



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

November 3, 2015

EA-15-209

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 05000348/2015003 AND 05000364/2015003; AND EXERCISE OF
ENFORCEMENT DISCRETION**

Dear Ms. Gayheart:

On September 30, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Joseph M. Farley Nuclear Plant, Units 1 and 2. On October 28, 2015, the NRC inspectors discussed the results of this inspection with Mr. J. Hutto and other members of your staff.

NRC inspectors documented two findings of very low safety significance (Green) in this report. One of these findings involved a violation of NRC requirements. Further, inspectors documented licensee-identified violations, which were 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 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 or a finding not associated with a regulatory requirement 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 Region II Regional Administrator and the NRC resident inspector at Farley.

NRC inspectors also identified a violation of 10 CFR 50.59, "Changes, tests and experiments." Because the violation was identified during the discretion period in Enforcement Guidance Memorandum 14-002 associated with the use of complex programmable logic device based solid state protection system cards (ADAMS Accession No. ML14014A125), and meets the criteria set forth therein for the granting of enforcement discretion, the NRC is exercising enforcement discretion in accordance with Section 3.5, "Violations Involving Special Circumstances," of the NRC Enforcement Policy. Therefore, we will not take enforcement action for this violation. The final safety evaluation approving the topical report was issued September 19, 2014 (ADAMS Accession No. ML14260A133).

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 of NRC's Agency wide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Joel T. Munday, Director
Division of Reactor Projects

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

Enclosure:
IR 05000348/2015003; 05000364/2015003
w/Attachment: Supplementary Information

cc Distribution via ListServ

C. Gayheart

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Letter to Cheryl A. Gayheart from Joel T. Munday dated November 3, 2015.

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT - NRC INTEGRATED INSPECTION
REPORT 05000348/2015003 AND 05000364/2015003; AND EXERCISE OF
ENFORCEMENT DISCRETION

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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.: 05000348/2015003 and 05000364/2015003

Licensee: Southern Nuclear Operating Company, Inc.

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

Location: Columbia, Alabama

Dates: July 1, 2015 through September 30, 2015

Inspectors: P. Niebaum, Senior Resident Inspector
K. Miller, Resident Inspector
A. Nielsen, Senior Health Physicist (Sections 2RS6, 2RS7, 4OA1)
J. Rivera, Health Physicist (Section 2RS8)
J. Panfel, Health Physicist (Sections 2RS6, 4OA1)
T. Su, Reactor Inspector (Section 1R17)

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

Enclosure

SUMMARY

IR 05000348/2015003; and 05000364/2015003, July 1, 2015, through September 30, 2015; Joseph M. Farley Nuclear Plant, Units 1 and 2; Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications, Follow up of Events

The report covered a 3-month period of inspection by resident inspectors and regional inspectors. There are two findings documented in this report. The significance of inspection findings are indicated by their color (i.e., greater than Green, or 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 dated January 28, 2013, and 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: Initiating Events

- Green: A self-revealing finding was identified for the licensee's failure to conduct adequate functional testing during implementation of a design change. Incorrect installation of protective relaying circuitry for the 1B Unit Auxiliary Transformer (UAT) was not identified during functional testing and contributed to a trip of the 1B Reactor Coolant Pump (RCP). As a result, Unit 1 was shutdown to hot standby as required by Technical Specification (T.S.) 3.4.4 Condition A.

The licensee's failure to properly implement a design change that included adequate functional testing of the 1B UAT was more than minor because it adversely affected the Design Control attribute of the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations in that inadequate functional testing of the 1B UAT contributed to the loss of the 1B UAT and resulted in a partial loss of RCS flow when the 1B RCP tripped in Mode 1. The significance of this finding was evaluated using the initiating events 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 result in an automatic reactor trip. The inspectors determined the finding had a cross-cutting aspect of "work management" in the human performance area (H.5), because the planning, controlling, and executing of work activities were inadequate. (Section 4OA3)

Cornerstone: Mitigating Systems

- Green: An NRC-identified non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for the licensee's failure to evaluate or test the Electro Magnetic Interference/Radio Frequency Interference (EMI/RFI) effects of the Solid State Protection System (SSPS) power supplies to ensure adequacy of design. The licensee initiated a Condition Report (CR) 10078615, EMI/RFI Testing for SSPS Power Supplies, to address this issue. The licensee performed an Immediate Determination of Operability (IDO) and Prompt Determination of Operability (PDO) and determined the power supplies were operable but nonconforming.

The performance deficiency was determined to be more than minor because it adversely affected the Mitigating Systems cornerstone objective of ensuring availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences and was associated with the cornerstone attribute of Design Control. Failure to evaluate or test the EMI/RFI of SSPS components could cause spurious actuations or failure to actuate. The finding was of very low safety significance (Green) because it did not affect the reactor protection system's tripping signal to initiate a reactor scram because it would be limited to a single channel at a time, did not involve control manipulation that added positive reactivity, and did not result in a mismanagement of reactivity by operators. No cross-cutting aspect was assigned to this finding because it was not indicative of current licensee performance. (Section 1R17)

Violations of very low safety significance that were identified by the licensee have been reviewed by the NRC. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Unit 1 started the report period at approximately 100 percent rated thermal power (RTP) and remained there through the end of the report period.

Unit 2 started the report period at approximately 100 percent RTP and remained there through the end of the report period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

Impending Adverse Weather Conditions: The inspectors reviewed the licensee's preparations to protect risk-significant systems from hot weather expected during July 5 through July 22, 2015. The inspectors evaluated the licensee's implementation of adverse weather preparation procedures and compensatory measures, including operator staffing, before the onset of and during the adverse weather conditions. The inspectors reviewed the licensee's plans to address potentially lasting effects that may result from the hot weather. The inspectors verified that operator actions specified in the licensee's adverse weather procedure maintain readiness of essential systems. The inspectors verified that required surveillances were current, or were scheduled and completed, if practical, before the onset of anticipated adverse weather conditions. The inspectors also verified that the licensee implemented periodic equipment walkdowns or other measures to ensure that the condition of plant equipment met operability requirements. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

Partial Walkdown: The inspectors verified that critical portions of the four selected systems or trains were correctly aligned by performing partial walkdowns. 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 2 Component Cooling Water System, "B" Train
- Unit 2 Residual Heat Removal System, "A" Train

- Unit 1 Containment Spray System, “A” Train
- U1 “B” train component cooling water (CCW) during maintenance on “C” CCW pump

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05Q)

a. Inspection Scope

Quarterly Inspection: 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 zone 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 two fire areas to assess material condition and operational status of fire protection equipment. Documents reviewed are listed in the Attachment.

- Unit 1, Train A 4kV Switchgear Room, FZ 41-A
- Unit 1, Train B 4kV Switchgear Room, FZ 21-A

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program and Licensed Operator Performance (71111.11)

a. Inspection Scope

Resident Inspector Quarterly Review of Licensed Operator Requalification: The inspectors observed a simulator scenario conducted for training of an operating crew for requalification on September 21, 2015. The inspectors assessed the following attributes.

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

Resident Inspector Quarterly Review of Licensed Operator Performance: The inspectors observed licensed operator performance in the main control room during a high risk activity, performance of the Diesel Generator 1-2A: 1000 kW Load Rejection Test, on September 21, 2015. The inspectors assessed the following attributes.

- 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

Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors assessed the licensee's treatment of the two 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. Documents reviewed are listed in the Attachment.

- Unit 2, N2R15BKRDB02271, 2B 4kV Bus Undervoltage Relay Drop Out Voltage
- Unit 1, 1C EDG auto transfer switch did not transfer to emergency

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

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, July 6, 2015, 1A circulating water pump motor lower sleeve guide bearing oil flush and fill
- Unit 2, July 29, 2015, 2D 600V load center hot bus transfer to alternate source
- Unit 2, August 4, 2015, reactor trip breaker A operability test, FNP-2-STP-33.2A
- Unit 1, August 31, 2015, 1C service water pump outage, 1C component cooling water pump outage

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15)

a. Inspection Scope

The inspectors selected the six 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 1, Containment Radiation Monitor, R-11 is in alarm, CR10080919
- Units 1 & 2, 4160VAC Bus Fluctuations, CR10092661
- Unit 2, Pressurizer Power Relief Valve (PORV) Limit Switch Part 21, CR10104330
- Units 1 & 2, SW to turbine building MOV isolation valves, CR10112414
- Unit 2, 2E SW pump motor upper bearing oil reservoir protective coating, CR10113993
- Unit 1, turbine driven auxiliary feedwater pump control panel, CR10106473

b. Findings

No findings were identified.

1R17 Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications

1. (Closed) URI 05000348/2013002-02: Unit 1 Solid State Protection System Modifications (ML13123A182)

a. Inspection Scope

An Unresolved Item (URI) was opened regarding the adequacy of a 10 Code of Federal Regulation (CFR) 50.59 screening that was completed for the modification of Solid State Protection System. In 2013, a potential violation of 10 CFR 50.59(d)(1) was identified for the licensee's failure to perform a full written 10 CFR 50.59 evaluation which provided the basis that the test or experiment did not require a license amendment. The inspectors identified five issues with potential adverse effects such as response time, Human System interface, software, testing and third party commercial vendor.

Enforcement Guidance Memorandum (EGM) 14-002, issued October 2, 2014 (ADAMS Accession No. ML14014A125), provided guidance on the use of enforcement discretion to disposition Westinghouse pressurized water reactor (PWR) licensee noncompliance with Title 10 of the Code of Federal Regulations (10 CFR), Section 50.59, "Changes, tests and experiments," for plants that have installed digital complex programmable logic device (CPLD)-based circuit boards in the solid state protection system (SSPS) without meeting the requirements of 10 CFR 50.59(c)(2)(vi) and/or 10 CFR 50.59(d)(1). The Action section of EGM 14-002 lists four criteria for licensee to demonstrate before NRC will exercise the enforcement discretion. A review was performed and the inspectors determined that the licensee met all the criteria listed in the Action section of the EGM to receive discretion for this issue and the URI is closed.

b. Findings

1. Failure to Evaluate or Test for EMI/RFI Effects for Solid State Protection System Power Supply

Introduction: An NRC-identified, Green non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for the licensee's failure to evaluate or test the EMI/RFI effects of the SSPS Power Supplies for both trains to ensure adequacy of design.

Description: Design Change Package (DCP) 1071563201 (SNC53026) replaced Unit 1 Westinghouse Solid State Protection System (SSPS) obsolete components with Westinghouse supplied replacements. Among the installed components were SSPS power supplies for both trains. The inspectors determined that the DCP did not document that EMI/RFI testing was performed on the new power supplies. The licensee was not able to provide any testing or evaluation that demonstrated that the newly designed and installed power supplies were evaluated or explicitly tested for EMI/RFI and would be compatible with the control room EMI/RFI environment.

Standard IEEE-279-1971, Section 4.4, "Equipment Qualification," stated, in part, that "Type test data or reasonable engineering extrapolation based on test data shall be available to verify that protection system equipment shall meet ... the performance requirements determined to be necessary for achieving the system requirements." Not

performing EMI/RFI testing or evaluation for the power supply was not consistent with the requirements of Section 4.4 of IEEE 279-1971. The safety function of the SSPS system is to trip the reactor and maintain the reactor in a safe condition or initiate an ESF actuation to mitigate the consequences of an accident. The lack of EMI/RFI testing represents a higher potential for the RTS to not to trip when required or for the ESFAS to inadvertently initiate. The licensee initiated a Condition Report (CR) 10078615 to address this issue. The licensee performed an Immediate Determination of Operability (IDO) and Prompt Determination of Operability (PDO) and determined the power supplies were operable but nonconforming.

Analysis: The licensee's failure to evaluate the effect of EMI/RFI for the SSPS power supplies was a Performance Deficiency (PD). The PD was determined to be more than minor because it adversely affected the Mitigating Systems cornerstone objective in that excessive EMI/RFI emitted from the power supplies could cause a spurious channel actuation or could inhibit the channel from actuating. The inspectors used IMC 0609, Att. 4, "Initial Characterization of Findings," issued June 19, 2012, for Mitigating Systems, and IMC 0609, App. A, "The Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012, and determined the finding to be of very low safety significance (Green) because the finding did not affect the reactor protection system's tripping signal to initiate a reactor scram because it would be limited to a single channel at a time, did not involve control manipulation that added positive reactivity, and did not result in a mismanagement of reactivity by operators. No cross-cutting aspect was assigned to this finding because it was not indicative of current licensee performance.

Enforcement: 10 CFR 50, Appendix B, Criterion III, Design Control, requires, in part, that "design control measures shall provide for verifying or checking the adequacy of design." Contrary to the above, since 2012 the licensee failed to adequately verify or check the adequacy of the design of the SSPS power supplies. The SSPS power supplies were installed without evaluating or testing the EMI/RFI effects to ensure the adequacy of design. Because this violation was of very low safety significance (Green), and the issue was entered into the licensee's corrective action program as CR 10078615, this violation is being treated as an NCV, consistent with Section 2.3.2 of the Enforcement Policy. (NCV 05000348/2015003-01, Failure to Evaluate or Test for EMI/RFI Effects for SSPS Power Supplies)

2. (SL-IV) Failure to Perform 50.59 Evaluation for Replacement of SSPS CPLD Cards

Introduction: The inspectors identified a SL IV NCV of 10 CFR 50.59(d)(1), "Changes, Tests, and Experiments," for the licensee's failure to record a written evaluation which provides the basis for the determination that a digital modification did not require a license amendment.

Description: The SSPS circuit boards provide the coincidence logic to produce trip signals for the RPS and actuation signals for the ESFAS. Design Change Package (DCP) 1071563201 (SNC53026) replaced Unit 1 Westinghouse Solid State Protection System (SSPS) obsolete components with Westinghouse supplied replacements. The original circuit boards used fixed logic devices (i.e. transistor-transistor logic) whereas the replacement circuit boards used programmable logic devices (i.e. complex programmable logic devices (CPLDs)) to perform the required logic operation for the design function of the SSPS.

Farley procedure NMP-AD-010, "10 CFR 50.59 Screening and Evaluation," stated that its purpose was to describe the process for compliance with the requirements of 10 CFR 50.59 using the guidelines contained in NEI 96-07, "Guidelines for 10 CFR 50.59 Evaluations," Revision 1. Specifically, Section 6 of Procedure NMP-AD-010, directed the user to refer to NEI 96-07, Revision 1 and NEI 01-01, "Guideline on Licensing Digital Upgrades," Revision 1, for additional guidance on how to answer the screening questions.

Section 4 of NEI 96-07, Revision 1, stated that a 10 CFR 50.59 evaluation is required when a change adversely affects the design function or the method of performing or controlling a design function. The guidance also states that an example that would require an evaluation is a change that introduces a new type of accident or malfunction. The guidance also states that if a change has both positive and adverse effects, the change would require a 50.59 evaluation and should focus on the adverse effects.

Additionally, NEI 01-01, Revision 1, Section 4.3.2, stated that most digital upgrades to redundant safety systems should be conservatively treated as "adverse" and should require an evaluation. This section also states that some examples of adverse effects that should be evaluated are those that change functionality in a way that increases complexity and introduces different behavior or potential failure modes.

The inspectors evaluated the licensee's actions using the criteria established in the Action section of NRC Enforcement Guidance Memorandum (EGM) 14-002, "Dispositioning Westinghouse Pressurized Water Reactor Licensee 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," dated October 2, 2014. The inspectors noted that the licensee entered this issue into their corrective action program as CR 606581 to address the operability of the SSPS and evaluate the need for a 50.59 evaluation. The licensee completed a prompt determination of operability (PDO). The resident inspectors reviewed the operability determination and found it to be acceptable. The licensee completed a 10 CFR 50.59 evaluation for the modification on November 24, 2014, and determined a license amendment was not required.

Analysis: In accordance with the guidance in the NRC Enforcement Manual, the licensee's failure to maintain record of an evaluation which provided the bases for why NRC approval of a license amendment was not required was a violation of 10 CFR 50.59. Specifically, the licensee failed to maintain record of an evaluation for a change that created the possibility of common cause software malfunctions of RPS and ESFAS; which was a malfunction not previously evaluated for in the UFSAR. The violation was screened using the traditional enforcement process because the failure to maintain a record of an analyses required by 10 CFR 50.59 was considered to be a violation that potentially impeded or impacted the regulatory process.

The inspectors used SDP risk-informed tools and concluded that the violation was of very low safety significance (Green). In accordance with the NRC Enforcement Policy, Section 6.0, "Violation Examples," dated January 28, 2013, a traditional enforcement violation of 10 CFR 50.59 that results in conditions evaluated as having very low safety significance (Green) by the SDP is considered a SL IV violation (Section 6.1.d). Cross-cutting aspects are not assigned to traditional enforcement violations.

Enforcement: 10 CFR 50.59(d) requires that a licensee shall maintain records of changes in the facility, of changes in procedures, and of tests and experiments made pursuant to paragraph (c) of this section. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require a license amendment.

Contrary to the above, from March 2, 2012, until November 24, 2014, the licensee failed to maintain a written evaluation that provided the bases for the determination that the change to the facility involving CPLDs did not require a license amendment. In accordance with Enforcement Guidance Memorandum (EGM) 14-002, "Dispositioning Westinghouse Pressurized Water Reactor Licensee 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," dated October 2, 2014, the NRC is exercising enforcement discretion for this violation. This determination was made after the inspectors confirmed that the licensee satisfied the criteria identified in the Action section of the EGM. (EA-15-209)

1R18 Plant Modifications (71111.18)

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.

- DCP SNC58128, DCP Ver. 5.0, Unit 1 Upper and Lower Reactor Internals Lift Rig

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors either observed post-maintenance testing or reviewed the test results for the seven 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.

- SNC688196, 2B RHR pump mini flow valve (FCV602B) failed to open, July 25, 2015
- SNC611197, Unit 1 Reactor Trip Bypass Circuit Breaker Q2C11E0004BBYA Preventive Maintenance per EMP-1402.01
- SNC403065, Unit 1A Containment Cooler Motor Replacement, Q1E21M0001A
- SNC583929, Unit 2 Turbine Driven Auxiliary Feedwater Pump, Q2N23P0003, oil system inspection
- SNC697941, Unit 2 2E Service Water Pump Motor, Q2P16M0001E, upper bearing oil reservoir inspection
- SNC694554, 1C DG Fuel Oil Manual Transfer Pump Vibration in Required Action Range
- SNC606850, Replace 1C CCW Pump Seals and Bearings

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

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the three 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-22.1, Auxiliary Feedwater Pump 1A In-service Test, Ver. 44.0
- FNP-2-STP-33.2A, A Train Reactor Trip Breaker Operability Test, Ver. 38.0

In-Service Tests (IST)

- FNP-2-STP-4.2, 2B Charging Pump Quarterly In-service Test, Ver. 72.0

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed the emergency preparedness drill conducted on September 23, 2015. The inspectors observed licensee activities in the simulator and/or technical support center 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 post-exercise 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

2RS6 Radioactive Gaseous and Liquid Effluent Treatment

a. Inspection Scope

Radioactive Effluent Treatment Systems: The inspectors walked-down selected components of the gaseous and liquid radioactive waste (radwaste) processing and effluent discharge systems. To the extent practical, the inspectors observed and evaluated the material condition of in-place waste processing equipment for indications of degradation or leakage that could constitute a possible release pathway to the environment. Inspected components included floor drain tanks, waste monitor tanks, liquid waste processing equipment, and associated piping and valves. The inspectors interviewed licensee staff regarding equipment configuration and effluent monitor operation. The inspectors also reviewed surveillance testing records for penetration room filters.

Effluent Sampling and Release: The inspectors observed the collection and processing of liquid effluent samples from the Unit 2 waste monitor tank #2. Technician proficiency in collecting, processing, and preparing the applicable release permits was evaluated. The inspectors reviewed recent liquid and gaseous release permits including pre-release sampling results, effluent monitor alarm setpoints, and public dose calculations. The inspectors reviewed the 2013 and 2014 Annual Radioactive Effluent Reports to evaluate reported doses to the public, to review any anomalous events, to evaluate groundwater sampling results, and to review Offsite Dose Calculation Manual (ODCM) changes. The inspectors also reviewed compensatory sampling data for time periods when selected radiation monitors were out of service. The inspectors reviewed the results of the 2013

and 2014 radiochemistry cross-check program to evaluate the quality of the radioactive effluent sample analyses. The inspectors also reviewed effluent source term evaluation and changes to effluent release points. In addition, the inspectors evaluated recent land use census results and meteorological data used to calculate doses to the public as a part of Inspection Procedure 71124.07.

Ground Water Protection: The inspectors reviewed the licensee's continued implementation of the industry's Ground Water Protection Initiative (Nuclear Energy Institute (NEI) 07-07) and discussed any changes to the program. The inspectors discussed program guidance for dealing with spills, leaks, and unexpected discharges with licensee staff and reviewed the 10 CFR 50.75(g) decommissioning file. The inspectors reviewed and discussed the licensee's program for monitoring of structures, systems, and components with the potential to release radioactive material to the environment. The inspectors also reviewed recent groundwater sampling results.

Problem Identification and Resolution: The inspectors reviewed Corrective Action Program (CAP) documents in the areas of gaseous and liquid effluent processing and release. The inspectors evaluated the licensee's ability to identify and resolve the identified issues. The inspectors also reviewed recent self-assessment results.

Radwaste system operation, effluent processing activities, and groundwater protection efforts were evaluated against requirements and guidance documented in the following: 10 CFR Part 20; 10 CFR Part 50 Appendix I; ODCM; Updated Final Safety Analysis Report (UFSAR) Section 11; Regulatory Guide (RG) 1.21, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants"; RG 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50 Appendix I"; NEI 07-07, "Industry Groundwater Protection Initiative – Final Guidance Document"; and Technical Specifications (TS) Section 5. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

2RS7 Radiological Environmental Monitoring Program (REMP)

a. Inspection Scope

REMP Implementation: The inspectors observed routine sample collection and surveillance activities as required by the licensee's environmental monitoring program. The inspectors noted the material condition and operability of airborne particulate filter and iodine cartridge sample stations and observed collection of weekly air samples at selected monitoring locations. The inspectors also observed change out of environmental dosimeters and collection of surface water samples. In addition, the inspectors reviewed and evaluated land use census results, changes to the ODCM, and monitoring for hard-to-detect radionuclides.

The inspectors reviewed recent calibration and maintenance records for selected environmental air samplers and automated water samplers. The inspectors also reviewed the 2013 and 2014 Radiological Environmental Operating Reports and the

2014 Annual Radioactive Effluent Report. The inspectors reviewed recent interlaboratory comparison results for the offsite laboratory used to process environmental samples. Selected environmental measurements were reviewed for consistency with licensee effluent data, evaluated for radionuclide concentration trends, and compared with detection level sensitivity requirements.

Ground Water Protection: The inspectors reviewed the licensee's groundwater protection program and recent sampling results as part of Inspection Procedure 71124.06.

Meteorological Monitoring Program: The inspectors observed the physical condition of the tower and its instrumentation and discussed equipment operability and maintenance history with licensee staff. The inspectors evaluated transmission of locally generated meteorological data to other licensee groups such as main control room operators. For the meteorological measurements of wind speed, wind direction, and temperature, the inspectors reviewed the last two calibration records for applicable tower instrumentation. The inspectors also evaluated measurement data recovery for 2014.

Problem Identification and Resolution: The inspectors reviewed CAP documents in the areas of radiological environmental monitoring and meteorological tower maintenance. The inspectors evaluated the licensee's ability to identify and resolve the identified issues. The inspectors also reviewed recent self-assessment results.

REMP implementation and meteorological monitoring activities were reviewed against the guidance and requirements of 10 CFR Part 20; Appendices E and I to 10 CFR Part 50; TS Section 5.0; UFSAR Chapter 2; ODCM; RG 4.15, "Quality Assurance for Radiological Monitoring Programs (Normal Operation) - Effluent Streams and the Environment"; Safety Guide 23, "Onsite Meteorological Programs"; Branch Technical Position, "An Acceptable Radiological Environmental Monitoring Program" – 1979; and approved licensee procedures. Documents reviewed are listed in the report Attachment.

b. Findings

No findings were identified.

2RS8 Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation

a. Inspection Scope

Waste Processing and Characterization: During inspector walk-downs, accessible sections of the liquid and solid radwaste processing systems were assessed for material condition and conformance with system design diagrams. Inspected equipment included storage tanks, transfer piping, resin dewatering and packaging components, and abandoned radwaste processing equipment. The inspectors discussed component function, processing system changes, and radwaste program implementation with licensee staff.

The inspectors reviewed the 2014 Annual Radioactive Effluent Report and radionuclide characterizations from 2014 - 2015 for each major waste stream. For primary resin, dry active waste, and reactor coolant system filters, the inspectors evaluated analyses for

hard-to-detect nuclides, reviewed the use of scaling factors, and examined quality assurance comparison results between licensee waste stream characterizations and outside laboratory data. Waste stream mixing and concentration averaging methodology for resin and filter waste streams were evaluated and discussed with radwaste staff. The inspectors also reviewed the licensee's procedural guidance for monitoring changes in waste stream isotopic mixtures.

Radioactive Material Storage: During walk-downs of indoor and outdoor radioactive material storage areas, the inspectors observed the physical condition and labeling of storage containers and the posting of Radioactive Material Areas. The inspectors also reviewed licensee procedural guidance for storage and monitoring of radioactive material.

Transportation The inspectors evaluated shipping records for consistency with licensee procedures and compliance with NRC and Department of Transportation (DOT) regulations. The inspectors reviewed emergency response information, DOT shipping package classification, waste classification, and radiation survey results. Licensee procedures for opening and closing Type B shipping casks were compared to Certificate of Compliance requirements. The inspectors observed the preparation and shipment of a liquid waste processing resin liner. The inspectors also reviewed qualification records for radworkers who perform shipping preparation activities.

Problem Identification and Resolution: The inspectors reviewed CAP documents in the areas of shipping and radwaste processing. The inspectors evaluated the licensee's ability to identify and resolve the identified issues. The inspectors also reviewed recent self-assessment results.

Radwaste processing, radioactive material handling, and transportation activities were reviewed against the guidance and requirements contained in the licensee's Process Control Program, UFSAR Chapter 11, 10 CFR Part 20, 10 CFR Part 61, 10 CFR Part 71, the Branch Technical Position on Waste Classification (1983), and NUREG-1608, "Categorizing and Transporting Low Specific Activity Materials and Surface Contaminated Objects". Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

40A1 Performance Indicator Verification (71151)

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 July 2014 and June 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. The inspectors verified the accuracy of reported data that were used to calculate the value of each PI.

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

- safety system functional failures

Cornerstone: Barrier Integrity

- reactor coolant system leak rate
- reactor coolant system specific activity

Public Radiation Safety Cornerstone

- Radiological Control Effluent Release Occurrence

The inspectors reviewed recent PI results for the period November 4, 2014, to July 10, 2015. The inspectors reviewed cumulative and projected doses to the public contained in liquid and gaseous release permits and CAP documents related to Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual issues.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

.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 Annual Follow-up of Selected Issues

a. Inspection Scope

The inspectors conducted a detailed review of condition report (CR) 10049642, SR NI Surveillances as required by Tech Specs".

The inspectors evaluated the following attributes of the licensee's actions:

- complete and accurate identification of the problem in a timely manner
- evaluation and disposition of operability and reportability issues
- 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

Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

4OA3 Follow-up of Events

.1 (Closed) Licensee Event Report (LER) 05000348/2015-001, Automatic Actuation of the Auxiliary Feedwater System When the 1B SGFP Was Tripped

a. Inspection Scope

On May 5, 2015 with Unit 1 in Mode 2 and the 1A steam generator feed pump (SGFP) in the tripped condition, an auxiliary feedwater (AFW) system auto start signal was received when the operators manually tripped the 1B SGFP because the motor driven AFW pump AUTO-DEFEAT switches were in AUTO. The 1A and 1B MDAFW pumps were already running to support current plant conditions. The auto start signal resulted in the AFW flow control valves going to the full open position and the steam generator (SG) blowdown and SG blowdown sample line valves going closed. The licensee failed to place the MDAFW pump AUTO-DEFEAT switches in DEFEAT as required by step 4.6.2 of procedure FNP-1-SOP-21.0, "Condensate and Feedwater System", Ver. 115.0 Operator action was required to minimize the impact to SG water level and RCS temperature and to reset the auto start signal. The inspectors reviewed the eight-hour event notification (EN # 51043), the corrective action report (CAR 257247), evaluated corrective actions, and discussed the issue with the licensee. The inspectors determined that this was a minor violation of 10 CFR 50 Appendix B, Criterion V, Procedures, because there was no impact on the Unit 1 steam generator water levels or RCS temperatures and is not subject to formal enforcement action. This violation was captured in the licensee's corrective action program (CAP) as condition report (CR) 10065362.

.2 (Closed) Licensee Event Report 05000348/2015-002-00, Technical Specification Shutdown Due to Reactor Coolant Pump Trip

a. Inspection Scope

The inspectors reviewed this licensee event report (LER) associated with the Unit 1 reactor shutdown required by Technical Specification (T.S.) 3.4.4 Condition A following the trip of the 1B Reactor Coolant Pump (RCP) on May 7, 2015. The RCP trip resulted during the transfer of the RCP power supply from the 1B Startup Auxiliary Transformer (SAT) to the 1B Unit Auxiliary Transformer (UAT) with the unit at approximately 28% RTP. The inspectors reviewed the root cause report (CAR 257646), evaluated corrective actions, and discussed the issue with licensee staff.

b. Findings

Introduction: A self-revealing Green finding was identified for the licensee's failure to conduct adequate functional testing during implementation of a design change. Incorrect installation of protective relaying circuitry for the 1B UAT was not identified

during functional testing and contributed to a trip of the 1B RCP. As a result, Unit 1 was shutdown to hot standby as required by Technical Specification (T.S.) 3.4.4 Condition A.

Description: On May 7, 2015, auxiliary power was being transitioned from the SATs to the UATs. While transferring power loads for the 1B 4160V bus from the 1B SAT to the 1B UAT, the circuit breaker to the 1B UAT closed and immediately tripped open causing the loss of power to the 1B RCP. The licensee followed the abnormal operating procedure for loss of reactor coolant flow and then shutdown to Mode 3 conditions. Investigation identified that the factory installed ground jumpers, used to protect CTs during storage and shipping, were still installed which resulted in tripping the 4160V bus feeder circuit breakers and the 1B RCP. Two additional problems were also identified; 1) the CT circuit design did not properly consider the polarity of the associated CTs so that when the 1B UAT was sufficiently loaded the differential current relays would have tripped and 2) the UAT high-side CTs were incorrectly “double-grounded” in the meter and relay panel and in the UAT control panel itself. The inspectors noted that licensee procedure NMP-ES-022, “DCP Site Approval, Implementation and Closure,” Version 10.0, contained requirements for functional testing of design changes. Specifically, Section 2.0 of Appendix B of NMP-ES-022 specified that functional test requirements for a design change package (DCP) shall be adequate to verify that the final configuration meets the intent of the modified design including all operational requirements. The licensee determined the event resulted from lapses in standards at various levels of the organization including electrical design, project oversight, work package planning, preparation, and review, and proper post-modification testing.

Analysis: The licensee’s failure to properly implement a design change that included adequate functional testing as required by licensee procedure NMP-ES-022, “DCP Site Approval, Implementation and Closure,” Version 10.0, was a performance deficiency (PD). The PD was more than minor because it adversely affected the Design Control attribute of the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations in that the inadequate functional testing of the 1B UAT contributed to a partial loss of RCS flow when the 1B RCP tripped in Mode 1. The significance of this finding was evaluated using the initiating events 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 result in an automatic reactor trip. The inspectors determined the finding had a cross-cutting aspect of “work management” in the human performance area, because the planning, controlling, and executing of work activities were inadequate (H.5).

Enforcement: This finding does not involve enforcement action because no violation of a regulatory requirement was identified. This finding is of very low safety significance and was entered in the licensee’s corrective action program as CR 10066407 and is identified as FIN 05000348/2015003-02, Failure to properly implement the 1B UAT design change.

40A5 Other Activities

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

a. Inspection Scope

The inspectors performed a walkdown of the onsite ISFSI and monitored the activities associated with the dry fuel storage campaign completed for Unit 1 on September 21, 2015. The inspectors reviewed changes made to the ISFSI programs and procedures, including associated 10 CFR 72.48, "Changes, Tests, and Experiments," screens and evaluations to verify that changes made were consistent with the license or certificate of compliance. The inspectors reviewed records and observed the loading activities to verify that the licensee recorded and maintained the location of each fuel assembly placed in the ISFSI. 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

No findings were identified.

40A6 Exit Meeting

On October 28, 2015, the resident inspectors presented the inspection results to Mr. J. Hutto and other members of the licensee's staff. The inspectors confirmed that proprietary information provided or examined during the inspection period was properly controlled.

40A7 Licensee-Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of the NRC Enforcement Policy, for being dispositioned as Non-Cited Violations.

- Technical Specification 5.5.4 states that the effluent monitoring program shall be contained in the ODCM. Section 2.1.1.2 of the ODCM specifies the actions to be taken with less than the minimum number of radioactive liquid effluent monitoring instrumentation channels operable. Table 2-1 of Section 2.1.1.2 requires, in part, at least two independent samples be analyzed prior to a liquid release with radiation monitor RE-18 inoperable. Contrary to this, on June 26, 2015, with RE-18 inoperable, the licensee made a release from Unit 1 Waste Monitor Tank 2 without first collecting two samples from the tank. The licensee identified the error upon review of the release paperwork and documented the event in CR 10089229. This violation was evaluated using the guidance in IMC 0609, Appendix D, "Public Radiation Safety Significance Determination Process," and was determined to be of very low safety significance (Green) because it did not represent a substantial failure to implement the effluent release program and post-release data indicated that the release did not exceed 10 CFR 50 Appendix I dose values.

- 10 CFR 50, Appendix B, Criterion V, “Instructions, 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 and shall be accomplished in accordance with these instructions, procedures or drawings. Procedure, NMP-ES-006, “Preventive Maintenance Implementation and Continuing Equipment Reliability Improvement”, Version 8.1 stated, PM implementation is complete only after all work has been completed as defined by the PM work scope. Contrary to the above, in July 2013, the licensee partial performed the PM on the 1C diesel generator (DG) automatic transfer switch (ATS) which was incorrectly credited as the full PM. Consequently, the date for the next PM was rescheduled for Aug. 2018 resulting in inadequate preventive maintenance on the 1C DG ATS contributing to failure of the ATS. The failure affected the Mitigating Systems cornerstone and represented a condition where a single train safety function was lost for greater than the Technical Specification (TS) allowed outage time, which required a detailed risk evaluation. The major analysis assumptions included: a 51 day exposure period, no recovery consideration, and the PD was modelled as a potential common cause impact to EDGs 1/2A, 1C and 2C. The dominant sequence was a Loss of Offsite Power with failure of the EDGs and failure to recover either offsite power or the EDGs prior to battery depletion leading to loss of core heat removal and potential core damage. The risk was mitigated by the availability of additional mitigating equipment and the low likelihood of establishing the conditions necessary to require the ATS to transfer to the alternate control power source. This finding screened as very low safety significance (Green). This issue was entered into the licensee’s corrective action program (CAP) as condition reports (CRs) 10039554 and 10056140.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel:

J. Andrews, Maintenance Director
G. Bell, Licensing Supervisor
E. Berry, Site Systems Manager
K. Brown, Chemistry Manager
T. Burdeshaw, Engineering Supervisor
J. Carroll, Shift Operations Manager
J. Collier, Senior Licensing Engineer
H. Cooper, Engineering Programs Supervisor
D. Drawbaugh, EP Supervisor
R. Dunaway Design Engineer
C. Gayheart, Site Vice President
S. Henry, Operations Director
R. Hruby, Engineering Director
J. Hutto, Plant Manager
R. Martin, Regulatory Affairs Manager
D. Reed, Operations Support Manager
S. Sampson, Radiation Protection Manager
B. Taylor, Regulatory Affairs Manager
C. Thornell, Site Projects Manager

LIST OF REPORT ITEMS

Opened and Closed

NCV 05000348/2015003-01	Failure to Evaluate or Test EMI/RFI Effect for Solid State Protection System Power Supply (Section 1R17)
FIN 05000348/2015003-02	Failure to properly implement design change (4OA3.2)

Closed

LER 05000348/2015-001-00	Automatic Actuation of the Auxiliary Feedwater System When the 1B SGFP Was Tripped (4OA3.1)
LER 05000348/2015-002-00	Technical Specification Shutdown Due to Reactor Coolant Pump Trip (4OA3.2)
URI 05000348/2013002-02	Unit 1 Solid State Protection System Modifications (Section 1R17)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures:

FNP-2-STP-1.0, Operations Daily and Shift Surveillance Requirements, Ver. 106
FNP-0-SOP-0.16, Containment Temperature Summer Contingencies, Ver. 3.0
FNP-0-AOP-21.0, Severe Weather, Rev. 41
FNP-1-SOP-12.1, Containment Air Cooling System, Ver. 42.1

Documents:

FNPO-11-10, ODMI – Unit 1 and Unit 2 Containment Temperature Low Margin, Ver. 2.0
Integrated Plant Computer (IPC) trend report for outside air temp, July 15 – July 20, 2015
National Weather Service Climate Data for Tallahassee, FL and Dothan, AL – July 2015
CRs 10097823, 10097798, 10097686

Section 1R04: Equipment Alignment

Drawings:

D-175002, Unit 1 P&ID – Component Cooling Water System, Sheet 1, Ver. 49.0
D-175002, Unit 1 P&ID – Component Cooling Water System, Sheet 2, Ver. 28.0
D-175002, Unit 1 P&ID – Component Cooling Water System, Sheet 3, Rev. No. 13
D-205002, Unit 2 P&ID – Component Cooling Water System, Sheet 1, Ver. 31
D-205002, Unit 2 P&ID – Component Cooling Water System, Sheet 2, Ver. 21
D-205002, Unit 2 P&ID – Component Cooling Water System, Sheet 3, Ver. 5
D-205041, Unit 2 P&ID – Residual Heat Removal System, Sheet 1, Ver. 19
D-205038, Unit 2 P&ID – Safety Injection System, Sheet 2, Ver. 24
D-205038, Unit 2 P&ID – Safety Injection System, Sheet 1, Ver. 38
D-175038, Unit 1 P&ID – Safety Injection System, Sheet 1, Ver. 44
D-175038, Unit 1 P&ID – Safety Injection System (Containment Spray), Sheet 3, Ver. 27

Procedures:

FNP-1-SOP-23.0, Component Cooling Water System, Ver. 94.2
FNP-2-SOP-23.0A, Component Cooling Water System, Ver. 13
FNP-2-SOP-23.0, Component Cooling Water System, Ver. 92
FNP-2-SOP-7.0A, Residual Heat Removal System, Ver. 10
FNP-1-SOP-9.0A, Containment Spray System, Ver. 9.0

Documents:

A-181000, Functional System Description, Component Cooling Water, Ver. 26
A-181002, Functional System Description, Residual Heat Removal/Low Head Safety Injection,
Ver. 45

Section 1R05: Fire Protection Annual/Quarterly

Drawings:

A-508650, Fire Zone Data Sheet: Unit No. 1 Aux. Bldg. El. 121' - 0" (NW QUAD), Sheet 16, Ver. 5.0
A-508650, Fire Zone Data Sheet: Unit No. 1 Aux. Bldg. El. 139' - 0" (NW QUAD), Sheet 32, Ver. 3.0

Section 1R11: Licensed Operator Regualification ProgramDocuments:

OPS-56400A, Licensed Operator Continuing Training Simulator Exercise Guide for LOCT 14-16, Segment 15-6, 15-S0601, Ver. 0
 WO SNC613348, FNP-1-STP-80.20, Diesel Generator 1-2A: 1000 kW Load Rejection Test, Ver. 22.0

Procedures:

NMP-TR-416, Licensed Operator Continuing Training Program Administration, Ver. 6.0
 NMP-OS-007, Conduct of Operations, Ver. 11.0
 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-0-SOP-38.0, Diesel Generators, Attachment 7, DG Start/Run Data, Ver. 124.2

Section 1R12: Maintenance EffectivenessDocuments:

Corrective Action Reports (CARs) 258188, 258950, 256826
 NUMARC-93-01, Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, Rev. 4A
 Regulatory Guide 1.160, Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, Rev. 3
 CRs10085469, 10100437, 10104710
 TEs 925467, 926354, 916341
 WOs SNC573396, SNC94352

Drawings:

A-207048, Unit 2 Relay Settings, Sht. 326, Rev. 1
 D-207151, Unit 2 Elementary Drawing – 4160V Bus 2B Potential Transformers, Ver. 20
 D-207174, Unit 2 Elementary Drawing – Reactor Coolant Pumps, Ver. 9
 D-356620, Unit 2 Elementary Drawing – Reactor Coolant Pumps Aux. PT Cabinet, Ver. 1
 D-177082, Unit 1, Single Line DC Distribution System 1A, Ver. 43

Procedures

NMP-ES-027, Maintenance Rule Program, Ver. 3.1
 NMP-ES-027, Maintenance Rule Implementation, Ver. 5.1
 FNP-1-STP-912.0, Reactor Coolant Pump Reactor Trip Undervoltage Relay Test, Ver. 25.1
 FNP-1-STP-912.1, Reactor Coolant Pump Bus Undervoltage TDAFW Start Relay Test, Ver. 3.2

Section 1R13: Maintenance Risk Assessments and Emergent Work EvaluationProcedures

NMP-GM-031, On-Line Configuration Risk Management Program, Ver. 3.0
 NMP-GM-031-001, Online Maintenance Rule (a)(4) Risk Calculations, Ver. 3.0
 FNP-2-SOP-36.7, Unit 2 600V Load Center Energized (Hot Bus) Transfer, Ver. 1.2
 FNP-2-STP-33.2A, A Train Reactor Trip Breaker Operability Test, Ver. 38.0

Documents

Operator's Risk Evaluation for Farley Unit 1 – Rev. 9/Version 4, July 6, 2015
 Operator's Risk Evaluation for Farley Unit 2 – Rev. 9/Version 5, August 4, 2015
 Operator's Risk Evaluation for Farley Unit 1 – Rev. 9/Version 5, August 31, 2015
 A-506250, Unit 1 Electrical Load List, Ver. 85
 A-351199, Unit 2 Electrical Load List, Ver. 71

D-207005, Unit 2 Single Line Protection and metering 4160V Switchgear Bus 2F (Emerg), Ver. 14.0

D-207010, Unit 2 Single Line Protection and metering 600V Load Center 2D (Emerg), Ver. 13.0
CR 10101993

Section 1R15: Operability Determinations and Functionality Assessments

Drawings

D-207381, Unit 2 – Elementary Diagram, Pressurizer Power Relief Solenoid Valves, Ver. 9

D-170119, Unit 1 – P&ID – Service Water System, Sheet 2, Ver. 47.0

D-200013, Unit 2 – P&ID – River Water, Service Water and Circulating Water System, Sheet 8, Ver. 37.0

D-171391, Unit 1 – Outdoor Concrete – Service Water Valve Box VB-1 – Neat Line, Sheet 1, Ver. 8.0

D-201309, Unit 2 – Outdoor Concrete – Service Water Valve Box 2VB-1 – Neat Line, Sheet 1, Rev. 6

Documents

Technical Evaluation (TE) 926169, TE 926299, TE 935697

CAR 210211

Integrated Plant Computer (IPC) trend of R-11 counts June 5, 2015 to July 10, 2015

FN1-15-006, Operational Decision Making Issue (ODMI) for elevated R-11 counts, Ver. 1 and 2

Evaluation for CR10092661 Farley Voltage Transient, July 10, 2015

Unit 2 Fourth 10-Year Interval Valve In-service Testing Basis Document, Ver. 4

Standing Order S-2015-16, Ver. 1.0

WOs SNC697941, SNC630158

CRs 259503, 806926, 906979, 10080919, 10092661, 10104330, 10110859, 10112362,

10112624, 10112791, 10112810, 10112865, 10113993, 10113826, 10112414, 10106473, 10117773

Procedures

NMP-AD-012, Operability Determinations and Functionality Assessments, Ver. 12.6

NMP-OS-009, RCS Unidentified Leakage Monitoring Program, Ver. 3.0

FN1-1-STP-9.0, RCS Leakage Test, Ver. 51.2

FN1-2-STP-27.2, Onsite AC Distribution, Ver. 23.0

FN1-2-STP-45.11, Miscellaneous Cold Shutdown Valves In-service Test, Ver. 27.1

FN1-1-STP-22.16, Turbine Driven Auxiliary Feedwater Pump Quarterly In-service Test, Ver. 62.2

Section 1R17: Evaluations of Changes, Tests, or Experiments and Permanent Plant

Modifications

CRs 196937, CR 536202, CR 820528, CR 886159

Procedures

FN1-0-ACP-61.0, Control of Portable RF Transmitter, Version 5, Dated 9/30/2013

FN1-1-SOP-40.0, Reactor Control and Protection System, Ver. 19.0, Dated 4/10/2015

FN1-1-SOP-40.0, Reactor Control and Protection System, Ver. 20.0, Dated 4/29/2015

FN1-1-STP-33.0A, Solid State Protection System Train A Operability Test, Ver. 54.0, Dated April 10, 2012

FN1-1-STP-33.0B, Solid State Protection System Train B Operability Test, Ver. 55.0, Dated April 10, 2012

NMP-ES-033, Setpoint Control Program, Version 6.1, Dated 7/18/2012

NMP-ES-033-001, Setpoint Control Program Graded Approach, Version 2.0, Dated 6/19/2008
 NMP-ES-033-GL02, Farley Setpoint Control Program Database, Version 2.0, Dated 4/10/2009

Calculations

Calculation, MC-F-09-0069, Control Room Air Conditioning Load, Ver. 2.0, Dated 4/4/2012
 Calculation, MC-F-09-0103, Cable Spreading Room Air Conditioning Unit, Ver. 2.0, Dated 4/4/2012
 Calculation, SE-91-1976-5, Distribution Cabinet Load Study, Ver. 12, Dated 8/1/2014

Drawings

D-181604, Connection Diagram 120 V Vital AC Instrumentation Dist. Panel 1A, 1B, 1C & 1D, Rev. 19, Dated 9/28/94
 U-263813, SSPS Schematics Diagram De-Multiplexer, Version 2.0, Dated 3/23/2011

Other Documents

ALA-13-42, Transmittal of LTR-PSS-13-016, "Westinghouse Response to Questions Regarding the Adequacy of Westinghouse SSPS Card Analysis and Testing Methodology", dated May 7, 2013
 Nuclear Management Procedure, Prompt Determination of Operability, CR 603230, Dated 3/21/2013
 Southern Nuclear Operating Company, Documentation of Engineering Judgement, Replacement Westinghouse Solid State Protection System Printed Circuit Board EMC Evaluation, DOEJ-FD1071563201-J001, Version 2, Dated 3/14/2012
 TR-102323, Guidelines for Electromagnetic Interference Testing of Power Plant Equipment, Revision 3, Dated November 2004
 WCAP-7672, Solid State Protection System Description, Dated

Section 1R18: Plant Modifications

Documents

NMP-ES-044-F01, DCP SNC58128 Signature Sheet, DCP Ver. 5.0
 NMP-ES-044-F02, DCP SNC58128 Checklist, DCP Ver. 5.0
 NMP-ES-044-F03, DCP SNC58128 List of Materials, DCP Ver. 1.0

 NMP-ES-044-F05, DCP SNC58128 Special Design Considerations, DCP Ver. 5.0
 NMP-AD-008-F01, Applicability Determination – DCP SNC58128, AD Ver. 2.0
 NMP-AD-010-F01, DCP SNC58128 10 CFR 50.59 Screening/Evaluation, Ver. 2.0
 NMP-AD-009-F01, DCP SNC58128, Ver. 1.0, Licensing Document Change Request No. 2013002, Ver. 1.0
 NMP-ES-042-F01, Design Input Record, DIR Ver. 5.0
 NMP-ES-042-F02, Design Verification Summary, DVS Ver. 5.0
 Work Orders WO SNC468711, SNC510807, SNC605924

Procedures

NMP-AD-008, Applicability Determinations, Ver. 19.1
 NMP-AD-009, Licensing Document Change Requests, Ver. 12.1
 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. 10.2
 NMP-ES-042, Design Input and Verification Process, Ver. 7.0

Section 1R19: Post Maintenance Testing**Procedures**

FNP-2-STP-11.2, 2B RHR Pump Quarterly In-service Test, Ver. 39.2
 NMP-MA-014-001, Post Maintenance Testing Guidance, Ver. 4
 FNP-0-EMP-1402.01, Reactor Trip and Bypass Breakers, Ver. 22.0
 FNP-2-STP-33.2A, A Train Reactor Trip Breaker Operability Test, Ver. 38.0
 FNP-1-STP-17.0, Containment Cooling System Train A-B Operability Test, Ver. 22.0
 FNP-2-STP-22.16, Turbine Driven Auxiliary Feedwater Pump Quarterly In-service Test, Ver. 66.2
 FNP-0-STP-81.3, 1C Diesel Generator Fuel Oil Transfer System In-service Test, Ver. 28.1
 FNP-1-STP-23.3, 1C Component Cooling Water Pump Quarterly In-service Test, Ver. 43.4

Documents

WOs SNC688196, SNC611197, SNC406927, SNC403065, SNC583929, SNC589166, SNC697941, SNC694554, SNC606850
 TE 921164
 CRs 873217, 10100508, 10700728, 10085609, 10102488, 10062131, 10110859, 10112362, 10112624, 10112791, 10112810, 10112865, 10113993, 10123474, 10118523, 10125912

Drawings

D-207632, Unit 2 – Elementary Diagram – RHR Pump Miniflow 575V MOV, Ver. 8
 D-177221, Unit 1 – Elementary Diagram – Containment Cooler 1A High Speed, Rev. 4
 D-177222, Unit 1 - Elementary Diagram – Containment Cooler 1A Low Speed, Rev. 15

Section 1R22: Surveillance Testing**Procedures**

FNP-2-STP-4.2, 2B Charging Pump Quarterly In-service Test, Ver. 72
 FNP-2-IMP-202.11, Charging Line Flow Q2E21FT0122 Loop Calibration EQ, Ver. 34
 FNP-1-STP-22.1, Auxiliary Feedwater Pump 1A In-service Test, Ver. 44
 FNP-2-STP-33.2A, A Train Reactor Trip Breaker Operability Test, Ver. 38.0

Documents

Work Order: SNC583091
 Unit 2 Fourth 10-Year Interval Pump In-service Testing Basis Document, Ver. 4
 ASME OM Code-2001, Code for operation and Maintenance of Nuclear Power Plants
 TE 895788
 CRs 10099483, 10102968,

Section 1EP6: Drill/Training Evaluation**Documents:**

Emergency Preparedness Crew 3 Drill Controller/Evaluator Package
 Nuclear Power Plant Emergency Notification Form, Message 1, September 23, 2015
 Nuclear Power Plant Emergency Notification Form, Message 2, September 23, 2015
 Nuclear Power Plant Emergency Notification Form, Message 3, September 23, 2015
 Nuclear Power Plant Emergency Notification Form, Message 4, September 23, 2015
 CR 10125866

Procedures:

FNP-1-EEP-3.0, Steam Generator Tube Rupture, Rev. 27
 FNP-1-EEP-0, Reactor Trip or Safety Injection, Rev. 46.1
 NMP-EP-110, Emergency Classification Determination and Initial Action, Ver. 8.1
 NMP-EP-110-GL01, FNP EAL – ICS Threshold Values and Basis, Ver. 8

NMP-EP-112-GL01, Farley Site Specific PAR Development Tools, Ver. 1
 NMP-EP-112, Protective Action Recommendations, Ver. 5

Section 2RS6: Radioactive Gaseous and Liquid Effluent Treatment

Procedures, Guidance Documents, and Manuals

FNP-0-CCP-212, Liquid Waste Release Program, Rev. 22.0
 FNP-0-CCP-213, Gaseous Waste Release Program, Rev 55.0
 FNP-0-CCP-641, Operation of the Plant Vent Stack Monitoring System, Rev. 18.0
 FNP-0-STP-761, Total Dose Determination, Rev. 11.0
 FNP-1-CCP-212, Detailed Guidance for Unit 1 WMT Releases, Rev. 26.1
 FNP-1-CPP-213.1, Gaseous Effluent Radiation Monitoring System Setpoints, Rev. 19.0
 FNP-2-CCP-643, Sampling Points for Potential Radiological Effluents, Rev. 50.1
 FNP-2-CCP-212, Detailed Guidance for Unit 2 WMT Releases, Rev. 29.1
 FNP-1-STP-714, Waste Monitor Tank Surveillance, Rev. 36.1
 FNP-2-STP-760, Gaseous Effluent Dose Rate Determination, Rev. 11.0
 FNP-0-ENV-798, On-Site Ground Water Monitoring Program, Rev. 3.1
 NMP-EN-002, Radiological Groundwater Protection Program, Ver. 6.1
 FNP-1-SOP-50.1, Liquid Waste Processing System Liquid Waste Release From Waste Monitor Tank, Rev. 71.1
 NMP-GM-002, Corrective Action Program, Rev. 13.1
 FNP-FSAR-11, FNP-FSAR-12, Rev. 23

Records and Data Reviewed

Batch Gaseous Waste Release Permit, GWRP# G-20150611-0377-B, Unit 1 CP Batch;
 GWRP# G-20150604-0359-C, Unit 2 PVS (CP in Batch);
 Farley Annual Radioactive Effluent Release Report for 2013
 Farley Annual Radioactive Effluent Release Report for 2014
 Gamma Spectrum Analysis, U2 RE68 FNP-2-STP-728, Sample 07/08/15-015; RE68 PVS FNP-2-STP-728, Sample 07/08/15-016;
 Ground Water Monitoring Program OCDM Measurements Report
 Liquid Waste Release Permit, LWRP# L-20150626-0589-B, Unit 1 Waste Monitor Tank #2;
 LWRP# L-20150610-0547-B, Unit 2 Waste Monitor Tank #1; LWRP# L-20150603-0522-C, Unit 2 Stream Generator Blowdown;
 Licensing Document Change Request, No. 2015024, Farley ODCM v.24.0
 Offsite Dose Calculation Manual for Joseph M. Farley Nuclear Plant, Rev. 24
 Penetration Room Filtration Test, WO# SNC62184, Dated 03/15/12; WO#SNC62182, Dated 03/15/12; WO# SNC82600, Dated 05/18/12; WO# SNC83281, Dated 06/20/12; WO# SNC380063, Dated 05/16/14; WO# SNC380077, Dated 05/16/14; WO# SNC410140, Dated 05/16/14; WO# SNC420558, Dated 07/21/14
 Results of Radiochemistry Cross Check Program, Alabama Power, Farley, 4th Quarter 2013; 4th Quarter 2014
 Solid Radioactive Waste Scaling Factor Determination and Implementation and Waste Classification; Sample ID#U1RCS0714-V, 09/22/14; Sample ID#U2RCS0714-V, 09/22/14;
 Technical Evaluation Quality Records 600968; 601127
 List of Structures, Systems, and Components Important to Groundwater Monitoring
 CRs 593747, 600325, 620433, 670701, 807541, 890730, 10017960, 10003275, 10089229, 10093480

Section 2RS7: Radiological Environmental Monitoring Program (REMP)Procedures and Guidance Documents

Offsite Dose Calculation Manual, Ver. 34
 FNP-0-ENV-791.0, Air Particulates and Iodine Sampling, Ver. 9.0
 FNP-0-ENV-792.0, Environmental OSLD Sampling, Ver. 3.0
 FNP-0-ENV-793.0, River Water Sampling, Ver. 6.0
 NMP-GM-002, Corrective Action Program, Ver. 13.1

Records and Data

2014 Annual Meteorological Report
 2013 Annual Radiological Environmental Operating Report
 2014 Annual Radiological Environmental Operating Report
 2014 Annual Radioactive Effluent Report
 Work Orders SNC93435, 496086, 95939, 95938, 94209, 94478, 480785, 94339, 93410, 477884, 566497, 440735, 518713

CAP Documents

EA/CHEM-2014, Fleet Environmental Affairs/Chemistry Audit
 CNOS 15-079, Corporate Nuclear Oversight Supplier Quality Assurance Audit Report of Georgia Power Corporation Environmental Laboratory
 CRs 679569, 10062765, 10093882, 10004955, 863951, 725301

Section 2RS8: Radioactive Material Processing and TransportationProcedures, Manuals, and Guides

FNP-0-M-30, Process Control Program, Ver. 17
 FNP-0-RCP-1, Schedule Radiation Protection Group Activities, Ver. 42
 FNP-0-RCP-800, Solidifications and Dewatering, Ver. 14.1
 FNP-0-RCP-801, Disposable Demineralizer System Operation (Hittman), Ver. 16
 FNP-0-RCP-803, Operation of The Low Level Radwaste Building, Ver. 23.1
 FNP-0-RCP-812.10, Use of The CNS 8-120B Shipping Cask, Ver. 10
 FNP-0-RCP-845, Operation of the Solidification and Dewatering Facility (SDF), Ver. 20
 FNP-1-SOP-49.0, Solid Waste Processing System, Ver. 26
 NMP-GM-002, Corrective Action Program, Rev. 13.1
 NMP-HP-405, Shipment of Radioactive Waste and Radioactive Material, Ver. 2.2
 NMP-HP-406, Performing Surveys for Shipments of Radioactive Containers, Ver. 1
 NMP-HP-408, Solid Radioactive Waste Scaling Factor Determination and Implementation and Waste Classification, Ver. 2

Shipping Records and Radwaste Data

Farley Annual Radioactive Effluent Release Report for 2014
 LLRWB Radioactive Material Inventory Check, 1/2/15
 LLRWB Survey No. 106506, 6/13/15
 Part 61 Analyses, DAW, 9/22/14
 Part 61 Analyses, U1 RCS Filters, 9/22/14
 Part 61 Analyses, Primary Resin, 7/2/14
 Shipment RWS 14-01, Type B, Resin
 Shipment RWS 14-05, LSA, DAW
 Shipment RWS 15-02, Type B, Resin
 Shipment RWS 15-05, LSA, DAW
 Shipment RWS 15-08, LSA, Resin

CAP Documents

Check-In Self-Assessment Report, Rad Waste Processing 7 Transportation, 2/28/15
 CRs 669562, 688281, 835184, 10020879, 10038424, 10064493, 10065039, 10076384,
 10076390, 10093143

Section 4OA1: Performance Indicator VerificationProcedures:

NMP-AD-034, Key Performance Indicators, Ver. 3.0
 NMP-OS-009, RCS Unidentified Leakage Monitoring Program, Ver. 3.0
 FNP-0-AP-54, Preparation and Reporting of NRC Performance Indicator Data and NRC
 Operating Data, Ver. 15.0
 FNP-0-CCP-22.0, Gross Beta Gamma Analysis of Liquid Samples, Ver. 18.0
 FNP-0-CCP-25.0, DEI-131 Determination, Ver. 15.0
 FNP-0-SOP-0.11, Watch Station Tours and Operator Logs, Ver. 27.0
 FNP-1-STP-9.0, RCS Leakage Test, Ver. 51.2
 FNP-2-STP-9.0, RCS Leakage Test, Ver. 47.2
 FNP-1-CCP-651.0, Routine Sampling of the RCS, Ver. 34.0
 FNP-2-CCP-651.0, Routine Sampling of the RCS, Ver. 40.0
 FNP-1-CCP-42.0, Primary Coolant Liquid Gamma Spectroscopy Analysis, Ver. 26.0
 FNP-2-CCP-42.0, Primary Coolant Liquid Gamma Spectroscopy Analysis, Ver. 26.0
 FNP-0-CCP-31.0, Leak Rate Determination, Ver. 38.0
 FNP-0-AP-54, Preparation and Reporting of NRC Performance Indicator Data and NRC
 Operating Data

Documents:

Selected Unit 1 and Unit 2 Control Room Logs from September 2014 through September 2015
 NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 7
 Farley Key Performance Indicators – August 2015
 LER 2015-001-00, Turbine Driven Auxiliary Feedwater Pump in a Condition Prohibited by Technical
 Specifications due to a Design Issue
 Batch Gaseous Waste Release Permit, GWRP# G-20150707-0444-B
 Liquid Waste Release Permit, LWRP# L-20150708-0616-B

Section 4OA2: Problem Identification and ResolutionProcedures:

FNP-1-ARP-1.6, Main Control Board Annunciator Panel F, Ver. 72.1
 FNP-1-STP-228.1, Nuclear Instrumentation System Source Range Channel N31 Calibration and
 Operational Test, Ver. 35.0
 FNP-0-M-50, Master List of Surveillance Requirements, Ver. 29
 FNP-1-AOP-27.0, Emergency Boration, Ver. 17.1
 FNP-2-AOP-100.0, Instrument Malfunction, Ver. 16
 FNP-1-AOP-30.0, Refueling Accident, Ver. 20
 FNP-0-AOP-41.0, Shutdown Reactivity, Rev. 4
 FNP-1-UOP-4.1, Controlling Procedure for Refueling, Ver. 64

Documents:

White Paper for NI Surveillance Issue, March 29, 2015
 CARs 256483, 256516
 Work Order SNC509099
 CRs10050214, 10047140, 10047250, 10047494

Section 40A3: Follow-up of Events and Notices of Enforcement Discretion

CRs 10065362, 10066407, 10068472, 10072000, 10123867
FNP-1-SOP-21.0, Condensate and Feedwater, Ver. 115.0
Issue Response Team (IRT) F-15-058 checklists
CAR 257247, CAR 257346
TE 921232, TE 923345, TE 924687

Section 40A5: Other Activities

Procedures:

FNP-0-MP-111.3, MPC Fuel Loading Operations, Ver. 23
FNP-2-STP-107.0, SFP and MPC Fuel Assembly Storage Verification, Ver. 20
FNP-0-MP-111.4, MPC Closure Operations, Ver. 22
FNP-0-MP-111.12, Forced Helium Dehydration System Operation, Ver. 7
FNP-2-FHP-5.4, Spent Fuel Assembly Handling Tool, Ver. 21.1

Documents:

Certificate of Compliance, Certificate No. 1014, Amendment 9, dated March 10, 2014
D-506467, ISFSI Dry Cask Storage Transporter Haul Route, Ver. 2
Work Order, SNC621316
Dry Fuel Storage Operations Resource Guide
CRs 10123837, 10123884, 10123431