 9/Version 4, June 10, 2015
 CRs_10068364, 10070496

Section 1R15: Operability Determinations and Functionality AssessmentsDrawings

D-205007, Unit 2, P&ID, Auxiliary Feedwater System, Ver. 28.0
 D-175037, Unit 1 P&ID, Reactor Coolant System, Ver. 34.0
 U-199291, Unit 1, Crosby Valve – Nozzle Type – Safety Valve, Ver. 1.0
 D-175033, Unit 1 P&ID Main Steam and Auxiliary Steam System, Sheet 1, Ver. 38.0
 D-175033, Unit 1 P&ID Main Steam and Auxiliary Steam Systems, Sheet 2, Ver. 26.0

Documents

CAR256456, Immediate Determination of Operability for CR10049482
 MCR logs
 Technical Evaluations (TE) 920875, 920487
 LTR-SEE-I-15-30, Farley Pressurizer Relief Tank Recommendation, May 8, 2015
 FNP1-15-04, ODMI for 1B Pressurizer Safety Valve leakage into PRT, May 8, 2015
 U-262486, Installation, Operating and Maintenance Manual for Crosby Style HB and HB-PB Self-Actuated Nozzle Type Safety-Relief Valves
 Work Order: SNC62027, Q1B13V031B – PZR Safety Valve Testing. Rev. 0
 CAR256883
 FNP-1-STP-41.1A, Source Range Functional Check Channel N-31, Ver. 16.0 performed on May 2, 2015
 Unit 1 - Evaluation of Structural Integrity for Reactor Coolant Pump No. 1 Seal Leak-Off Line Piping to address Westinghouse NSAL-15-2, RER SNC655721

Unit 1 - Evaluation of Structural Integrity for Reactor Coolant Pump No. 1 Seal
 Leak-Off Line Piping to address Westinghouse NSAL-15-2, RER SNC653126
 NSAL-15-2, Impact of a Break in the Reactor Coolant Pump No. 1 Seal Leak-Off Line Piping on
 Seal Leakage during a Loss of Seal Cooling Event, dated 3/23/2015
 NMP-OS-006, Operational Performance Indicators, Version 16.1
 Tagout 1-DT-15-N12-00385, N1N12LI3608, TDAFW Pump Steam Supply Drain Pot Level
 Indicator
 Tagout 1-DT-15-N12-00404, N1N12LI3608, TDAFW Pump Steam Supply Drain Pot Level
 Indicator
 Administrative Tracking Item #1466, TDAFWP drain pot level control valve LCV-3608 & LI-3608
 failed
 CRs 10049482, 10050362, 10052039, 2009115185, 10047590, 10049503, 10049527,
 2010111366, 10065279, 10065299, 10064177, 10047128, 10045441, 916171, 10070747,
 10088793

Procedures

FPN-2-STP-22.2, 2B Auxiliary Feedwater Pump Quarterly Inservice Test, Ver. 30.0
 FPN-1-STP-905.4, Auxiliary Building Battery Quarterly Verification (Q1R42E0002A and
 Q1R42E002B), Ver. 18.0
 FPN-1-STP-604.1, Pressurizer Safety Valve Testing at Wyle Laboratories, Ver. 15.0
 FPN-1-SOP-1.2, Reactor Coolant Pressure Relief System, Ver. 33.0

Section 1R18: Plant Modifications

Documents

NMP-ES-044-F01, DCP SNC467134 Signature Sheet, DCP Ver. 4.0
 NMP-ES-044-F02, DCP SNC467134 Checklist, DCP Ver. 4.0
 NMP-ES-044-F03, DCP SNC467134 List of Materials, DCP Ver. 3.0
 NMP-ES-044-F05, DCP SNC467134 Special Design Considerations, DCP Ver. 2.0
 NMP-AD-008-F01, Applicability Determination – DCP SNC467134, AD Ver. 2.0
 ES-EP-003, 50.55a Evaluation – Farley SAM – U1 FLEX Core Cooling DCP SNC467134 / Version
 1.0
 NMP-AD-010-F01, DCP SNC467134 10 CFR 50.59 Screening/Evaluation, Ver. 2.0
 NMP-AD-009-F01, DCP SNC467134, Ver. 1.0, Licensing Document Change Request No.
 2014006, Ver. 1.0
 FPN-0-PMP-505, DCP SNC467134, Ver. 3.0, Inservice Test Data Sheet
 NMP-ES-024-202, DCP SNC467134, Ver. 3.0, Visual Leakage Examination Report (VT-2)
 Condition Reports 10042595
 Work Orders WO SNC509544

Procedures

NMP-AD-008, Applicability Determinations, Ver. 19.0
 ES-EP-003, 50.55a Evaluations, Ver. 2.0
 NMP-AD-009, Licensing Document Change Requests, Ver. 11.0
 NMP-AD-010, 10 CFR 50.59 Screenings and Evaluations, Ver. 13.0
 NMP-ES-044, Preparation of Design Change Packages, Ver. 13.1
 NMP-ES-084, Design Control/Configuration Management Process, Ver. 3.2
 NMP-ES-022, DCP Site Approval, Implementation and Closure, Ver. 10.0
 FPN-0-PMP-505, Farley Nuclear Plant - Plant Modifications Procedure, System Inservice and
 Hydrostatic/Pneumatic Testing, Ver. 25.0
 NMP-ES-024-202, Visual Examination (VT-2), Ver. 5.2

Drawings

SNC467134M005, Ver. 2.0, Unit No. 1 Auxiliary Feedwater System – N23 – Piping and Hanger Isometric

Section 1R19: Post Maintenance TestingCondition Reports

10056136, 10056140, 10060833, 10054036, 10056513, 10057417, 10057182, 10060886, 10061148, 10068364, 10070496, 10079240, 10059005

Procedures

FP-0-STP-80.2, Diesel Generator 1C Operability Test, Ver. 65.0
 FNP-1-STP-228.2, Nuclear Instrumentation System Source Range Channel N32 Calibration and Operational Test, Ver. 33.0
 FNP-1-STP-228.14, NIS Source Range Channel N32 Level Trip Calibration and Operational Test, Ver. 7.2
 FNP-1-IMP-228.4, Nuclear Instrumentation System Source and Intermediate Range Detector Replacement, Ver. 11.1
 FNP-1-STP-11.15B, RHR HX Valve Q1E11HCV603B Mechanical Stop Position Verification, Ver. 12.1
 FNP-1-STP-11.6, Residual Heat Removal Valves In-service Test, Ver. 43.0
 FNP-1-STP-40.7, ECCS Branch Line Flow Verification and Charging Pump Low Discharge Head Flow Test, Ver. 32.0
 NMP-MA-014-001, Post Maintenance Testing Guidance, Ver. 4.0
 FNP-2-STP-22.16, Turbine Driven Auxiliary Feedwater Pump Quarterly Inservice Test, Ver. 66.2

Work Orders

SNC655375, SNC649390, SNC528586, SNC 657815, SNC664292, SNC671426, SNC671749, SNC 556771

Documents

LCO/TR 1-2015-052, Recording Limiting Condition of Operation, dated 4/8/2015
 Letter from Mirion Technologies to Westinghouse, SR/IR Detector Assembly for serial number 134807, dated Nov. 19, 2013
 Foreign Material Evaluation for Q1E21V061B, dated April 26, 2015
 Memo from Engineering to Operations regarding acceptability of the 1B charging pump, dated April 27, 2015
 F-15-052, Issue Response Team Activation Form for STP-40.7 testing issues, April 24, 2015
 Unit 2 Main Control Room Logs, June 4 -6, 2015

Drawings

D-175038, Unit 1 P&ID – Safety Injection System, Ver. 42.0
 D-175039, Unit 1 P&ID – Chemical and Volume Control System, Ver. 10
 U-732412, Outline/Assembly Drawing, Dragon Valve Model FN15210N-31SW, Ver. 2.0
 U-732524, FMEA Data Letter for Equipment in New Digital Governor System, Ver. 2.0
 U-611503, ESI – Turbine Control Schematic, Sheet 1 of 4, Ver. 3.0
 U-611504, ESI – Turbine Control Schematic, Sheet 2 of 4, Ver. 3.0
 U-611505, ESI – Turbine Control Schematic, Sheet 3 of 4, Ver. 3.0

U-611506, ESI – Turbine Control Schematic, Sheet 4 of 4, Ver. 3.0

U-259257, Unit 1, Butterfly Valve for 10BA74D, Ver. 4.0

U-259043, Unit 1, Instruction Manual for Butterfly Valves, Ver.5.0

Section 1R20: Refueling and Other Outage Activities

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NMP-AD-016, Fatigue Management Program, Ver. 8.1

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FNP-1-FHP-5.13, Manipulator Crane, Ver. 24.0

FNP-1-SOP-1.11, Reactor Coolant System Filling and Venting – Dynamic Method, Ver. 13.0

FNP-0-ETP-3637.0, Reactor Core Loading Verification and Television Mapping, Ver. 19.0

FNP-0-UOP-4.0, General Operations Guidance, Ver. 50.3

FNP-1-UOP-1.1, Startup of Unit from Cold Shutdown to Hot Standby, Ver. 103

FNP-1-UOP-1.2, Startup of Unit from Hot Standby to Minimum Load, Ver. 111

FNP-1-AOP-3.0, Turbine Trip below P-9 Setpoint, Ver. 18.0

FNP-1-AOP-4.0, Loss of Reactor Coolant Flow, Ver. 20.0

FNP-1-UOP-2.1, Shutdown of Unit from Minimum Load to Hot Standby, Ver. 75.0

FNP-1-EEP-0, Reactor Trip or Safety Injection, Rev. 46.0

FNP-1-ESP-0.1, Reactor Trip Response, Rev. 34.0

FNP-1-UOP-2.3, Shutdown of Unit Following a Reactor Trip, Ver. 13.0

FNP-1-ARP-1.12, Main Control Board Annunciator Panel M, Ver. 63.1

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NMP-OM-002, Shutdown Risk Management, Ver. 2.4

FNP-0-SOP-103.0, Return to Service Checklist and Return to Service System Lineup, Ver. 43.6

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Plant Review Board (PRB) Agenda for April 29, 2015

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FNP-0-UOP-4.0, Attachment 1, Outage Defense-In-Depth Assessment, dated April 3, 2015

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FNP-0-UOP-4.0, Attachment 1, Outage Defense-In-Depth Assessment, dated April 27, 2015

FNP-0-UOP-4.0, Attachment 1, Outage Defense-In-Depth Assessment, dated May 1, 2015

FNFP-1-STP-14.1, Containment Integrity Verification Test, Ver. 5.0, performed on May 2, 2015

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Drawings

D-175041, Unit 1 P&ID, Residual Heat Removal System, Ver. 18.0

D-175037, Unit 1, P&ID, Reactor Coolant System, Ver. 31.0

Other:

Video recording of the 1R27 core reload verification performed on April 24, 2015

IPC trends for the Unit 1 RCS cooldown, May 26, 2015

Section 1R22: Surveillance Testing

Condition Reports

10047325, 10049482, 10050362, 10056762

Procedures

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FNFP-2-STP-22.2, “2B Motor Driven Auxiliary Feedwater Water Pump Quarterly Inservice Test,” Ver. 30.0

FNFP-0-STP-80.2, Diesel Generator 1C Operability Test, Ver. 65.0

FNFP-1-STP-158.0, Reactor Coolant System Pressure Isolation Valve Leak test, Ver. 32.0

FNFP-1-STP-627.0, Local Leak Rate Testing of Containment Penetrations, Ver. 45.0

NMP-ES-013, Inservice Testing Program, Ver. 5.0

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FNFP-1-STP-627.0, “Local Leak Rate Testing of Containment Penetrations”, Ver. 44.0

Attachment H, Local Leak Rate Test Record Data Sheet for Penetration 16 performed on April 10, 2015

FNFP-0-IMP-006, Heise Gage Calibration Data Sheet 7 for FNFP-HTG-8015, performed on March 23, 2015

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D-175041, Unit 1 P&ID – Residual Heat Removal System, Ver. 18.0

D-175038, Unit 1 P&ID – Safety Injection System, Ver. 43.0, Sheet 1

D-175038, Unit 1 P&ID – Safety Injection System, Ver. 23.0, Sheet 2

D-175037, Unit 1 P&ID – Reactor Coolant System, Ver. 31.0

Section 1EP2: Alert and Notification System Evaluation

Procedures and Reports

Southern Nuclear Company (SNC), Joseph M. Farley Nuclear Plant, Units 1 & 2, Emergency Plan, Rev. 63 and Rev. 64

SNC Farley 2014 Antenna and Line Kit Inspections

SNC Emergency Preparedness Maintenance Checklist

Southern Nuclear Operating Company Alert and Notification System (ANS) Design Report 2015 Emergency Information Calendar

Records and Data

Records of Silent, Full Cycle, and Growl ANS testing – January 1, 2013, to December 31, 2014
Siren System Report for SNC – Farley Plant system-wide test on 4/20/15
Annual siren reports to FEMA for 2013 and 2014
Documentation of ANS repair and annual preventative maintenance – January 1, 2013 to December 31, 2014
FEMA Siren Upgrade Approval Letter, dated 4/3/13
WPS-2900 Series High Power Voice & Siren System Operating & Troubleshooting Manual, 2005
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Section 1EP3: Emergency Response Organization Staffing and Augmentation System

Procedures

NMP-EP-135, Alternate Facility Setup and Operation
NMP-EP-301, EOF Emergency Response Organization and Emergency Preparedness Staff Training, version 8.0
NMP-EP-111-001, Emergency Notification Communicator Instructions—Farley, version 3.3
NMP-AP-001-F08, Site Procedure Approval Form, version 2.0
FNP-0-TCP-17.14, Emergency Plan Training Administration version 17.0
EOF Emergency Response Organization and EP Staff Training, version 8.0

Records and Data

FNP Augmentation Drill Reports and test results, EOF/TSC Activation response time declaration to arrival, 1Q13 – 4Q13 and 1Q14 – 4Q14
Emergency Response Organization current list
On-call schedule, ERO memorandum, dated 3/16/15
ERO Personnel Estimated Response Times
Training Status Reports and training records for selected ERO individuals
Nuclear Oversight (NOS) Audit of EP Log: Fleet—2015, dated 3/23/15
Minimum Staffing Levels, Emergency Plan, revision 64, Table 3, pp 1-2.
CRs 599168, 600814, 685159, 686501, 735443, 789300, 830326, 870933, 902640, 10058150

Section 1EP4: Emergency Action Level and Emergency Plan Changes

Procedures

NMP-EP-310, Maintaining the Emergency Plan, Rev. 3
Change Packages
NMP-EP-312, Development of Emergency Preparedness Technical Products, Rev. 1.0

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Licensing Document Change Request (LDCR) 2014020 for FNP E-Plan Rev. 61, dated 6/17/14
Applicability Determination for LDCR 2014020, dated 6/16/14
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Applicability Determination for LDCR 2014032, dated 7/31/14
10CFR50.54(q) Screening/Evaluation for FNP E-Plan Rev. 62 & EALs Rev. 6, dated 8/1/14
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Section 1EP5: Maintenance of Emergency Preparedness Procedures

NMP-EP-310, Maintaining the Emergency Plan, Rev. 30
 NMP-GM-002, Corrective Action Program, Rev. 13.1
 NMP-GM-002-001, Corrective Action Program Instructions, Rev. 33.2
 NMP-GM-002-005, Corrective Action Program Trending, Rev. 20
 NMP-GM-003, Self-Assessment & Benchmark Procedure, Rev. 21.1

Records and Data

2014 through 2015 Agreement Letters for various offsite agencies
 Check-In Self-Assessment Report, dated 1/29/15
 Check-In Self-Assessment Report, dated 2/20/15
 Check-In Self-Assessment Report, dated 3/2/15
 NOS Audit of Emergency Preparedness, dated 3/24/14
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 EP Report – Plant Farley ALERT Declaration 8/3/13, dated 10/3/13
 EP Report – Crew 1 SANG Table Top Drill, dated 2/17/14
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 EP Report – Crew 2 SAMG Table Top Drill, dated 1/30/15
 EP Drill Report – 2/19/14 Hostile Action, dated 3/13/14
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Section 1EP6: Drill/Training Evaluation

Documents:

Farley Emergency Notification Form (Simulator), Message 1, dated 6/22/2015
 Farley Emergency Notification Form (Simulator), Message 2, dated 6/22/2015
 Operations Training Simulator Exam Scenario, Extended Scenario #6, June 9, 2015
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NMP-EP-110, Emergency Classification Determination and Initial Action, Ver. 8.0
 FNP-0-EP-0.0, Farley Emergency Plan, Rev. 64

Section 2RS1: Radiological Hazard Assessment and Exposure Controls

Procedures, Guidance Documents, and Manuals

FNP-0-RCP-0, General Guidance and Special Instructions to Health Physics Personnel, Ver. 68.2
 FNP-0-RCP-0.1, Key Control Program and Health Physics Guidance for Control of High Radiation Areas, Locked High Radiation Areas, and Very High Radiation Areas, Ver. 18
 FNP-0-RCP-17, Radiological Controls for Underwater Divers, Ver. 21.0
 FNP-0-RCP-26, Radiological Surveys and Monitoring, Ver. 43.0
 FNP-2-SOP-45.0, Radiation Monitoring System, Ver. 39.0

FNP-2-SOP-12.2, Containment Purge and Pre-Access Filtration System, Ver. 39.1
 NMP-FLS-016, Safe Conduct of Diving, Ver. 2.0
 NMP-FLS-016-001, Control of Radiological Diving Operations, Ver. 1.1
 NMP-HP-206, Issuance, Use and Control of Radiation Work Permits, Ver. 3.0
 NMP-HP-300, Radiation and Contamination Surveys, Ver. 3.0
 NMP-HP-301, Airborne Radioactivity Sampling and Evaluation, Ver. 3.0
 NMP-HP-302-001, Radiological Key Control, Ver. 2.1
 NMP-HP-302-002, Radioactive Material Labeling Instruction, Ver. 1.0
 NMP-HP-303, Personnel Decontamination, Ver. 2.2
 NMP-HP-304, Decontamination of Areas, Tools and Equipment, Ver. 1.0
 NMP-HP-305, Alpha Radiation Monitoring", Ver. 5.0
 NMP-HP-400, Control and Accountability of Radioactive Sources, Ver. 2.0
 NMP-HP-404, Release of Materials from the RCA and Protected Areas, Ver. 2.0
 NMP-HP-109, Investigation, Evaluation and Management of Damaged, Lost, Malfunctioning or Alarming Dosimetry, Ver. 1.1
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 NMP-GM-002-F02, Apparent Cause Determination Report
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ALARA Briefing Record for Under Rx Head inspection, 04/08/15

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123194, FPC HRH and HX, 03/25/2015

104181, U1 Ctmt transfer canal, 04/07/2015

104133, U1 Reactor Head Lower View, 04/06/2015

104073, Blank 242 (dose rates under and around head), 04/05/2015

102355, U1 Spent Resin Sluice Filter Area (1AB121232), 02/02/2015

102204, U1 Spent Resin Sluice Filter Area (1AB121232), 01/26/2015

103000, U1 A/B Monday 121ft (1AB121), 03/09/2015

104049, U1 Reactor Cavity (1CB155), 04/05/2015

104031, U1 Reactor Cavity (1CB155), 04/04/2015

103974, U1 Reactor Cavity (1CB155), 04/04/2015

103597, U-1 105ft Containment (1CB105), 09:38 03/29/2015

103743, U-1 105ft Containment (1CB105), 08:00 03/31/2015

103680, Unit 1 105ft CTMT Outside Biowall North (1CB105), 11:30 03/30/2015

104001, Unit 1 105ft CTMT Outside Biowall North (1CB105), 08:30 04/04/2015

#104992, U-1 105ft Containment (1CB105), 03:17 04/20/2015

104928, Unit 1 105ft CTMT Outside Biowall North (1CB105), 22:49 04/18/2015

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FNP Alpha Source Term Characterization Report, January 21, 2015

Gamma Spectroscopy Results, Sample ID 14270 U1 CTMT Cavity South, 04/07/2015

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Section 40A1: Performance Indicator Verification

Procedures:

FNPP-0-AP-54, Preparation and Reporting of NRC Performance Indicator Data and NRC Operating Data, Ver. 15.0

FNPP-0-M-151.0, NRC Mitigating Systems Performance Index (MSPI) Basis Document, Ver. 9

NMP-ES-076, Mitigating System Performance Index Program (MSPI), Ver. 2.1

NMP-AD-034, "Key Performance Indicators", Version 3.0

FNPP-0-AP-54.0, Preparation & Reporting of NRC PI Data & NRC Operating Data, Rev. 15

NMP-EP-311, SNC Emergency Preparedness Tier 4 Performance Indicators, Rev. 1

Documents:

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Farley Unit 1 CDE Margin Reports for Residual Heat Removal System, April 2014 to March 2015

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Documents:

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Section 4OA3: Follow-up of Events and Notices of Enforcement Discretion

CR 894677

WO SNC616840

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Section 4OA5: Other Activities

FNPP-0-STP-63.7, Spent Fuel Cask Heat Removal System Monitoring, Ver. 15.1

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