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

October 29, 2013

Mr. T. A. Lynch
Vice President
Southern Nuclear Operating Company, Inc.
Joseph M. Farley Nuclear Plant
P.O. Drawer 470, BIN B500
Ashford, AL 36312

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 05000348/2013004; AND 05000364/2013004

Dear Mr. Lynch:

On September 30, 2013, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Joseph M. Farley Nuclear Plant, Units 1 and 2. On October 28, 2013, the NRC inspectors discussed the results of this inspection with you and other members of your staff. Inspectors documented the results of this inspection in the enclosed inspection report.

NRC inspectors documented two findings of very low safety significance (Green) in this report. These findings involved violations of NRC requirements. Further, inspectors documented licensee-identified violations which were determined to be of very low safety significance and Severity Level IV 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 the 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 Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at Joseph M. Farley Nuclear Plant.

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 Joseph M. Farley Nuclear Plant.

In accordance with Title 10 of 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 Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/Jannette Worosilo RA for/

Frank Ehrhardt, Branch Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket Nos.: 50-348, 50-364
License No.: NPF-2, NPF-8

Enclosure: Inspection Report 05000348/2013004; and 05000364/2013004
w/Attachment: Supplemental Information

cc: Distribution via Listserv

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Letter to T. A. Lynch from Frank Ehrhardt dated October 29, 2013

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 05000348/2013004; AND 05000364/2013004

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REGION II

Docket Nos.:	05000348, 05000364
License Nos.:	NPF-2, NPF-8
Report No.:	05000348/2013004; and 05000364/2013004
Licensee:	Southern Nuclear Operating Company, Inc.
Facility:	Joseph M. Farley Nuclear Plant, Units 1 and 2
Location:	Columbia, AL
Dates:	July 1, 2013 through September 30, 2013
Inspectors:	P. Niebaum, Senior Resident Inspector J. Sowa, Resident Inspector D. Dumbacher, Senior Resident Inspector (Browns Ferry)
Approved by:	Frank Ehrhardt, Chief Reactor Projects Branch 2 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000348/2013004; and 05000364/2013004; July 1, 2013, through September 30, 2013; Joseph M. Farley Nuclear Plant, Units 1 and 2, Fire Protection, Problem Identification and Resolution

The report covered a three-month period of inspection by resident inspectors. There was one NRC identified and one self-revealing violation identified and 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 June 2, 2011. The cross-cutting aspects are determined using IMC 0310, "Components Within The Cross-Cutting Areas" dated October 28, 2011. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy dated July 9, 2013. The NRC's program for overseeing the safe operations of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process" revision 4.

Cornerstone: Initiating Events

- Green. The NRC identified a non-cited violation (NCV) of Technical Specification (TS) 5.4.1.c, "Fire Protection Program Implementation," for failing to properly control combustible material in fire risk-significant areas without a continuous fire watch as required by FNP-0-SOP-0.4, "Fire Protection Program Administration Procedure" and FNP-0-ACP-35.2, "Flammable Material and Combustible Material Control." This issue was captured in the licensee's corrective action program (CAP) as condition reports (CRs) 669286, 669554 and 686872. The licensee immediately removed the combustible materials from the fire risk significant areas. This violation is applicable to Unit 2.

  Storing transient combustibles in fire risk significant areas without establishing a continuous roving fire watch was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the protection against external factors (fire) attribute of the initiating events cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown and power operations. Also, the finding was similar to example 4.k of Inspection Manual Chapter (IMC) 0612, Appendix E, for identified transient combustibles in a combustible free zone required for separation of redundant trains. The inspectors evaluated this finding using the NRC's SDP and IMC 0609 Attachment 4, "Initial Characterization of Findings." Because the finding involved a failure to adequately implement fire prevention and administrative controls for transient combustible materials, an evaluation using IMC 0609 Appendix F, Attachment 1, "Fire Protection SDP Worksheet" was required. The finding screened to Green because it would not affect the ability to reach and maintain safe shutdown conditions due to the amount of combustibles identified combined with an hourly fire watch previously established in those areas. The cause of this finding was directly related to the cross-cutting aspect of procedural compliance in the work practices component of the human performance area because plant staff failed to comply with written procedures and posted instructions regarding storage of combustible materials in fire risk significant areas [H.4(b)]. (Section 1R05)

Cornerstone: Mitigating Systems

Green. A self-revealing NCV of TS 5.4.1.c, "Fire Protection Program Implementation," was identified, because the licensee failed to implement written procedures to cover activities of the Fire Protection Program as documented in Appendix 9B of the updated final safety analysis report (UFSAR). As a result, an inadvertent carbon dioxide (CO2) discharge occurred on August 3, 2013 which required evacuation of the Unit 1 auxiliary building and an Alert Emergency declaration. The licensee completed the low pressure (LP) CO2 system maintenance, replaced the hazard pilot valve and verified it was left in the correct position. Performance of licensee procedure FNP-0-FSP-57.0 was planned for completion per technical evaluation (TE) 704305. This issue was captured in the licensee's CAP as CR 682967. This violation is applicable to Unit 1.

Failure to verify proper operation of hazard pilot valve N1V43G076 following maintenance as required in work order (WO) SNC 54604 was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the protection against external events (fire) 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 to prevent undesirable consequences. Specifically, the inadvertent discharge of CO2 into the Unit 1 auxiliary building resulted in an atmosphere that was determined to be an immediate danger to life and health (IDLH). Respirators would be required in this area which would cause an undue burden on the operators' ability to respond to events requiring manual operator actions. The inspectors evaluated this finding using the NRC's SDP and IMC 0609 Attachment 4, "Initial Characterization of Findings." Because the finding involved a fixed fire protection system, an evaluation using IMC 0609 Appendix F, Attachment 1, "Fire Protection SDP Worksheet," was required. The finding screened to Green because it would not affect the ability to reach and maintain safe shutdown conditions. The inspectors concluded that the time critical operator actions needed to support safe shutdown could be achieved with the use of respirators and operators are properly trained and qualified to use respirators. The cause of this finding was directly related to the cross-cutting aspect of maintenance scheduling in the work control component of the human performance area, because the licensee deferred the performance of procedure FNP-0-FSP-57.0 which would have identified the hazard pilot valve was partially open following completion of maintenance on the valve. [H.3(b)]. (Section 4OA2.2)

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 CAP. 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 100 percent rated thermal power (RTP). On September 13, Unit 1 began coasting down as it progressed toward the Unit 1 refueling outage. On September 29, Unit 1 was at 84 percent RTP and ramped down to approximately 15 percent RTP for the reactor shutdown. At the end of the report period, Unit 1 was shutdown for a refueling outage.

Unit 2 maintained approximately 100 percent RTP during the report period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

.1 Seasonal Extreme Weather Conditions

The inspectors conducted a detailed review of the station's adverse weather procedures written for extreme high temperatures. The inspectors verified that weather related equipment deficiencies identified during the previous year had been corrected prior to the onset of seasonal extremes. The inspectors evaluated the licensee's implementation of adverse weather preparation procedures and compensatory measures before the onset of seasonal extreme weather conditions. Documents reviewed are listed in the Attachment. The inspectors evaluated the following risk-significant systems:

- Unit 1 Service Water System
- Unit 2 Service Water System

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

Partial Walk-Down:

The inspectors verified that critical portions of selected risk-significant systems were correctly aligned. The inspectors selected systems for assessment because they were a redundant or backup system/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. The

inspectors verified that critical portions of the selected systems were correctly aligned by performing partial walkdowns. Documents reviewed are listed in the Attachment. The inspectors selected the following two system/trains to inspect:

- U2 alignment of "C" battery charger to "B" train of 125VDC
- 1-2A emergency diesel generator (EDG) while "2B" EDG out of service for maintenance

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05AQ)

a. Inspection Scope

Quarterly Inspection

The inspectors evaluated the adequacy of selected fire plans by comparing the fire plans to the defined hazards and defense-in-depth features specified in the fire protection program. In evaluating the fire plans, the inspectors assessed the following items: 1) control of transient combustibles and ignition sources; 2) fire detection systems; 3) water-based fire suppression systems; 4) gaseous fire suppression systems; 5) manual firefighting equipment and capability; 6) passive fire protection features; 7) compensatory measures and fire watches; and 8) 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 2, component cooling water (CCW) heat exchanger and pump room, fire zone 6
- Unit 2, corridor to hot shutdown panels, 121', fire zone 20
- Unit 1, high head safety injection pump rooms, fire zone 5
- Unit 1, 4160V switchgear room, fire zone 21
- Unit 2, 4160V switchgear room, fire zone 21

b. Findings

Introduction: The inspectors identified a Green NCV of TS 5.4.1.c, "Fire Protection Program Implementation," for failing to properly control combustible material in fire risk significant areas without a continuous fire watch as required by FNP-0-SOP-0.4, "Fire Protection Program Administration Procedure" and FNP-0-ACP-35.2, "Flammable Material and Combustible Material Control."

Description: On July 10 and August 13, 2013, the inspectors identified combustible materials left unattended in fire risk significant areas of the Unit 2 auxiliary building in the CCW pump and heat exchanger room (room 2185) and the corridor near the 125VDC battery rooms on the 121-foot elevation (room 2210) respectively. These areas were designated fire risk significant areas in accordance with FNP-0-ACP-35.2, "Flammable

Material and Combustible Material Control." Signs were posted in those areas that stated "Fire Risk Significant Area." Also, the floors in these areas were painted red and stenciled "No Combustible Storage Area." For room 2185, the fire risk significant area was designated to maintain separation between the "A" and "B" trains of the CCW pumps and cable raceways. For room 2210, the fire risk significant area was designated to maintain separation between the "A" and "B" trains of safe shutdown (SSD) equipment cables. Licensee procedures FNP-0-ACP-35.2, "Flammable Material and Combustible Material Control," Section 7.1.1, and FNP-0-SOP-0.4, "Fire Protection Program Administration," Section 5.1 stated no transient flammable or combustible material may be stored or left unattended in the fire risk significant areas without a continuous roving fire watch. The inspectors did not identify a continuous roving fire watch in these areas at the time the combustible materials were identified. The materials consisted of a two oil absorbent rags, a small plastic bag, a nylon rope and various small paper items. The inspectors notified the Unit 2 shift supervisor, who promptly had the items removed from the associated areas. This issue was captured in the licensee's CAP as CRs 669286, 669554 and 686872. The inspectors recognized that an hourly fire watch had already been established in this area since June 30, 2011, as a compensatory measure for a previous unrelated fire impairment.

Analysis: Storing transient combustibles in fire risk significant areas without establishing a continuous roving fire watch was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the protection against external factors (fire) attribute of the initiating events cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown and power operations. Also, the finding was similar to example 4.k of IMC 0612, Appendix E, for identified transient combustibles in a combustible free zone required for separation of redundant trains. The inspectors evaluated this finding using the NRC's SDP and IMC 0609 Attachment 4, "Initial Characterization of Findings." Because the finding involved a failure to adequately implement fire prevention and administrative controls for transient combustible materials, an evaluation using IMC 0609 Appendix F, Attachment 1, "Fire Protection SDP Worksheet," was required. The finding screened to Green because it would not affect the ability to reach and maintain safe shutdown conditions due to the amount of combustibles identified combined with an hourly fire watch previously established in those areas. The cause this finding was directly related to the cross-cutting aspect of procedural compliance in the work practices component of the human performance area, because plant staff failed to comply with written procedures and posted instructions regarding storage of combustible materials in fire risk significant areas [H.4(b)].

Enforcement: Technical Specification 5.4.1.c required that written procedures for the fire protection program shall be established and implemented. Licensee procedures FNP-0-ACP-35.2, "Flammable Material and Combustible Material Control," Section 7.1.1, and FNP-0-SOP-0.4, "Fire Protection Program Administration," Section 5.1 stated no transient flammable or combustible material may be stored or left unattended in the fire risk significant areas without a continuous roving fire watch. Contrary to the above, on July 10 and August 13, 2013, the inspectors identified combustible materials left unattended in fire risk significant areas of the Unit 2 auxiliary building in the component

cooling water pump and heat exchanger room (room 2185) and the corridor near the 125VDC battery rooms on the 121-foot elevation (room 2210) respectively without a continuous fire watch established. The licensee promptly removed the transient combustibles from the restricted areas. Because this violation was of very low safety significance and it was entered into the licensee's CAP as CRs 669286, 669554 and 686872, this violation is being treated as an NCV, consistent with the NRC Enforcement Policy. This NCV is identified as NCV 05000364/2013004-01, Failure to Control Transient Combustible Materials in the Unit 2 Auxiliary Building.

1R06 Flood Protection Measures (71111.06)

.1 Internal Flooding

a. Inspection Scope

The inspectors reviewed related flood analysis documents and walked down the areas listed below that contain risk significant structures, systems, and components susceptible to flooding. The inspectors verified plant design features and plant procedures for flood mitigation were consistent with design requirements and internal flooding analysis assumptions. The inspectors also assessed the condition of flood protection barriers and drain systems. In addition, the inspectors verified the licensee was identifying and properly addressing issues using their corrective action program. Documents reviewed are listed in the Attachment.

- Unit 1 service water intake structure (SWIS)
- Unit 2 service water intake structure (SWIS)

b. Findings

No findings were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

.1 Annual Review

The inspectors verified the readiness and availability of the "1C" EDG jacket water heat exchanger to perform its design function by observing the licensee's heat exchanger inspections and by verifying critical operating parameters through direct observation and by reviewing operating data. Additionally, the inspectors verified that the licensee had entered any significant heat exchanger performance problems into their corrective action program and that the licensee's corrective actions were appropriate. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope:

.1 Resident Inspector Quarterly Review of Licensed Operator Requalification

The inspectors observed a simulator scenario conducted for training of an operating crew for requalification on August 19, 2013. The inspectors assessed licensed operator performance, the ability of the licensee to administer the scenario and evaluate the operators, the quality of any post-scenario critique, any follow-up actions taken by the facility licensee, and the performance of the simulator. Documents reviewed are listed in the Attachment.

.2 Resident Inspector Quarterly Review (Licensed Operator Performance):

The inspectors observed licensed operator performance in the main control room during a Unit 1 Alert Emergency Action Level Declaration on August 3, 2013. Inspectors observed licensed operator performance to assess 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

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 issue listed below in order to verify the licensee appropriately addressed equipment problems within the scope of the Maintenance Rule (10 CFR 50.65). The inspectors reviewed procedures and records in order 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 1, CCW Q1P17HV3096A and Q1P17HV3096B exceeding reliability performance criteria

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors reviewed the three maintenance activities listed below to verity 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 2, July 12, 2013, YELLOW risk condition while the "2B" spent fuel pool cooling pump is out of service for planned maintenance and corrective maintenance on the rod control system
- Unit 1, July 29, 2013, planned YELLOW risk condition for corrective maintenance on the "1B" service water (SW) pump and preventive maintenance on the "1A" residual heat removal (RHR) pump
- Unit 2, August 20, 2013, YELLOW risk condition while "2B" motor driven auxiliary feedwater (MDAFW) pump out of service for surveillance testing

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.

- CR 677528, "1B" SW strainer leakage
- CR 682500, "1C" CCW heat exchanger outlet tube side drain clogged with clams
- CR 690266, "2B" motor driven auxiliary feedwater pump quarterly in-service testing acceptance criteria not met
- CR 688618, "2A" main steam isolation valve (MSIV) bypass valve (Q2N11V003A) broken yoke
- CR 694503, Bistable card for Unit 2 containment pressure high-3 function
- CR 700201, "1B" EDG speed signal generator

b. Findings

No findings were identified.

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. 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.

Permanent Plant Modifications

- SNC331641, Replace "2B" and "2C" charging pump main control board (MCB) hand switches Q2E21HS6504B, C, and D

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 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. 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; and 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.

- FNP-0-SOP-38.0-1C, "1C" Diesel Generator and Auxiliaries, Slow Speed Start, following maintenance on "1C" EDG jacket water heat exchanger
- FNP-2-SOP-41.0, Control Rod Drive Position Indication System following troubleshooting and repair of system
- FNP-1-STP-24.1, Service Water Pump "1A", "1B", and "1C" In-service Test, following replacement of "1B" Service Water Pump
- FNP-0-IMP-410.2, United Controls DP Switches (Calibration) following maintenance on differential pressure switches associated with service water to turbine building motor operated valves
- SNC465294, preventive maintenance (eddy-current testing) performed on the "1B" CCW heat exchanger
- SNC516944, corrective maintenance for spurious containment pressure high-3 and channel 2 bistable alarm

b. Findings

No findings were identified.

1R20 Refueling and Other Outage Activities (71111.20)

.1 Unit 1 Scheduled Refueling Outage

a. Inspection Scope

The inspectors evaluated the outage activities listed below for the Unit 1 refueling outage that began on Sept. 29, 2013. The inspectors verified that the licensee: 1) considered risk in developing the outage schedule; 2) controlled plant configuration in accordance with administrative risk reduction methodologies; 3) developed mitigation strategies for loss of key safety functions; and 4) adhered to operating license and technical specification requirements.

- Outage planning
- Outage risk control
- Reactor shutdown and cooldown

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the four 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-2-STP-80.18, Diesel Generator "1C" 1000 KW Load Rejection Test
- FNP-2-STP-5.0, Full Length Control Rod Operability Test
- FNP-2-STP-80.1, Diesel Generator 2B Operability Test

In-Service Tests (IST)

- FNP-2-STP-22.2, 2B Auxiliary Feedwater Pump Quarterly In-service Test

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness (EP)

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed the emergency preparedness drill conducted on September 11, 2013. 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 inspection 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.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors reviewed a sample of the performance indicator (PI) data, submitted by the licensee, for the PIs listed below. To verify the accuracy and completeness of the data reported for the station, the inspectors reviewed plant records compiled between September 2012 and September 2013. The inspections verified that the PI data complied with guidance contained in NEI 99-02, "Regulatory Assessment Indicator Guideline," and licensee procedures. The inspectors also confirmed the PIs were calculated correctly. 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: Barrier Integrity

- Reactor Coolant System Specific Activity
- Reactor Coolant System Leak Rate

Cornerstone: Mitigating Systems

- Safety System Functional Failures

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

.1 Routine Review

The inspectors performed a daily screening of 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 daily condition reports, attended screening meetings, or accessed the licensee's computerized corrective action database.

.2 Annual Follow-up of Selected Samples

a. Inspection Scope

The inspectors selected CR 682005, "Inadvertent discharge of CO2 results in Alert Emergency on August 3, 2013," for detailed review. 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/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 and Observations

Introduction: A self-revealing Green NCV of TS 5.4.1.c, "Fire Protection Program Implementation," was identified for the licensee's failure to implement written procedures to cover activities of the fire protection program as documented in Appendix 9B of the UFSAR. As a result, an inadvertent CO2 discharge occurred on August 3, 2013 which required evacuation of the Unit 1 and 2 auxiliary buildings and an Alert Emergency declaration.

Description: During maintenance activities on the LP CO2 fire protection system on August 3, 2013, an inadvertent discharge of CO2 occurred on the 100-ft elevation of the Unit 1 auxiliary building. The licensee declared an Alert Emergency and evacuated the Units 1 and 2 auxiliary buildings. The Alert was declared in accordance with emergency action level (EAL) HA3 - release of toxic, asphyxiant, or flammable gases within vital areas which jeopardizes operation of systems required to maintain safe operations or establish or maintain safe shutdown. The atmosphere in the unit 1 auxiliary building was determined to be an immediate danger to life and health (IDLH). Any personnel entry into this area would require the use of respirators which would cause an undue burden on operators in responding to events requiring manual operator actions.

The licensee determined that electro-mechanical hazard pilot valve N1V43G076 was most likely left partially open following its replacement on May 20, 2011 performed under WO SNC 54604. The hazard pilot valve N1V43G076 provides LP CO2 fire suppression into the "1B" charging pump B-Train 4kV disconnect switch and is located on the 100-foot elevation of the Unit 1 auxiliary building. It is normally deenergized and maintained in the closed position. Upon receipt of a fire protection signal, the hazard pilot valve is energized and opens to provide LP CO2 into the disconnect switch to extinguish a fire. WO SNC 54604 required returning the LP CO2 system to service and verify no leaks and proper operation of the new hazard pilot valve, N143G076. The WO step

referenced procedure FNP-0-FSP-57.0, “Auxiliary Building Low Pressure CO2 Systems and Hose Reels,” which, if implemented correctly, would have identified that the hazard pilot valve was left in the open position. This condition has existed since the hazard pilot valve was replaced on May 20, 2011. The licensee failed to implement and maintain in effect all provisions of the fire protection program as documented in Appendix 9B of the UFSAR. Specifically, Section 9B.6.2, “Testing Program,” required in part that following repair or replacement to fire protection systems, sufficient testing is performed to demonstrate that the system or equipment will perform satisfactorily in service. This issue was captured in the licensee’s CAP as CR 682967. The licensee completed the LP CO2 system maintenance, replaced the hazard pilot valve and verified it was left in the correct position. Performance of licensee procedure FNP-0-FSP-57.0 was planned for completion per technical evaluation (TE) 704305.

Analysis: Failure to verify proper operation of hazard pilot valve N1V43G076 following maintenance as required in WO SNC 54604 was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the protection against external events (fire) 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 to prevent undesirable consequences. Specifically, the inadvertent discharge of CO2 into the Unit 1 auxiliary building caused the atmosphere to be an IDLH. Respirators would be required in this area which would cause an undue burden on operators in responding to events requiring manual operator actions. The inspectors evaluated this finding using the NRC’s SDP and IMC 0609 Attachment 4, “Initial Characterization of Findings.” Because the finding involved a fixed fire protection system, an evaluation using IMC 0609 Appendix F, Attachment 1, “Fire Protection SDP Worksheet,” was required. The finding screened to Green because it would not affect the ability to reach and maintain safe shutdown conditions. The inspectors concluded that all time-critical operator actions needed to support safe shutdown could be achieved with the use of respirators and operators are properly trained and qualified to use respirators. The cause of this finding was directly related to the cross-cutting aspect of maintenance scheduling in the work control component of the human performance area, because the licensee deferred the performance of procedure FNP-0-FSP-57.0 which would have identified the hazard pilot valve was partially open following completion of maintenance on the valve. [H.3(b)].

Enforcement: Technical Specifications 5.4.1.c, “Fire Protection Program Implementation,” required in part that written procedures be implemented covering activities of the fire protection program. The licensee’s fire protection program was described in Appendix 9B of the UFSAR. Section 9B.6.2, “Testing Program,” required in part that following repair or replacement to fire protection systems, sufficient testing is performed to demonstrate that the system or equipment will perform satisfactorily in service. Contrary to the above requirements, the licensee failed to implement a written procedure covering activities of the fire protection program. Specifically, work order SNC 54604, required the LP CO2 system to be placed in service and verification of no leaks and proper operation of hazard pilot valve N1V43G076. The WO step referenced procedure FNP-0-FSP-57.0, “Auxiliary Building Low Pressure CO2 Systems and Hose Reels,” which, if implemented correctly, would have identified that the hazard pilot valve was left in the wrong position. This testing was not performed following completion of

the valve replacement. The licensee completed the LP CO2 system maintenance, replaced the hazard pilot valve and verified it was left in the correct position. Performance of licensee procedure FNP-0-FSP-57.0 was planned for completion per technical evaluation (TE) 704305. Because this violation was of very low safety significance and it was entered into the licensee's CAP as CR 682967, this violation is being treated as an NCV, consistent with the NRC Enforcement Policy. This NCV is identified as NCV 05000348/2013004-02, Failure to Implement Fire Protection Program Requirements.

4OA3 Follow-up of Events

.1 (Closed) Licensee Event Reports (LERs) 05000364/2013-001-00 and -01, 2C Steam Generator Flow Transmitter Inoperable Longer Than Allowed by Technical Specifications

a. Inspection Scope

The inspectors reviewed the LERs described above, the associated causal determination (CAR 207260) and discussed the issue with the applicable licensee staff. The licensee determined the direct cause of the inoperable steam flow transmitter was equipment aging which resulted in setpoint drift. The flow transmitter was recalibrated to within the allowable setpoint value and returned to service on June 1, 2013.

b. Findings

The enforcement aspects of this finding are discussed in Section 4OA7.

.2 (Closed) Licensee Event Reports (LERs) 05000364/2012-001-00 and -01, TDAFW Orifice Plate Thickness Results in Condition Prohibited by Technical Specifications

a. Inspection Scope

The inspectors reviewed the LERs described above, the associated casual determination (CAR 195856) and discussed the issue with the applicable licensee staff. The licensee determined the cause of the inoperable Unit 2 TDAFW pump was due to 1/8-inch thick flow orifice plates that were installed during original plant construction when 1/2 inch thick orifice plates were required. The TDAFW pump was restored to a conforming condition when the correct sized orifice plates where installed during the Unit 2 refueling outage in Spring 2013.

b. Findings

The enforcement aspects of this finding are discussed in Section 4OA7.

.3 Alert Emergency declaration due to inadvertent discharge of CO2 into the Unit 1 auxiliary building on August 3, 2013

a. Inspection Scope

The inspectors responded to the site following the notification of the Alert Emergency. The inspectors were positioned in the main control room and the technical support center to obtain understanding of plant status, equipment/personnel performance and plant management decisions. The inspectors reviewed the licensee's emergency notifications and confirmed that the licensee properly classified the event in accordance with emergency action level procedures and made timely notifications to NRC and state/county governments. The inspectors conducted the follow-up inspection in accordance with NRC inspection procedure 71152, Problem Identification and Resolution (Section 4OA2.2). Documents reviewed are listed in the Attachment.

b. Findings

The enforcement aspects of this finding are discussed in Section 4OA2.

4OA5 Other Activities

.1 Quarterly Resident Inspector Observations of Security Personnel and Activities

a. Inspection Scope

During the inspection period, the inspectors conducted observations of security force personnel and activities to ensure that the activities were consistent with licensee security procedures and regulatory requirements relating to nuclear plant security. These observations took place during both normal and off-normal plant working hours.

These quarterly resident inspector observations of security force personnel and activities did not constitute any additional inspection samples. Rather, they were considered an integral part of the inspectors' normal plant status review and inspection activities.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

The NRC presented the inspection results to Tom A. Lynch, Site Vice-president and members of the licensee's staff on October 28, 2013. The staff acknowledged the results. The NRC confirmed that any proprietary information that was provided during the inspection period was properly controlled or returned.

4OA7 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 a Non-Cited Violations.

- Technical Specification 3.3.2, "Engineered Safety Feature Actuation System (ESFAS) Instrumentation," required the ESFAS instrumentation for each function in Table 3.3.2-1 to be operable. Table 3.3.2-1, Function 4.e., "Steam Line Isolation" required two (2) channels per steam line and is applicable in Mode 1 and Modes 2 and 3, except when one main steam isolation valve (MSIV) is closed in each steam line. When one channel is inoperable Condition D is entered which required placing the inoperable channel in trip within 72 hours. Contrary to the above between November 29, 2011, through January 4, 2012, and again on May 14, 2013, through May 29, 2013, a "2C" steam generator steam flow transmitter (FT-494) was found to have a trip setpoint above the TS required value of 110.3 percent. Action was not taken to either restore the flow transmitter to operable status or place the channel in trip within 72 hours until Operations staff was made aware of the issue on January 4, 2012, for the first occurrence and again on May 29, 2013, for the second occurrence. Subsequently, FT-494 was recalibrated to within the TS allowable value and placed back in service on January 7, 2012, and June 1, 2013. These issues were entered in the licensee's CAP as CRs 389633 and 646824. The finding screened to Green, very low safety significance, in accordance with the NRC's SDP because it did not represent an actual loss of function of a single train for greater than its TS allowed outage time. Redundant instruments to the main steam isolation circuitry were available to actuate the main steam isolation function at the required setpoint. This violation is associated with Unit 2 LERs 05000364/2013-001-00 and -01.

- 10 CFR 50.73(a)(2)(i)(B), Licensee Event Report System required an LER to be submitted within sixty (60) days after the discovery of a condition prohibited by TS. Contrary to the above, the licensee failed to submit a required LER within 60 days following a condition prohibited by TS when "2C" steam flow transmitter, FT-494 was inoperable from November 29, 2011 through January 4, 2012. The licensee failed to recognize this condition was reportable until May 29, 2013 during the review of the second occurrence of inoperability of the "2C" steam flow transmitter. The licensee captured this issue in the CAP as CR 675409 and submitted LERs 05000364/2013-001-00 and -01. Since this finding impacted the ability of the NRC to perform its regulatory oversight function, it was evaluated using the traditional enforcement process. The inspectors concluded that failure to make the required LER was a Severity Level IV violation in accordance with Section 6.9(d) of the NRC's Enforcement Policy. This violation is associated with Unit 2 LERs 05000364/2013-001-00 and -01.

- 10 CFR 50 Appendix B, Criterion III, "Design Control," required in part that design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design. Contrary to the above, the licensee failed to implement a design change for the TDAFW pump flow orifice plates that would have installed the correct sized (1/2-inch thick) orifice plates in the TDAFW pump discharge headers during original plant construction of Unit 2. The licensee captured this issue into the CAP as CR 515901. The significance of this

finding was screened using IMC 0609, Appendix A, “Significance Determination Process (SDP) for Findings at Power” dated July 1, 2012. The finding required a detailed risk evaluation by a senior reactor analyst (SRA) because it represented an actual loss of function of at least a single train for greater than its TS allowed outage time. Consequently a detailed risk evaluation was performed by an SRA. The bounding analysis showed that the change in core damage frequency was less than 1E-6, and should therefore be treated as a Green finding. The main drivers for the low risk result were; the low likelihood of events which would reveal the performance deficiency and the lack of common cause applicability to other AFW flow orifices. This violation is associated with Unit 2 LERs 05000364/2012-001-00 and -01.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee
B. Arens, Licensing Supervisor
H. Cooper, Engineering Programs Supervisor
C. Gayheart, Plant Manager
D. Hobson, Shift Operations Manager
J. Horn, Regulatory Affairs Manager
J. Hutto, Engineering Director
T. Lynch, Site Vice President
R. Martin, Engineering Programs Manager
B. Reed, Nuclear Operations Training Supervisor
D. Reed, Operations Support Manager
L. Riley, Performance Improvement
B. Taylor, Performance Improvement Supervisor
C. Thornell, Operations Director
C. Westberry, Engineering Programs Supervisor

NRC personnel
Frank Ehrhardt, Chief, Branch 2, Division of Reactor Projects

LIST OF ITEMS OPENED AND CLOSED

Opened and Closed

05000364/2013004-01	NCV	Failure to Control Transient Combustible Materials in the Unit 2 Auxiliary Building (Section 1R05)
05000348/2013004-02	NCV	Failure to Implement Fire Protection Program Requirements (Section 4OA2)

Opened

None

Closed

05000364/2013-001-00	LER	2C Steam Generator Flow Transmitter Inoperable Longer Than Allowed by Technical Specifications (Section 4OA3.1)
05000364/2013-001-01	LER	2C Steam Generator Flow Transmitter Inoperable Longer Than Allowed by Technical Specifications (Section 4OA3.1)

05000364/2012-001-00	LER	TDAFW Orifice Plate Thickness Results in Condition Prohibited by Technical Specifications (Section 4OA3.2)
05000364/2012-001-01	LER	TDAFW Orifice Plate Thickness Results in Condition Prohibited by Technical Specifications (Section 4OA3.2)

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection
Procedures:
FNP-0-AOP-21, Severe Weather, Version 37.0

Section 1R04: Equipment Alignment
Condition Reports:
673277

Drawings:
D-207133, Interlock Schematic for Battery Charger 2C, Rev. 1
D-207082, Single Line DC Distribution System 2A, Rev. 3
D-207083, Single Line DC Distribution System 2B, Rev. 31

Procedures:
FNP-2-STP-914.0, Auxiliary Battery Charger Load Test, Ver. 23
FNP-2-SOP-37.1, 125 Volt DC Aux Building Distribution System, Ver. 52.3

Section 1R05: Fire Protection Annual/Quarterly
Condition Reports:
669286, 669554, 686872

Documents:
A-506301, 10CFR50 Appendix R Engineering Evaluations, Ver. 5.0
Fire Protection Administrative LCO Sheet for LCO: 2-2011-0128

Drawings:
A-509018, Fire Zone Data Sheet 2, Rev. 15
A-509018, Fire Zone Data Sheet 3, Rev. 3
A-509018, Fire Zone Data Sheet 20, Rev. 16
A-509018, Fire Zone Data Sheet 20A, Rev. 15
A-509018, Fire Zone Data Sheet 12, Rev. 4
A-509018, Fire Zone Data Sheet 12A, Rev. 2
A-508650, Fire Zone Data Sheet 10, Rev 3

A-508650, Fire Zone Data Sheet 16, Rev 4
A 509018, Fire Zone Data Sheet 18, Rev 11

Procedures:
FNP-0-SOP-0.4, Fire Protection Program Administration Procedure, Ver. 85.3
FNP-0-ACP-35.2, Flammable Material and Combustible Material Control, Ver. 14.3

Section 1R06: Flood Protection Measures (71111.06)
Condition Reports:
677528

Procedures:
FNP-1-ARP-1.1, Main Control Board Annunciator Panel A, Ver. 53.2
FNP-1-AOP-10.0, Loss of Service Water, Ver. 16.0

Documents:
Units 1 and 2 Internal Flooding Notebook PRA Model Rev. 9, March 2010

Drawings:
D-170179, Piping - Service Water Pumps Discharge, Ver. 9.0
D-170176, Piping – Service Water Intake Structure, Ver. 28.0

Section 1R07: Heat Sink Performance
Condition Reports:
667060

Work Orders:
505040

Other Documents:
PD 041121.02 – Eddy Current Inspection, Diesel Generator 1C JWC, Plant Farley Unit No 1 & Unit No 2

Section 1R11: Licensed Operator Requalification Program
Documents:
Scenario #4, Operations Training Simulator Exam Scenario, LOCT 12-14 Segment 8 conducted on August 19, 2013
OPS-56400A, Licensed Operator Continuing Training Student Handbook

Procedures:
FNP-0-TCP-17.3, Licensed Operator Continuing Training Program Administration, Ver. 36.0
FNP-0-TCP-17.6, Simulator Training Evaluation / Documentation, Ver. 30
NMP-OS-007, Conduct of Operations, Ver. 9.1

Section 1R12: Maintenance Effectiveness
Technical Evaluations:
639644

Documents:
DCP SNC 66497
Unit CCW System Health Report Q2, 2013

Work Orders:
386829

Section 1R13: Maintenance Risk Assessments and Emergent Work Evaluation

Procedures:
FNP-0-ACP-52.3, Mode 1, 2 & 3 Risk Assessment, Ver. 9.0
NMP-DP-001, Operational Risk Awareness, Ver. 14.1
NMP-GM-006, Work Management, Ver. 12.5
NMP-MA-007-001, SNC Rigging and Lifting Program Planning and Evaluation, Ver. 9.0

Documents:
Unit 2 Equipment Outage Forecast, July 6 – July 12, Revs. 0, 1, 2 and 3
Unit 1 Equipment Outage Forecast, July 27 – August 2
EOOS Operator's risk reports, July 29, 2013

Condition Reports:
CR 672645, Rod Control Logic Cabinet inclusion into EOOS

Work Orders:
SNC505190

Section 1R15: Operability Determinations and Functionality Assessments

Condition Reports:
677528, 678536, 681675, 682500, 690377, 690266, 688618, 694503, 700201, 694503

Drawings:
D-205033, Main Steam and Auxiliary Steam Systems, Ver. 38.0
U-210885, SSPS Schematic Diagram Containment Pressure, Ver. 0
U-198640, SSPS Schematic Diagram Containment Pressure, Ver. 0

Documents:
Joseph M. Farley Nuclear Plant IST Program Component Basis Information – Unit 2
ASME OM Code-2001, Code for Operation and Maintenance of Nuclear Power Plants

Procedures:
NMP-AD-012, Operability Determinations and Functionality Assessments, Ver. 12.1
FNP-2-STP-45.7, MSIV and Bypass Valves Inservice Test, Ver. 24.0

Technical Evaluations:
677928, Immediate Determination of Operability for 1B SW strainer, Ver. 1.0
677928, Immediate Determination of Operability for 1B SW strainer, Ver. 2.0
688628, Immediate Determination of Operability for 2A MSIV bypass valve, Ver. 1.0
OD 13-01, Prompt Determination of Operability for 2A MSIV bypass valve, Rev. 1.0

700438, Immediate Determination of Operability for 1B EDG with Speed Signal Generator Annunciator Alarm 56 in, Ver 1.0

Work Orders:
465294

Other
Main Control Room (MCR) Logs, dated August 29, 2013

Section 1R18: Plant Modifications
Condition Reports:
2010116613, 2010103437, 589394, 70765

Documents:
U734352
DOEJ-FDSNC331641-C001, "Seismic Evaluation for Addition of KTK-R-5 Fuses and BM6032SQ Fuse Holders (Cooper Bussman) to Main Control Board Termination Cabinets for DCP SNC331641 for Plant Farley

Drawings:
D207182, High Head Safety Injection Pump 2B – Train B, Sheet 1, Version 12.0
D207180, High Head Safety Injection Pump 2C, Sheet 1, Version 9.0
D207181, High Head Safety Injection Pump 2B, Train A, Sheet 1, Version 12.0

Work Orders:
331641

Section 1R19: Post Maintenance Testing
Condition Reports:
667037, 666444, 667613, 667308, 667067, 666839, 670648, 684884, 684960, 688007, 687895, 694503, 695348,

Drawings:
U-207599, Schematic Diagram – Containment Pressure Protection II, Ver. 1.0
U-210885, SSPS Schematic Diagram Containment Pressure, Ver. 0
U-198640, SSPS Schematic Diagram Containment Pressure, Ver. 0

Procedures:
FNP-0-SOP-38.0-1C, 1C Diesel Generator and Auxiliaries, Version 9.0
NMP-MA-014-001, Post Maintenance Testing Guideline, Ver. 3.0
NMP-MA-014, Post Maintenance Testing, Ver. 1.1
FNP-2-SOP-41.0, Control Rod Drive and Position Indication System, Ver. 36.0
FNP-1-STP-24.1, Service Water Pump 1A, 1B, and 1C Inservice Test, Ver 79.0
FNP-0-IMP-410.2, United Controls DP Switches, Ver 3.0
FNP-2-STP-33.0B, Solid State Protection System Train B Operability Test, Ver 52.0
FNP-2-STP-33.0A, Solid State Protection System Train A Operability Test, Ver 53.0
FNP-2-ARP-1.5, Annunciator Response Procedure, Panel E, Ver. 49.1

Technical Evaluations:
684890, 684892

Work Orders:
SNC505881, 505241, 504746, 505190, 50795, 514019, 465294, 516944,

Documents:
WCAP-15360-P, Westinghouse Rod Control System Corrective Maintenance Guide, Rev. 5
Rtype A4.51 document "1B Service Water Pump," dated 8/8/2013
Joseph M. Farley Nuclear Plant Unit 1 Fourth Ten Year Interval Inservice Testing Basis Document, Ver. 3.0

Other:
Main Control Room (MCR) Logs

Section 1R20: Refueling and Other Outage Activities

Documents:
Daily STORM reports
Main Control Room Logs

Procedures:
FNP-1-UOP-2.4, Planned Reactor Shutdown, Ver. 13.2
FNP-0-UOP-4.0 General Outage Operations Guidance, Ver. 47.0
FNP-1-STP-35.0, Reactor Coolant System Pressure and Temperature/Pressurizer Temperature Limits Verification, Version 21.1

Condition Reports:
710153

Section 1R22: Surveillance Testing

Condition Reports:
686466, 686614, 690266, 690377

Procedures:
FNP-0-AP-5.0, Surveillance Program Administrative Control, Ver. 33.0
FNP-0-SOP-0.0, General Instructions to Operations Personnel, Ver. 153.1
FNP-2-STP-80.18, Diesel Generator 1C 1000 KW Load Rejection Test, Ver. 18.0
FNP-2-STP-5.0, Full Length Control Rod Operability Test, Ver. 24.0
FNP-2-STP-80.1, Diesel Generator 2B Operability Test, Ver. 52.0
FNP-2-STP-22.2, 2B Auxiliary Feedwater Pump Quarterly Inservice test, Ver. 28.0

Section 1EP6: Drill Evaluation

Documents:
Emergency Preparedness Crew 3 Drill Monitor Package, dated 9/11/13

Procedures:
NMP-EP-110, Emergency Classification Determination and Initial Action, Version 6.1
NMP-EP-111, Emergency Notifications, Version 8.0

Section 4OA1: Performance Indicator Verification

Procedures:

FNP-0-AP-54, Preparation and Reporting of NRC Performance Indicator Data and NRC Operating Data, Ver. 14.0
FNP-0-CCP-22.0, Gross Beta Gamma Analysis of Liquid Samples, Version 17.0
FNP-0-CCP-25, DEI-131 Determination, Version 15.0
FNP-0-SOP-0.11, Watch Station Tours and Operator Logs, Version 26.4
FNP-1-STP-9.0, RCS Leakage Test, Version 51.1
FNP-2-STP-9.0, RCS Leakage Test, Version 47.1
FNP-2-CCP-651.0, Routine Sampling of the RCS, Version 37.0
FNP-2-CCP-42.0, Primary coolant liquid gamma spectroscopy Analysis, Version 25.0
FNP-0-CCP-31.0, Leak Rate Determination, Version 37.0

Documents:

Selected Unit 1 and Unit 2 Control Room Logs from September 2012 through September 2013
NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 6
Farley Unit 1 and Unit 2 PI Report for MS05 Safety System Functional Failures, 7/10/2013
Unit 2 LER 2012-001-00, TDAFW Orifice Plate Thickness Results in Condition Prohibited by Technical Specifications
Unit 2 LER 2012-001-01, TDAFW Orifice Plate Thickness Results in Condition Prohibited by Technical Specifications

Section 4OA2: Problem Identification and Resolution

Condition Reports:

682967, 683380, 684920,

Work Orders:

SNC 54604 – Replace CO2 hazard pilot valve for the 1B charging pump disconnect switch

Documents:

Plant Farley ALERT Declaration - Emergency Preparedness 8-Hour Report, August 3, 2013
U-276242, Flow calculation for Cable Spreading Room
A-181017, Functional System Description, Fire Protection System, Ver. 31
CAR 207753, Enhanced Apparent Cause Determination for Alert Emergency
D-170384, Fire Protection P&ID, Rev. 15
Main Control Room Logs
Fire Protection Administrative LCO Sheet for LCO: 1-2013-0266
Farley Emergency Notification Forms, August 3, 2013

Procedures:

FNP-0-FSP-57.0, Auxiliary Building Low Pressure CO2 systems and Hose Reels, Ver. 21.0
FNP-0-EP-0.0, Farley Emergency Plan, Rev. 59
FNP-0-SOP-0.4, Fire Protection Program Administration Procedure, Ver. 85.3
NMP-GM-002-001, Corrective Action Program Instructions, Ver. 30.1

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

Condition Reports:
675409, 676047, 661761, 646824

Documents:
CAR 207260 – Apparent Cause Report for Unit 2 FT-494 out of specification
CAR 193230 - Apparent Cause Report for Unit 2 FT-494 out of specification
CAR 195856 – Apparent Cause Report for Unit 2 TDAFW orifice plates
RER: SNC 424215, Auxiliary Feedwater System Motor-Driven Pump and Turbine-Driven Pump Orifice Plates Deformation Analysis, August 31, 2012
D-515486, Auxiliary Feedwater System – N23 Piping and Hanger Information, Ver. 2.0
D-515847, Auxiliary Feedwater System – N23 Piping and Hanger Isometric, Ver. 1.0
RBA 12-017-F, Risk Based Analysis on Unit 2 TDAFW orifice plates, Rev. 1

Procedures:
NMP-GM-002-001, Corrective Action Program Instructions, Ver. 30.1
NMP-AD-031-001, Reportability Requirements – Farley, Ver. 1.0
NMP-AD-012, Operability Determinations and Functionality Assessments, Ver. 12.1
NMP-ES-002-004, System Walkdowns, Ver. 3.0

Section 4OA5: Other Activities

Procedures:
NMP-SE-006, Security Force-On-Force Drills/Exercises, Ver. 3.0