



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

May 6, 2015

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy
P.O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: ST. LUCIE PLANT - NRC INTEGRATED INSPECTION REPORT
05000335/2015001, 05000389/2015001 AND EMERGENCY PREPAREDNESS
REPORT 05000335/2015501, 05000389/2015501

Dear Mr. Nazar:

On March 31, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your St. Lucie Plant Units 1 and 2. The enclosed integrated inspection report documents the inspection results, which were discussed on April 9, 2015, and April 30, 2015, with Mr. Costanzo 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. Both of these findings involved violations of NRC requirements. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 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 the St. Lucie 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 the St. Lucie Plant.

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

/RA/

Eric J. Stamm, Branch Chief (Acting)
Reactor Projects Branch 3
Division of Reactor Projects

Docket Nos.: 50-335, 50-389
License Nos.: DPR-67, NPF-16

Enclosure:
IR 05000335/2015001, 05000389/2015001,
and 05000335/2015501, 05000389/2015501
w/Attachment: Supplementary Information

cc Distribution via ListServ

M. Nazar

2

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

/RA/

Eric J. Stamm, Branch Chief (Acting)
Reactor Projects Branch 3
Division of Reactor Projects

Docket Nos.: 50-335, 50-389
License Nos.: DPR-67, NPF-16

Enclosure:
IR 05000335/2015001, 05000389/2015001,
and 05000335/2015501, 05000389/2015501
w/Attachment: Supplementary Information

cc Distribution via ListServ

☒ PUBLICLY AVAILABLE

☐ NON-PUBLICLY AVAILABLE

☐ SENSITIVE

☒ NON-SENSITIVE

ADAMS: ☒ Yes ACCESSION NUMBER: ML15126A323

☒ SUNSI REVIEW COMPLETE ☐ FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII:DRS	RII:DRS	NSIR:DRP	RII:DRP	RII:DRP
SIGNATURE	TXM1 via email	RJR1 via email	CAF2 via email	SPS via email	BXC3 via email	JER6 via email	MJR4 via email
NAME	TMorrissey	JReyes	CFontana	SSanchez	BCecere	JRiviera-Ortiz	MRiches
DATE	05/04/2015	05/05/2015	05/04/2015	04/30/2015	05/05/2015	05/01/2015	05/05/2015
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO
OFFICE	RII:DRP	RII:DRP					
SIGNATURE	EJS2 /RA for/	EJS2					
NAME	CKontz	ESamm					
DATE	05/05/2015	05/05/2015					
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRPI\RPB3\ST LUCIE\REPORTS\2015 REPORTS\ST. LUCIE INSPECTION
REPORT 15-1Q.DOC

Letter to Mano Nazar from Eric J. Stamm dated May 6, 2015.

SUBJECT: ST. LUCIE PLANT - NRC INTEGRATED INSPECTION REPORT
05000335/2015001, 05000389/2015001 AND EMERGENCY PREPAREDNESS
REPORT 05000335/2015501, 05000389/2015501

DISTRIBUTION:

D. Gamberoni, RII

L. Douglas, RII

OE Mail

RIDSNRRDIRS

PUBLIC

RidsNrrPMStLucie Resource

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: 50-335, 50-389

License Nos: DPR-67, NPF-16

Report Nos: 05000335/2015001, 05000389/2015001 and 05000335/2015501,
05000389/2015501

Licensee: Florida Power & Light Company (FP&L)

Facility: St. Lucie Plant, Units 1 & 2

Location: 6501 South Ocean Drive
Jensen Beach, FL 34957

Dates: January 1, 2015 to March 31, 2015

Inspectors: T. Morrissey, Senior Resident Inspector
J. Reyes, Resident Inspector
C. Fontana, Emergency Preparedness Inspector (Sections 1EP5,
4OA1.2, 4OA6)
S. Sanchez, Senior Emergency Preparedness Inspector (Sections 1EP2,
1EP3, 1EP4)
B. Cecere, Emergency Preparedness Specialist (Trainee)
J. Rivera-Ortiz, Senior Reactor Inspector (Section 4OA5.2)

Approved by: Eric J. Stamm, Branch Chief (Acting)
Reactor Projects Branch 3
Division of Reactor Projects

Enclosure

SUMMARY

IR 05000335/2015001, 05000389/2015001 and IR 05000335/2015501, 05000389/2015501; 01/01/2015 – 03/31/2015; St. Lucie Nuclear Plant, Units 1 and 2; Maintenance Risk Assessments and Emergent Work Control; Problem Identification and Resolution

The report covered a three-month period of inspection by the resident inspectors and regional inspectors. The significance of inspection findings are indicated by their color (i.e., Green, White, Yellow, or Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," (SDP) dated June 2, 2011. Cross-cutting aspects are determined using IMC 0310, "Components Within the Cross-Cutting Areas," dated December 4, 2014. All violations of NRC requirements were dispositioned in accordance with the NRC's Enforcement Policy dated February 4, 2015. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5.

Findings and Violations

Cornerstone: Mitigating Systems

- Green. The inspectors identified a Green non-cited violation of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," paragraph (a)(4), for the licensee's failure to conduct adequate risk assessments prior to performing surveillance testing on the emergency core cooling system (ECCS). Consequently, ECCS surveillance testing was completed while the unit was in a Green online risk configuration when the risk should have been elevated to Yellow. Corrective actions completed included implementing instructions via an Operations Standing Order to declare any system, structure or component unavailable when it is declared inoperable unless an assessment is completed to show that operator actions can restore the safety function before it is needed.

The licensee's failure to implement the online risk assessment program as required by ADM-17.16, Implementation of the Configuration Risk Management Program, was a performance deficiency (PD). Specifically, in each of the three examples identified by the inspectors, the plant's online risk was reclassified from Green to Yellow when properly assessed as established by the licensee's online risk monitor (OLRM). The inspectors determined that the PD was more than minor because it adversely affected the equipment performance attribute of the Mitigating Systems Cornerstone. Specifically, the failure to identify increases in operational risk and implement risk management actions adversely affected the reliability of those systems relied upon to respond to plant events. The finding was determined to be of very low safety significance (Green) because for each instance, the Incremental Core Damage Probability Deficit for the timeframe the ECCS was unavailable was less than 1E-6. The inspectors determined that the finding had a cross-cutting aspect of Training in the Human Performance area, because the control room operators did not have adequate risk insight guidance and an adequate understanding regarding use of operator actions to take credit for safety function availability, causing incorrect application of the on-line risk monitoring tool [H.9]. (Section 4OA2.2).

- Green. The NRC identified a Green, non-cited violation of Technical Specification (TS) 6.8.1, Procedures and Programs, for the licensee's failure to establish, implement, and maintain written procedures covering activities referenced in NRC Regulatory Guide 1.33, Revision 2, dated February 1978. Specifically, the licensee failed to track, inspect and evaluate the placement of temporarily installed ladders (TILs) that were touching or placed near safety-related Structures, Systems, and Components (SSCs) with the potential to interact with the SSCs during a design basis seismic event. Corrective actions completed included removing TILs that were no longer being used and entering the remaining ladders into the corrective action program (CAP) for tracking and inspection, and reviewing whether any ladder required an engineering evaluation.

The licensee's repeated failure to track, inspect, or complete an engineering evaluation on TILs located near safety-related SSCs as required by licensee procedures ADM-27-21 and MA-AA-100-1008 was a performance deficiency. The performance deficiency was more than minor because if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. Specifically, routinely not tracking, inspecting or completing engineering evaluations of TILs that are touching or located near safety-related SSC could allow ladders to be installed, which interact with safety-related equipment resulting in equipment rendered inoperable during a design basis seismic event. The finding screened as green because the finding did not represent an actual loss of function of at least a single Train for > its TS Allowed Outage Time OR two separate safety systems out-of-service for > its TS Allowed Outage Time. The finding involved the crosscutting area of Problem Identification and Resolution, in the aspect of Identification, in that non-compliances associated with TILs had been long-term issues, which the licensee had failed to identify and enter into the CAP. As a result, the ladder issues remained unnoticed and unaddressed in the CAP until identified by the inspectors [P.1] (Section 4OA2.3).

B. Licensee-Identified Violations

None

REPORT DETAILS

Summary of Plant Status

Unit 1 began the inspection period at 100 percent rated thermal power (RTP). On March 22, 2015, the control room operators commenced a planned power reduction and manually tripped the reactor at 25 percent RTP on March 23, 2015, to start the refueling outage. The unit was in a defueled condition at the end of the inspection period.

Unit 2 began the inspection period at 100 percent RTP. On February 15, 2015, the unit was shutdown to Mode 3 (hot standby) in order to repair leaking condenser tubes in the 2A1 main condenser waterbox. The unit was restarted on February 18, 2015, and reached 100 percent RTP on February 20, 2015. On March 9, 2015, power was reduced to approximately 85 percent RTP in order to perform planned maintenance on the other three main condenser waterboxes. Power was restored to 100 percent RTP on March 13, 2015. The unit was at 100 percent RTP for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection

Impending Adverse Weather Conditions

a. Inspection Scope

On February 19, 2015, the inspectors reviewed the licensee's overall preparations and actions as described in operating procedure OP-AA-102-1002, Seasonal Readiness, for forecasted overnight temperature conditions below 50-degrees. The inspectors verified conditions were established for the onset of the low temperatures including the placement of temporary heaters around equipment affected by low temperatures. The inspectors reviewed compensatory measures planned and implemented while considering equipment controls, area accessibility, and system susceptibilities to cold weather. The inspectors reviewed action requests (ARs) to verify weather-related issues were placed in the licensee's corrective action program (CAP). This inspection constitutes one sample. The inspectors performed walkdowns of the following areas:

- Unit 1 and 2; A and B emergency diesel generator (EDG) engine rooms
- Unit 1 and 2; A, B, and C auxiliary feed water (AFW) pump areas
- Unit 1 and 2; main steam isolation valve (MSIV) and main feedwater isolation valve (MFIV) areas

b. Findings

No findings were identified.

1R04 Equipment Alignment

Partial Equipment Walkdowns

a. Inspection Scope

The inspectors conducted partial alignment verifications of the safety-related systems listed below. These verifications included reviews using plant lineup procedures, operating procedures, and piping and instrumentation drawings, which were compared with observed equipment configurations to verify that the critical portions of the systems were correctly aligned to support operability. The inspectors also verified that the licensee had identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and that those issues were documented in the CAP. This inspection constitutes four samples. Documents reviewed are listed in the Attachment.

- 1B EDG while the 1A EDG was out of service (OOS) for maintenance
- 2B EDG while the Unit 1B and Unit 2B startup transformers were OOS for maintenance
- 2A high pressure safety injection pump (HPSI) train while 2B EDG was OOS for an extended planned outage
- 2A component cooling water (CCW) system while the 2B CCW train was OOS for repairs

b. Findings

No findings were identified.

1R05 Fire Protection

Fire Area Walkdowns

a. Inspection Scope

The inspectors toured the following plant areas during this inspection period to evaluate conditions related to control of transient combustibles and ignition sources, and the material condition and operational status of fire protection systems including fire barriers used to prevent fire damage or fire propagation. The inspectors reviewed these activities against provisions in the licensee procedure AP-1800022, Fire Protection Plan, and 10 CFR Part 50, Appendix R. The licensee's fire impairment lists, updated on an as-needed basis, were routinely reviewed. In addition, the inspectors reviewed the CAP database to verify that fire protection problems were being identified and appropriately resolved. Documents reviewed are listed in the Attachment. This inspection constitutes six samples. The following areas were inspected:

- 1B EDG room
- 1A and 1B low pressure safety injection pump (LPSI) rooms and 1A shut down cooling heat exchanger room
- 1A and 1B main and auxiliary transformer areas, and 1B and 2B startup transformer areas
- Unit 2 A and B switchgear rooms
- Unit 2 control element assembly motor-generator set room
- Unit 2 primary chemistry sampling room

b. Findings

No findings were identified.

1R06 Flood Protection Measures

Internal Flooding

a. Inspection Scope

The inspectors conducted a walkdown of the area listed below which included checks of building structure drainage sumps to ensure that flood protection measures were in accordance with design specifications. The inspectors reviewed Updated Final Safety Analysis Report (UFSAR), Section 3.4, Water Level (Flood) Design and UFSAR Table 3.2-1, Design Classification of Systems, Structures, and Components (SSCs). The inspectors also reviewed plant procedures that discussed the protection of areas containing safety-related equipment that may be affected by internal flooding. Specific plant attributes that were checked included structural integrity, sealing of penetrations, control of debris, and operability of sump pump systems. This inspection constitutes one sample.

- Unit 2, A train containment spray, LPSI, and HPSI reactor auxiliary building (RAB) area

b. Findings

No findings were identified.

1R07 Heat Sink Performance

a. Inspection Scope

The inspectors interviewed engineering personnel responsible for Unit 1, 1A CCW heat exchanger's monitoring and performance. The inspectors observed and assessed the end-of-cycle as-found heat exchanger conditions on the outlet seawater side of the heat exchanger when it was initially opened for inspection. The inspectors reviewed the licensee's as-found documentation of the inlet side of the heat exchanger seawater side as documented in AR 2035340. The inspectors verified that the licensee completed

plugging of any heat exchanger tubes deemed necessary as a result of the eddy current testing. The inspectors verified that periodic maintenance activities were conducted in accordance with licensee procedure 0-PMM-14.01, Component Cooling Water Heat Exchanger Clean and Repair. The inspectors verified the heat exchangers can perform their safety-related functions by assessing documentation of licensee inspections. The inspectors walked down portions of the systems for signs of degradation and to assess overall material condition, as well as to monitor system parameters for proper operation. The inspectors verified that significant heat sink issues were being identified and entered into the CAP. This inspection completes one sample under the inspection procedure.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program and Licensed Operator Performance

.1 Resident Inspector Quarterly Review

a. Inspection Scope

On January 26, and February 19, 2015, the inspectors observed and assessed licensed operator crews during four separate evaluated simulator scenarios during continuing training on the control room simulator. The simulated scenarios included a crane accident that damaged the CCW building which resulted in a loss of one CCW pump; two dropped control rods, a manual reactor trip with a loss of all annunciators; and a reactor coolant pump trip with no automatic reactor trip. Each scenario included an Emergency Alert classification and notification to the State. These inspections complete one sample under this procedure.

Documents reviewed are listed in the Attachment. The inspectors also reviewed simulator physical fidelity and specifically evaluated the following attributes related to the operating crews' performance:

- Clarity and formality of communication
- Ability to take timely action to safely control the unit
- Prioritization, interpretation, and verification of alarms
- Correct use and implementation of abnormal and emergency operation procedures, and emergency plan implementing procedures
- Control board operation and manipulation, including high-risk operator actions
- Oversight and direction provided by supervision, including ability to identify and implement appropriate Technical Specification (TS) actions, regulatory reporting requirements, and emergency plan classification and notification
- Crew overall performance and interactions
- Effectiveness of the post-evaluation critique

b. Findings

No findings were identified.

.2 Control Room Observations

a. Inspection Scope

The inspectors observed and assessed licensed operator performance in the plant and main control room, particularly during periods of heightened activity or risk and where the activities could affect plant safety. Documents reviewed are listed in the Attachment. This inspection constitutes one sample. The inspectors observed activities in the control room during the following evolution:

- February 15, 2015, Unit 2 reactor trip from 25 percent RTP following a rapid down power from 100 percent RTP. The unit was taken off line due to elevated chlorides in the steam generators from a main condenser tube leak.

The inspectors focused on the following conduct of operations attributes as appropriate:

- Operator compliance and use of procedures
- Control board manipulations
- Communication between crew members
- Use and interpretation of plant instruments, indications, and alarms
- Use of human error prevention techniques
- Documentation of activities, including initials and sign-offs in procedures
- Supervision of activities, including risk and reactivity management

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the performance data and associated AR for the system listed below to verify that the licensee's maintenance efforts met the requirements of 10 CFR 50.65 (Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants) and licensee administrative procedure ADM-17-08, Implementation of 10 CFR 50.65, The Maintenance Rule (MR). The inspectors focused on maintenance rule scoping, characterization of maintenance problems and failed components, risk significance, determination of MR a(1) and a(2) classification, corrective actions, and the appropriateness of established performance goals and monitoring criteria. The inspectors also interviewed responsible engineers and observed some of the corrective maintenance activities. The inspectors attended applicable expert panel meetings and reviewed associated system health reports. The inspectors verified that equipment

problems were being identified and entered into the licensee's CAP. Documents reviewed are listed in the Attachment. This inspection constitutes one sample.

- AR 2021039, Unit 1 control room air conditioning unit ACC-3B Maintenance Rule Performance Criteria Exceeded

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors completed in-office reviews, plant walkdowns, and control room inspections of the licensee's on-line and shutdown risk assessment of planned maintenance activities. The inspectors verified the licensee's risk assessment and risk management activities using the requirements of 10 CFR 50.65(a)(4); the recommendations of Nuclear Management and Resource Council 93-01, Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants; and licensee procedure ADM-17.16, Implementation of the Configuration Risk Management Program. The inspectors also reviewed the effectiveness of the licensee's contingency actions to mitigate increased risk resulting from the degraded equipment. The inspectors interviewed responsible senior reactor operators on-shift, verified actual system configurations, and specifically evaluated results from the online risk monitor (OLRM) for the combinations of OOS risk-significant systems, structures, and components (SSCs) listed below. Documents reviewed are listed in the Attachment. This inspection constitutes six samples.

- Unit 1, OLRM assessment with 1A charging pump, 3B control room air conditioner, and 1A EDG OOS for a planned extended outage
- Unit 2, OLRM assessment with the Unit 1B and Unit 2B startup transformers OOS for planned maintenance
- Unit 2, OLRM assessment with 2B EDG OOS for a planned extended outage
- Unit 2, OLRM assessment with 2A CCW heat exchanger and 2A HPSI pump OOS for planned maintenance
- Unit 1, OLRM assessment during planned code testing of 1A HPSI pump and 1A HPSI pump discharge valve
- Unit 1, Shutdown Safety Assessment (SSA) while the unit was in Mode 5, reactor coolant system (RCS) pressure was approximately 250 psia, and the RCS temperature was 110 °F, and while performing planned maintenance in the St. Lucie switch yard

b. Findings

One finding was identified and it is documented in Section 4OA2.2 of this report.

1R15 Operability Determinations and Functionality Assessments

a. Inspection Scope

The inspectors reviewed the following ARs' interim dispositions and operability determinations or functionality assessments to ensure that they were properly supported and the affected SSCs remained available to perform their safety function with no increase in risk. The inspectors reviewed the applicable UFSAR, associated supporting documents and procedures, and interviewed plant personnel to assess the adequacy of the interim disposition. Documents reviewed are listed in the Attachment. This inspection constitutes six samples.

- AR 2017942, Unit 2 CCW system leakage
- AR 2017249, Unit 1A EDG abnormal indications on engine start
- AR 2027438, Unit 2B EDG DC turbocharger lube oil pump failure to autostart
- AR 2023290, Unit 1, evaluate the installation of nuclear instrumentation temporary modification EC 283213
- AR 2032752, Evaluation of Barriers Impacting Emergency Core Cooling System (ECCS) Ventilation System
- AR 2034138, 1B Intake Cooling Water (ICW) pipe degradation and Operation in Mode 5, 6, and No Mode

b. Findings

No findings were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

For the maintenance work orders (WOs) listed below, the inspectors reviewed the test procedures and either witnessed the testing or reviewed test records to determine whether the scope of testing adequately verified that the work performed was correctly completed and demonstrated that the affected equipment was functional and operable. The inspectors verified that the requirements of licensee procedure ADM-78.01, Post Maintenance Testing, were incorporated into test requirements. This inspection constitutes five samples.

- WO 40281321, 1A2 EDG radiator replacement
- WOs 40344433, 402204290, 2B EDG maintenance outage
- WO 40235919, Replace solenoid valve and other components on U1 control room HVAC ACC-3A
- WO 40364591, Unit 2, Repair tube leaks on the 2B CCW heat exchanger
- WO 40110238, Unit 1 1A ICW pump and motor replacement

b. Findings

No findings were identified.

1R20 Refueling and Other Outage Activities

Unit 1 Refueling Outage SL1-26

a. Inspection Scope

Outage Planning, Control and Risk Assessment

The Unit 1 planned refueling outage started on March 23, 2015. The inspectors reviewed the licensee's outage risk control plan and verified that the licensee had appropriately considered risk, industry experience, and previous site specific problems. The inspectors also reviewed the outage work schedule for Operations, Maintenance, and the Fire Brigade to confirm the licensee had scheduled covered workers such that the minimum days off for individuals working on outage activities was in compliance with 10 CFR 26.205(d)(4) and (5).

The inspectors reviewed the risk reduction methodology employed by the licensee during various daily refueling outage (RFO) SL1-26 meetings including the outage command center (OCC) morning meetings, operations team meetings, and schedule performance update meetings. The inspectors examined the licensee implementation of shutdown safety assessments during SL1-26 in accordance with licensee procedure OM-AA-101-1000, Shutdown Risk Management, to verify whether a defense in depth concept was in place to ensure safe operations and avoid unnecessary risk. In addition, the inspectors regularly monitored OCC activities, and interviewed responsible OCC management, to ensure system, structure, and component configurations and work scope were consistent with TS requirements, site procedures, and outage risk controls. Documents reviewed are listed in the Attachment.

Monitoring of Shutdown Activities

The inspectors monitored RCS cooldown rates to verify they met TS requirements. The inspectors walked down the reactor containment building (RCB) shortly after the unit was shut down to determine whether any components were impacted by previously unidentified RCS leakage. The RCB, including the RCB sump, was inspected for any damage incurred during the operating cycle.

Outage Activities

The inspectors examined outage activities to verify that they were conducted in accordance with TSs, licensee procedures, and the licensee's outage risk control plan. Some of the more significant inspection activities accomplished by the inspectors were as follows:

- Walked down selected safety-related equipment clearance orders
- Verified operability of RCS pressure, level, flow, and temperature instruments during various modes of operation
- Verified electrical systems availability and alignment
- Verified shutdown cooling system and spent fuel pool cooling system operation
- Evaluated implementation of reactivity controls
- Reviewed control of containment penetrations
- Examined foreign material exclusion controls put in place inside containment (e.g., around the refueling cavity, near sensitive equipment and RCS breaches) and around the spent fuel pool (SFP)
- Verified worker fatigue was properly managed

Refueling Activities and Containment Closure

The inspectors witnessed selected fuel handling operations being performed according to TS and applicable operating procedures from the main control room, refueling cavity inside containment, and the SFP. The inspectors also examined licensee activities to control and track the position of each fuel assembly. The inspectors evaluated the licensee's ability to close the containment equipment, personnel, and emergency hatches in a timely manner per procedure 1-GMM-68.02, Emergency Closure of Containment Penetrations, Personnel Hatch, and Equipment Hatches.

Mode Transition

The inspectors examined selected TS, license conditions, license commitments and verified administrative prerequisites were being met prior to mode changes.

Lowered Inventory Condition

The inspectors reviewed the planned activities associated with a period of lowered RCS inventory established in order to remove the reactor vessel head. The inspectors verified the licensee had controls in place to govern lower inventory conditions. The inspectors verified that the necessary instrumentation and means of adding inventory to the RCS were available.

Corrective Action Program

The inspectors reviewed ARs generated during SL1-26 to evaluate the licensee's threshold for initiating ARs. The inspectors routinely reviewed the results of Quality Assurance (QA) daily surveillances of outage activities.

This inspection constitutes a partial sample. Documents reviewed are listed in the Attachment.

b. Findings

No findings were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors either reviewed or witnessed the following surveillance tests to verify that the tests met TS, the UFSAR, the licensee's procedural requirements, and demonstrated the systems were capable of performing their intended safety functions and their operational readiness. In addition, the inspectors evaluated the effect of the testing activities on the plant to ensure that conditions were adequately addressed by the licensee staff and that after completion of the testing activities, equipment was returned to standby alignment required for the system to perform its safety function. The inspectors verified that surveillance issues were documented in the CAP. Documents reviewed are listed in the Attachment. This inspection constitutes two in-service and four surveillance samples.

In-Service Tests:

- 2-OSP-09.01C, 2C Auxiliary Feedwater Pump Code Run and OP-2-0010125A, Surveillance Data Sheets (Data Sheet 8A, 2C AFW valves only)
- 1-OSP-09.02C, 1C Auxiliary Feedwater Pump Refueling Shutdown Pump and Valve Test

Surveillance Tests:

- 2-OSP-66.01, Control Element Assembly Quarterly Exercise
- 2-OSP-03.30B, UT Evaluation of B Train ECCS Sentinel Locations and 2-OSP-03.31B, UT Evaluation of B Train ECCS Monitored Locations (RB5, CB8 and HB8 locations only)
- 1-OSP-99.08B, B Train Quarterly Non Check Valve Cycle Test (MV-07-1B and MV-07-2B only)
- 1-SMM-08.08, Main Steam Safety Valve Setpoint Surveillance Using Furmanite Trevitest Mark VIII-2 Equipment

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness (EP)

1EP2 Alert and Notification System Evaluation

a. Inspection Scope

The inspectors evaluated the adequacy of the licensee's methods for testing the alert and notification system in accordance with NRC Inspection Procedure 71114, Attachment 02, Alert and Notification System Evaluation. The applicable planning standard, 10 CFR Part 50.47(b)(5) and its related 10 CFR Part 50, Appendix E, Section

IV.D requirements were used as reference criteria. The criteria contained in NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Revision 1, were also used as a reference.

The inspectors reviewed various documents which are listed in the Attachment, interviewed personnel responsible for siren maintenance and verified placement of several sirens. This inspection activity satisfied one inspection sample for the alert and notification system on a biennial basis.

b. Findings

No findings were identified.

1EP3 Emergency Response Organization Staffing and Augmentation System

a. Inspection Scope

The inspectors reviewed the licensee's Emergency Response Organization (ERO) augmentation staffing requirements and process for notifying the ERO to ensure the readiness of key staff for responding to an event and timely facility activation. The qualification records of key position ERO personnel were reviewed to ensure all ERO qualifications were current. A sample of problems identified from augmentation drills or system tests performed since the last inspection were reviewed to assess the effectiveness of corrective actions.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 03, Emergency Response Organization Staffing and Augmentation System. The applicable planning standard, 10 CFR 50.47(b)(2), and its related 10 CFR 50, Appendix E requirements were used as reference criteria.

Documents reviewed are listed in the Attachment. This inspection activity satisfied one inspection sample for the ERO staffing and augmentation system on a biennial basis.

b. Findings

No findings were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

Since the last NRC inspection of this program area, some changes were made to the Radiological Emergency Plan and Emergency Action Levels (EALs). The licensee determined that, in accordance with 10 CFR 50.54(q), the Plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR Part 50. The inspectors reviewed these changes and sampled implementing procedure changes made in 2014, to evaluate for potential reductions in the effectiveness of the Plan. However, this review

was not documented in a Safety Evaluation Report and does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04, Emergency Action Level and Emergency Plan Changes. The applicable planning standards of 10 CFR 50.47(b), and its related requirements in 10 CFR 50, Appendix E, were used as reference criteria.

Documents reviewed are listed in the Attachment. This inspection activity satisfied one inspection sample for the emergency action level and emergency plan changes on an annual basis.

b. Findings

No findings were identified.

1EP5 Maintenance of Emergency Preparedness

a. Inspection Scope

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

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 05, Maintenance of Emergency Preparedness. The applicable 10 CFR 50.47(b) planning standards and related 10 CFR 50, Appendix E requirements were used as reference criteria.

Documents reviewed are listed in the Attachment. This inspection activity satisfied one inspection sample for the maintenance of emergency preparedness on a biennial basis.

b. Findings

No findings were identified.

1EP6 Drill Evaluation

Emergency Preparedness Drills

a. Inspection Scope

On January 26 and February 19, 2015, the inspectors observed and assessed licensed operator crews' performance during several short evaluated licensed operator continued training scenarios using the control room simulator. The simulated scenarios included assessing classification of the emergency events and completing notifications to the State. The inspectors assessed the licensee's actions to verify that emergency classifications and notifications were timely and made in accordance with the licensee emergency plan implementing procedures and 10 CFR 50.72 requirements. This completes one sample of drill observations.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

.1 Initiating Events Cornerstones

a. Inspection Scope

The inspectors checked licensee submittals for the performance indicators (PIs) listed below for the period January 1, 2014, through December 31, 2014, to verify the accuracy of the PI data reported during that period. Performance indicator definitions and guidance contained in NEI 99-02, Regulatory Assessment Performance Indicator Guideline, and licensee procedures ADM-25.02, NRC Performance Indicators, and LI-AA-204-1001, NRC Performance Indicator Guideline, were used to check the reporting for each data element. The inspectors checked operator logs, plant status reports, condition reports, system health reports, and PI data sheets to verify that the licensee had identified the required data, as applicable. Documents reviewed are listed in the Attachment. This inspection constitutes two samples in each PI area.

- Unit 1 Unplanned Scrams per 7000 Critical Hours
- Unit 2 Unplanned Scrams per 7000 Critical Hours
- Unit 1 Unplanned Scrams With Complications

- Unit 2 Unplanned Scrams With Complications
- Unit 1 Unplanned Power Changes per 7000 Critical Hours
- Unit 2 Unplanned Power Changes per 7000 Critical Hours

b. Findings

No findings were identified.

.2 Emergency Preparedness Cornerstone

a. Inspection Scope

The inspectors sampled licensee submittals relative to the PIs listed below for the period January 1, 2014, through December 31, 2014. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, was used to confirm the reporting basis for each data element.

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

For the specified review period, the inspectors examined data reported to the NRC, procedural guidance for reporting PI information, and records used by the licensee to identify potential PI occurrences. The inspectors verified the accuracy of the PI for ERO drill and exercise performance through review of a sample of drill and event records. The inspectors reviewed selected training records to verify the accuracy of the PI for ERO drill participation for personnel assigned to key positions in the ERO. The inspectors verified the accuracy of the PI for alert and notification system reliability through review of a sample of the licensee's records of periodic system tests. The inspectors also interviewed the licensee personnel who were responsible for collecting and evaluating the PI data. Licensee procedures, records, and other documents reviewed within this inspection area are listed in the Attachment. This inspection satisfied three inspection samples for PI verification on an annual basis.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution

.1 Daily Review

a. Inspection Scope

As required by Inspection Procedure 71152, Problem Identification and Resolution, and to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a screening of items entered daily into the licensee's CAP. This review was accomplished by reviewing daily printed summaries of action requests and by reviewing the licensee's electronic AR database. Additionally, reactor coolant system unidentified leakage was checked on a daily basis to verify no substantive or unexplained changes.

b. Findings

No findings were identified.

.2 Annual Sample Review: Inadequate Risk Assessments on the Emergency Core Cooling System

a. Inspection Scope

The inspectors performed an in-depth review of apparent cause evaluation (ACE) report, AR 02012693. The inspectors reviewed the circumstances and corrective actions relating to control room operators not changing the Online Risk Monitor (OLRM) to Yellow while the 2A emergency core cooling system (ECCS) was unavailable. The inspectors reviewed licensee performance attributes associated with complete and accurate information of the problem, identification of the contributing causes and planning and completion of assigned corrective actions. The inspectors interviewed plant personnel and evaluated the licensee's administration of this selected AR in accordance with their corrective action program as specified in the licensee procedure PI-AA-104-1000, Corrective Action. This inspection constitutes one sample.

b. Observations

The purpose of the OLRM is to evaluate the risk based on the combination of unavailable equipment. The apparent cause of this issue was that the control room did not validate the judgment that the containment sump suction header could be refilled within the required time during accident conditions, resulting in the header being declared available and the OLRM not being updated to reflect the Yellow risk condition, a knowledge-based error. The analysis determined that the performance that led to this event was atypical for the organization and therefore an organizational and a programmatic review was not completed as part of this ACE. However, during inspection of this ACE, the inspectors identified two additional examples of the licensee not completing an adequate risk assessment with an ECCS train unavailable during surveillance testing. These additional examples of inadequate risk assessment led the licensee to initiate a much broader scope investigation into this issue. A violation of NRC requirements was identified.

The inspectors identified three examples of inadequate risk assessment associated with surveillance testing of the ECCS. In each example the ECCS train that was undergoing testing had been declared available when the train was unavailable to perform its safety function. As a result, during each of the tests, online risk was classified in the Green

band when the risk should have been elevated to Yellow. The licensee's initial position in each of these cases was that they were taking credit for dedicated operator actions to restore the ECCS safety function in the event of safety injection actuation signal. After further review of each issue, the licensee reevaluated their position and determined they had not time validated that the manual operator actions could be performed in a timeframe that would credit the dedicated operator actions to restore the safety function.

Example #1 (Unit 2)

On October 30, 2014, with Unit 2 operating at 100 percent reactor power, MV-07-2A, Train A Containment Sump Isolation Valve, was opened and subsequently closed during the performance of surveillance test 2-OSP-69.29, Engineered Safeguards Relay Test. When MV-07-2A was opened, the ECCS recirculation header piping between valves MV-07-2A and V07174 was drained and voided. During this period, the ECCS train was unavailable for recirculation injection.

Prior to the testing of MV-07-2A, the inspectors specifically questioned the control room supervisor and the shift manager whether the A ECCS train was unavailable during the test and whether the plant was going to enter a Yellow risk condition as a result of the unavailable ECCS train. Operators stated that in the event of a safety injection actuation signal (SIAS) operators in the control room would direct dedicated operators in the plant to fill and vent the voided portion of the ECCS header prior to the automatic opening of MV-07-2A for ECCS recirculation phase. As a result, the ECCS header was not going to be declared unavailable on the plant's OLRM. The inspectors questioned whether the actions to fill and vent the ECCS header piping had been time validated. The shift manager, from his recollection of accident analysis, referenced from the UFSAR and stated it took approximately 20 minutes to drain the refueling water tank to the level required for the ECCS injection to automatically swap to recirculation phase of safety injection; by which time the dedicated operators would have filled and vented the voided portion of the ECCS header. However, the inspectors determined that the licensee had not time validated the fill and vent actions. Just prior to cycling MV-07-2A, the control room declared the 2A ECCS header inoperable but available and the Unit 2 OLRM remained Green. The ECCS train was declared operable after the piping was refilled.

The inspectors noted that during quarterly in-service test (IST) of the same valve, the Unit 2 OLRM was Yellow during the period the ECCS header was voided. Additionally, the inspectors used the licensee's OLRM program and simulated making MV-07-2A unavailable and noted that the Unit 2 online risk was Yellow. The inspectors pursued this issue with plant management and the licensee initiated AR 2012693. The licensee's preliminary investigation identified that the ECCS train was unavailable during the period the header was voided and that the Unit 2 OLRM should have been elevated to Yellow.

Example #2 (Unit 2)

The inspectors reviewed two years of surveillance test history for surveillance 2-OSP-69.24/25 to determine whether the licensee had correctly assessed the Unit 2 OLRM for those tests. The inspectors found that on December 3, 2013, the Unit 2 OLRM had not been elevated to Yellow while the A high pressure safety injection (HPSI) pump had

been made inoperable during pump venting. After reviewing the test configuration and additional licensee procedures, the inspectors determined that during the period while the pump was being vented, the A ECCS train was unavailable to perform its safety function. The licensee's initial position on this issue was that they could take credit for operator action in the control room and in the plant to restore the function. The inspectors questioned several senior reactor operators (SROs) whether the ECCS train was unavailable during the period when the HPSI pump was inoperable for venting. The replies were mixed and some SROs stated that they could credit the actions of dedicated operators, in place of automatic actuation, to start the pump during a SIAS. The licensee did not have a validated timeline showing that in the event of a SIAS, and in place of automatic actuation, dedicated operators could complete the necessary manual operator actions within the time the ECCS safety function is required. Subsequently, the licensee determined that the OLRM for the December 3, 2013, surveillance was incorrect and should have been elevated to Yellow.

Example #3 (Unit 1)

On March 3, 2015, the inspectors reviewed the control room log entries concerning the in-service testing of the 1A HPSI pump and its associated discharge valve that had been completed overnight. The inspectors determined that the A ECCS train had been declared available during the test. As a result, the Unit 1 OLRM remained Green when it should have been Yellow. Specifically, the inspectors determined that during cycling of the discharge valve and the subsequent venting of the pump, the A ECCS train was both inoperable and unavailable. In reviewing this issue with control room reactor operators, the inspectors found that a recent Operations Night Order had been approved to credit the operator actions during surveillance testing of HPSI pumps. However, the licensee had not time validated the operator manual actions in place of automatic SIAS actuation. After reviewing the timeline for the ECCS design basis safety function, the licensee determined that operator actions would not have been completed in time to make the ECCS injection safety function available and acknowledged the OLRM should have been elevated to Yellow.

The inspectors determined that control room operators did not have correct guidance for assessing increases in risk on the ECCS during surveillance testing, and there was inconsistency amongst the SROs in that they did not have the same understanding of when credit can be taken for dedicated operator actions. Additionally, the inspectors determined that the night order that allowed taking credit for operator actions was incorrect in that it did not discuss validation of timelines for making safety functions available. Consequently, application of the OLRM tool was not consistently applied amongst the operational crews and resulted in incorrect risk assessments. After discussing these issues the licensee initiated ACE AR 02030002 to complete an extent of condition review and investigate this issue on a broader scope and programmatic level. Interim corrective actions included an Operations clock reset and discussing these issues with the crews, retracting the Night Order and implementing an Operations Standing Order requiring any SSC that is part of the OLRM to also be considered unavailable when it is inoperable.

c. Findings

Introduction: The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," paragraph (a)(4), for the licensee's failure to conduct adequate risk assessments prior to performing surveillance testing on the ECCS.

Description: The inspectors identified three examples of inadequate risk assessments associated with surveillance testing of the ECCS. In each example the ECCS train that was undergoing testing had been declared available when the train was actually unavailable to perform its safety function. As a result, during each of the tests, online risk was classified in the Green band when the risk should have been elevated to Yellow. The licensee acknowledged that the risk assessments were incorrect and they should have been elevated to Yellow.

Example #1 (Unit 2)

On October 30, 2014, with Unit 2 operating at 100 percent reactor power, MV-07-2A, Train A Containment Sump Isolation Valve, was opened and subsequently closed during the performance of surveillance test 2-OSP-69.29, Engineered Safeguards Relay Test. When MV-07-2A was opened, the ECCS recirculation header piping between valves MV-07-2A and V07174 was drained and voided. During this period, the ECCS train was unavailable for recirculation injection and online risk was classified as Green. The licensee's preliminary investigation identified that the ECCS train was unavailable during the period the header was voided and that the Unit 2 OLRM should have been elevated to Yellow. The AR was subsequently upgraded to an ACE.

Example #2 (Unit 2)

The inspectors found that on December 3, 2013, the Unit 2 OLRM had not been elevated to Yellow while the A high pressure safety injection (HPSI) pump had been made inoperable during pump venting. After reviewing the test configuration and additional licensee procedures, the inspectors determined that during the period while the pump was being vented, the A ECCS train was unavailable to perform its safety function. The licensee did not have a validated timeline showing that in the event of a SIAS, and in place of automatic actuation, dedicated operators could complete the necessary manual operator actions within the time the ECCS safety function is required. Subsequently, the licensee determined that the OLRM for the December 3, 2013, surveillance was incorrect and should have been elevated to Yellow.

Example #3 (Unit 1)

On March 3, 2015, the inspectors reviewed the control room log entries concerning the in-service testing of the 1A HPSI pump and its associated discharge valve that had been completed overnight. The inspectors determined that the A ECCS train had been declared available during the test. As a result, the Unit 1 OLRM remained Green when it

should have been Yellow. After discussing these issues, the licensee initiated ACE AR 02030002 to complete an extent of condition review and investigate this issue on a broader scope and programmatic level. Interim corrective actions included an Operations clock reset and discussing these issues with the crews, retracting the Night Order and implementing an Operations Standing Order requiring any SSC that is part of the OLRM to also be considered unavailable when it is inoperable.

Analysis: The licensee's failure to implement the online risk assessment program as required by licensee procedure ADM-17.16, Implementation of the Configuration Risk Management Program, was a performance deficiency. Specifically, in each of the three examples identified by the inspectors, the plant's online risk was reclassified from Green to Yellow when properly assessed as established by the licensee's OLRM. The inspectors determined that the performance deficiency was more than minor because it adversely affected the equipment performance attribute of the Mitigating Systems Cornerstone. Specifically, the failure to identify increases in operational risk and implement risk management actions adversely affected the reliability of those systems relied upon to respond to plant events. The inspectors determined the significance of the finding using IMC 0609, Appendix K, "Maintenance Risk Assessment and Risk Management Significant Determination Process." The finding was determined to be of very low safety significance (Green) because for each instance, the Incremental Core Damage Probability Deficit for the timeframe the ECCS was unavailable was less than $1E-6$. The inspectors determined that the finding had a cross-cutting aspect of Training in the Human Performance area, because the control room operators did not have adequate risk insight guidance and an adequate understanding regarding use of operator actions to take credit for safety function availability, causing incorrect application of the on-line risk monitoring tool [H.9].

Enforcement: 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," paragraph (a)(4), requires in part, that "Before performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance) the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities." Contrary to the above, on December 3, 2013; October 30, 2014; and March 3, 2015, the licensee failed to adequately assess the increase in risk that resulted from the ECCS being unavailable during surveillance testing. Consequently, ECCS surveillance testing was completed while the unit was in a Green online risk configuration when the risk should have been elevated to Yellow. Corrective actions completed included implementing instructions via an Operations Standing Order to declare any SSC unavailable when it is declared inoperable unless an assessment is completed to show that operator actions can restore the safety function before it is needed. Because the licensee entered this issue into its CAP and the finding is of very low safety significance (Green), this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (NCV 05000335,389/2015001-01, Inadequate Risk Assessments on the Emergency Core Cooling System).

.3 Annual Sample Review: Temporarily Installed Ladders Located near Safety-related Structures, Systems or Components

a. Inspection Scope

The inspectors performed an in-depth review of the ACE for AR 02018765. The inspectors completed a plant walk down of all Unit 1 and Unit 2 emergency operating procedure (EOP) staged ladders to verify they were all accounted for and readily accessible to support EOP time critical actions. The inspectors reviewed three years of the licensee's electronic CAP database to assess whether issues relating to ladders were adequately addressed and trended. The inspectors also reviewed the circumstances and corrective actions related to temporarily installed ladders (TILs) that are touching or located near safety-related structures, systems and components (SSCs). These ladders did not have engineering evaluations to support their specific applications and were not being tracked and inspected periodically as required by plant procedures. The inspectors interviewed plant personnel and evaluated the licensee's disposition of the selected ARs and verified the licensee's actions were in accordance with licensee procedure, PI-AA-104-1000, Corrective Action. Documents reviewed are listed in the attachment. This inspection constitutes one sample.

b. Observations

The inspectors found a non-EOP ladder stored in the Unit 1 AFW pump room EOP ladder station. The ladder was tie-wrapped to the ladder station and was blocking the EOP ladders from being removed. The licensee immediately removed the extra ladder and documented the issue as AR 2022068 in the CAP.

The inspector reviewed 14 ARs associated with the obstruction of EOP ladders. Each occurrence was addressed and the AR was closed, but there were no long-term corrective actions taken to prevent EOP ladders from being blocked. Although the inspectors determined that time critical EOP actions could still be met in each case, the inspectors identified that the CAP had failed to capture these occurrences for a trend review. The licensee wrote AR 2023312 to review the ARs related to EOP ladders for trending and corrective actions to prevent recurrence of blocked ladders. The inspectors also identified that TILs routinely had not been entered into the CAP for tracking, were not routinely inspected and were not screened for the need of an engineering evaluation.

The licensee has five procedures, with overlapping similar requirements associated with the installation of temporary ladders near safety-related SSCs. Several procedures require TILs to be entered in the CAP for tracking and to be routinely inspected to ensure plant configuration is maintained and ladders remain safely installed. Depending on the specific application, requirements are also specified as to when to complete an engineering evaluation for a TIL. The applicable procedures are as follows:

- ADM-27.21, Ladder Usage And Compliance;
- Q I-13-PSL-2, Housekeeping And Cleanliness Control Methods;
- MA-AA-100-1008, Station Housekeeping And Material Control;

- ADM-04.02, Industrial Safety Program; and
- ADM-27.11, Scaffold Control

The inspectors' review of the ACE found that it thoroughly described the ladder issues and that the interim corrective actions were comprehensive and had been aggressively and immediately implemented. During this inspection however, other ladder issues were identified by the inspectors and the licensee was developing additional corrective actions at the conclusion of the inspection period. Although there were no instances of TILs causing inoperability of safety-related SSCs, a violation of NRC requirements was identified.

c. Findings

Introduction: The NRC identified a Green NCV of Technical Specification (TS) 6.8.1, Procedures and Programs, for the licensee's failure to establish, implement, and maintain written procedures covering activities referenced in NRC Regulatory Guide 1.33, Revision 2, dated February 1978. Specifically, the licensee failed to track, inspect and evaluate the placement of temporarily installed ladders that were touching or placed near safety-related SSCs with the potential to interact with the SSCs during a design basis seismic event.

Description: On January 16, 2015, the inspectors identified in the Unit 1 reactor auxiliary building (RAB) several TILs touching or located near safety-related SSCs that were not in compliance with station procedures. Specifically, one ladder in the 1A shutdown heat exchanger room, one ladder in the 1A low pressure safety injection pump room, and three ladders in the 1B low pressure safety injection pump room, had all been installed and left in place and were not in compliance with ladder procedures. The ladders that were fastened to safety-related SSCs, did not have an engineering evaluation and were not being tracked and inspected utilizing the licensee's CAP. The licensee initiated AR 2019392 to address this issue and completed a plant sweep to address any additional TILs not in compliance with station procedures. Additionally, the licensee completed a verification inspection to ensure all EOP ladders were accounted for and readily accessible for use, i.e., not blocked.

On January 29, 2015, the inspectors completed a follow-up inspection in the Unit 1 and Unit 2 RABs to verify the licensee had adequately addressed and corrected the issues with TILs. The inspectors identified additional procedural non-compliances associated with TILs that had not received an engineering evaluation and were not being tracked in the CAP as follows: one ladder in the Unit 1 pipe tunnel; and two ladders in the Unit 2 pipe penetration room. The licensee entered this issue into the CAP as AR 2022126 and completed a second plant sweep to look for additional ladder non-compliances.

In total, 28 TILs located near safety-related SSCs were identified as not being in compliance with procedures. The licensee's immediate corrective actions included removing TILs that were no longer needed, inspecting and entering all remaining TILs in the CAP and reviewing if any ladder required an engineering evaluation. Since the

licensee did not record specific information for each ladder removed, it is unknown if any of these ladders required an engineering evaluation. In reviewing the location for the remaining TILs, the inspectors found that most of the ladders were being used for repetitive surveillance or maintenance activities. Some of the ladders had been left installed in place for years, since the procedures did not address how long TILs could be left in place. For example, four TILs were found in the Unit 2 EDG buildings which had been approved by engineering evaluation PSL-ENG-SECS-06-042, Evaluation of Temporary Ladders Installed for Access to EDG Radiators Expansion Tanks. The evaluation was completed in 2006 and approved temporary installation of ladders to allow operator access to the EDG radiator expansion tanks for adding coolant during on-line operations. The intent was to use the ladders until a modification was installed incorporating a permanent fill line. However, the modification was never approved and the ladders had been left in place and had not been entered into the CAP for tracking and inspection. Although the licensee has now entered these ladders into the CAP, there are no actions to either implement the permanent modification or remove the TILs, which had been in place for over nine years. Similarly, TILs had been left in place for years in both units' emergency core cooling system rooms. The licensee acknowledged that TILs should not be in place for prolonged periods and entered this issue into the CAP as AR 2032286 to ensure time limits are specified to prevent ladders being indefinitely temporarily installed.

Analysis: The licensee's repeated failure to track, inspect, or complete an engineering evaluation on TILs located near safety-related SSCs as required by licensee procedures ADM-27-21 and MA-AA-100-1008 was a performance deficiency. The performance deficiency was more than minor because if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. Specifically, routinely not tracking, inspecting or completing engineering evaluations of TILs that are touching or located near safety-related SSC could allow ladders to be installed which interact with safety-related equipment resulting in equipment rendered inoperable during a design basis seismic event. Using Manual Chapter 0609.04, Significance Determination Process Initial Characterization of Findings, Table 2 dated June 19, 2012, the finding was determined to affect the Mitigating Systems Cornerstone. Manual Chapter 0609 Appendix A, Significance Determination Process (SDP) for Findings At-Power, Exhibit 2 - Mitigating Systems Screening Questions dated, June 19, 2012, was used to further evaluate this finding. The finding screened as Green because the finding did not represent an actual loss of function of at least a single Train for > its TS Allowed Outage Time OR two separate safety systems out-of-service for > its TS Allowed Outage Time. The finding involved the crosscutting area of Problem Identification and Resolution, in the aspect of Identification, in that, non-compliances associated with TILs had been long-term issues, which the licensee had failed to identify and enter into the CAP. As a result, the ladder issues remained unnoticed and unaddressed in the CAP until identified by the inspectors [P.1].

Enforcement: Technical Specification 6.8.1, Procedures and Programs, requires, in part, that written procedures be implemented covering activities referenced in Regulatory Guide 1.33, Revision 2, dated February 1978, including safety-related activities carried out during operation of the reactor plant. Section 9.a, Procedures for Performing Maintenance, states in part, that maintenance that can affect the

performance of safety-related equipment should be properly pre-planned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

ADM-27.21, Ladder Usage and Compliance, requires, in part, that if a ladder needs to be left in a work location greater than 72 hours, a condition report shall be generated containing the ladder location, the date the ladder was installed, and a recurring assignment to inspect the ladder. This inspection must be performed within 90 days of the installation of the ladder and be subsequently performed every 90 days until the ladder is removed. Additionally, MA-AA-100-1008, Station Housekeeping and Material Control, Section 4.9, Seismic Housekeeping requires, in part, that when locating temporary items near safety-related equipment and components, the duration shall be kept to a minimum. Should there be a need to leave portable items in the power block other than those associated with a specific work task unmonitored for an indefinite period of time, an engineering evaluation of the item shall be requested. The evaluation shall address provisions for location, restraint, tagging, and document update to show the item on applicable drawings, as required.

Contrary to the above, in January of 2015, 28 TILs were found that were either in contact with or near safety-related SSC, which either had not been entered into the CAP for tracking and inspections, or had not been evaluated by engineering to ensure the ladders did not interact with safety-related equipment during a seismic event. Immediate corrective actions included removing TILs that were no longer being used and entering the remaining ladders into the CAP for tracking and inspection, and reviewing whether any ladder required an engineering evaluation. Because the licensee has restored compliance and entered this issue into its CAP as AR 02018765, and because the finding is of very low safety significance (Green), this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC's Enforcement Policy. (NCV 05000335,389/2015001-02, Procedural Non Compliances Relating To Temporarily Installed Ladders Located Near Safety-related SSCs.

.4 Annual Sample: Unit 2 Steam Generator Feedwater Ring Support Damage Root Cause Analysis

a. Inspection Scope

The inspectors selected condition report (CR) 1951667, "Feeding Supports," and the corresponding root cause evaluation (RCE), Areva CR 2014-2213, "St. Lucie Unit 2 Feedwater Ring Support Damage Root Cause Analysis," for a more in-depth review of the circumstances, and licensee's evaluations. The inspectors reviewed the action request (AR) report to verify that the licensee had planned, and/or implemented, corrective actions commensurate with the significance of the identified issue. The inspectors interviewed plant personnel and evaluated the CR, to verify that the licensee followed the corrective action process (CAP) as specified in licensee procedure PI-AA-104-1000, "Corrective Action."

b. Findings and Observations

The inspectors were still reviewing the RCE and corrective actions for this annual sample at the end of the quarterly inspection period covered in this report. The inspectors plan to complete the review, and document the results of this inspection sample in the next integrated inspection report (IR) 2015-002.

4OA3 Follow-up of Events and Notice of Enforcement Discretion

Unit 2 Forced Shutdown due to 2A1 Condenser Water box Tube Leak

On February 15, 2015, Unit 2 was operating at approximately 100 percent RTP when a secondary chemistry alarm was received in the control room due to 2A1 condenser hotwell elevated sodium. The control room operators entered the rapid down power procedure in order to remove the unit from service. By procedure, the unit was manually tripped from 25 percent RTP and entered Mode 3 (hot standby). The 2A1 water box was removed from service and the several leaking tubes were plugged. Additional tubes were plugged in the lower portion of the water box as a preemptive measure. Chemistry was restored on the secondary side of the steam generators. On February 18, 2015, the unit was restarted.

The inspectors were notified of the rapid down power. The inspectors observed Unit 2 control room activities just after the unit was manually tripped and placed in a hot standby condition. The inspector reviewed control room chronological logs, control room indications, post trip procedures, and interviewed control room operators to verify that operating restrictions and procedural requirements were met. The inspector observed control room operator communications, procedure place keeping, and control room annunciator responses by the reactor operators at the control boards. The inspector reviewed documentation and operator actions associated with licensee emergency operating procedures 2-EOP-01, Standard Post Trip Actions, and 2-EOP-02, Reactor Trip Recovery. On February 18 and 19, the inspectors observed startup of the Unit 2 reactor and subsequent power ascension to verify compliance with applicable TS and general operating procedures. Documents reviewed are listed in the Attachment.

4OA5 Other Activities

.1 Independent Spent Fuel Storage Facility (ISFSI) Walk down (IP 60855.1)

a. Inspection Scope

The inspectors conducted a walk down of the ISFSI controlled access fenced-in cask area per Inspection Procedure 60855.1, "Operation of an ISFSI at Operating Plants." The inspectors observed each cask building temperature indicator and passive ventilation system to be free of any obstruction allowing natural draft convection decay heat removal through the air inlet and air outlet openings. The inspectors observed associated cask building structures to be structurally intact and radiation protection access controls to the ISFSI area to be functional.

b. Findings

No findings were identified.

.2 (Updated) Unresolved Item 05000389/2014005-02, Design Basis Review for Unit 1 and Unit 2 Steam Generators Tube-to-Tubesheet Joint

The inspectors opened an unresolved item (URI) 05000389/2014005-02 in NRC integrated IR 05000389/2014-005 (ADAMS Accession Number ML15030A323), to review additional information from the licensee on the specific design and qualification approach for the Unit 2 replacement steam generator (RSG) tube-to-tubesheet joint, particularly the tube end weld. Based on the information available at the time, the inspectors understood that the issue was only applicable to Unit 2. During further interactions with the Unit 1 steam generator (SG) vendor, the licensee was informed that the tube-to-tubesheet joint for the Unit 1 RSGs appeared to be designed in the same way as Unit 2. Similarly to Unit 2, the Unit 1 SG tube end welds were not analyzed in accordance with the provisions in Sub-section NB-3000 of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC), Section III.

Further information is still required from the licensee to understand the design approach of Unit 1 and Unit 2 SGs, and confirm whether the provisions of NB-3000 are applicable to the tube end welds. The licensee entered the Unit 1 SG issue in the CAP as AR 02035185, "PSL1 Steam Generators Tube-to-Tubesheet Design." The Unit 2 issue remains tracked in AR 02011678, "Design Basis Review for Steam Generator Tubesheet Design." This URI is being revised to include Unit 1 and will be tracked as URI 05000335,389/2014005-02, "Design Basis Review for Unit 1 and Unit 2 Steam Generators Tube-to-Tubesheet Joint."

4OA6 Management Meetings (Including Exit Meeting)

Exit Meeting Summary

The resident inspectors presented the inspection results to Mr. Costanzo and other members of licensee management on April 09, 2015, and April 30, 2015. The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary information. The licensee did not identify any proprietary information.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel:

N. Bach, Chemistry Manager
F. Baker, Emergency Preparedness Coordinator
M. Baughman, Training Manager
B. Coffey, Plant General Manager
C. Costanzo, Site Vice President
C. Couture, Emergency Preparedness Coordinator
K. Frehafer, Licensing Engineer
R. Gil, Steam Generator Program Manager
M. Haskin, Projects Site Manager
M. Jones, Engineering Director
E. Katzman, Licensing Manager
C. Martin, Health Physics Manager
R. McDaniel, Fire Protection Supervisor
J. Piazza, Maintenance Director
P. Polfleit, Corporate Emergency Preparedness Manager
P. Rasmus, Operations Director
R. Sanford, Emergency Preparedness Coordinator
R. Sciscente, Licensing Engineer
M. Snyder, Nuclear Quality Assurance Manager
D. Taylor, Emergency Preparedness Manager
C. Workman, Security Manager

NRC Personnel:

Eric J. Stamm, Chief, Branch 3, Division of Reactor Projects

LIST OF ITEMS OPENED, CLOSED, AND UPDATED

Opened and Closed

05000335,389/2015001-01	NCV	Inadequate Risk Assessments on the Emergency Core Cooling System (Section 4OA2.2)
05000335,389/2015001-02	NCV	Procedural Non Compliances Relating To Temporarily Installed Ladders Located Near Safety-related SSCs (Section 4OA2.3)

Updated

05000335,389/2014005-02	URI	Design Basis Review for Unit 1 and Unit 2 Steam Generators Tube-to-Tubesheet Joint. (Section 4OA5.2)
-------------------------	-----	------------------------------------------------------------------------------------------------------

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment

2-NOP-03.11, High Pressure Safety Injection Initial Alignment
1-NOP-59.01B, 1B Emergency Diesel Generator Standby Lineup
2-NOP-59.01B, 2B Emergency Diesel Generator Standby Lineup
2-NOP-14.01, Component Cooling Water System Initial Alignment
2-NOP-14.02, Component Cooling Water Operation

Section 1R05: Fire Protection

ADM-0005728, Fire Protection Training, Qualification and Requalification
ADM-1800022, Fire Protection Plan
AP-1-1800023, Unit 1 Fire Fighting Strategies
AP-2-1800023, Unit 2 Fire Fighting Strategies

Section 1R11: Licensed Operator Requalification Program and Licensed Operator Performance

2-EOP-01, Standard Post Trip Actions
2-EOP-02, Reactor Trip Recovery
2-GOP-123, Turbine Shutdown – Full Load To Zero Load
2-AOP-22.01, Rapid Downpower
2-AOP-14.01, Component Cooling Water Abnormal Operations
EPIP-01, Classification of Emergencies
EPIP-02, Duties and Responsibilities of the Emergency Coordinator

Section 1R12: Maintenance Effectiveness

ER-AA-100-2002, Maintenance Rule Program Administration
SCEG-004, Guideline for Maintenance Rule Scoping, Risk Significant Determination, and Expert Panel Activities
AR 2020178, U1 ACC-3A Maintenance Rule a(1) evaluation
AR 2017293, U1 ACC-3B Compressor Cycling
AR 2004048, U1 ACC-3B Loss of Power
AR 1933762, U1 ACC-3B Shutdown due to High Suction Pressure
Unit 1 HVAC, System 25b System Health Report dated 10/1/2014-12/31/2014

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

OP-AA-104-1007, Online Aggregate Risk
WCG-016, Online Work Management
ADM-09.23, Shutdown Safety Assessment

Section 1R15: Operability Determinations and Functionality Assessments

EN-AA-203-1001, Operability Determinations and Functionality Assessments

Section 1R20: Refueling and Other Outage Activities

ADM-09.23, Shutdown Safety Assessment
1-GMM-68.02, Emergency Closure of Containment Penetrations, Personnel Hatch, and Equipment Hatches
1-NOP-03.05, Shutdown Cooling 1-NOP-01.03, Draining RCS

AP-0010145, Shutdown Cooling Controls
 1-GOP-123, Turbine Shutdown – Full Load To Zero Load
 1-GOP-305, Reactor Plant Cooldown – Hot Standby To Cold Shutdown
 1-GOP-365, Refueling Sequence Guidelines
 1-NOP-67.02, Spent Fuel Handling Machine Operation
 1-NOP-67.04, Refueling Machine Operation
 0-NOP-67.05, Refueling Operation

Section 1R22: Surveillance Testing

ADM-29.02, ASME Code Testing of Pumps and Valves

Section 1EP2: Alert and Notification System Evaluation

Procedures and Reports

KLD TR-739, St. Lucie NPP Population by Siren Contour Analysis, Rev. 0
 EP-SR-102-1000, Nuclear Division Florida Alert & Notification System, Rev. 8
 FEMA-43 Report, Public Alert and Notification System for the St. Lucie Plant, February 1985
 Siren System Availability Test Procedure, No. 6.80.01, Rev. K
 Siren Maintenance Procedure, No. 6.80.02, Rev. I
 Master Siren Control System Maintenance Procedure, No. 6.80.05, Rev. D
 FPL Siren System Design Document, Rev. 12
 RP-SL-105-1005, Operational Support Center Emergency Kits, Rev. 1

Records and Data

2013 St. Lucie Siren System Availability
 2014 St. Lucie Siren System Availability
 2014 Safety Planning Information Mailer
 2014 Quarterly and Extended ANS Maintenance checklist sheets

Corrective Action documents

AR 1891609, Siren failed due to lightning
 AR 1891611, Siren failed due to lightning
 AR 1901318, Siren failed due to bad brushes
 AR 1905138, Siren failed due to lightning damage
 AR 1942048, Siren failed due to lightning
 AR 1995490, Siren failed due to lightning
 AR 2006485, Siren failed due to rotor module failure
 AR 1968188, Replace Current Nortel PBX with Internet Protocol Telephone System

Section 1EP3: Emergency Response Organization Staffing and Augmentation System

Procedures

EPIP-03, Emergency Response Organization Notification/Staff Augmentation, Rev. 24
 EPIP-04, Activation and Operation of the Technical Support Center, Rev. 46

Records and Data

Current ERO Roster
 ERO Training Records

Corrective Action Documents

AR 1943239, Giving TSC EP Coordinator the EOF EP Manager Responsibilities
 AR 1971787, PSL E-Plan revision actions
 AR 1994615, PSL E-Plan Revision 64 actions

Section 1EP4: Emergency Action Level and Emergency Plan ChangesProcedures

EP-AA-100-1007, Evaluation of Changes to the Emergency Plan, Supporting Documents and Equipment [10 CFR 50.54(Q)], Rev. 3

Change Packages

10 CFR 50.54(q) Screening Form, Change to the E-Plan, dated 4/2/14
 10 CFR 50.54(q) Evaluation Form, Change to the E-Plan, dated 4/2/14
 10 CFR 50.54(q) Screening Form, Administrative Change to the E-Plan, dated 9/9/14
 10 CFR 50.54(q) Evaluation Form, Administrative Change to the E-Plan, dated 9/9/14
 10 CFR 50.54(q) Screening Form, Fuel Building Mid-Range Channel, dated 6/24/14
 10 CFR 50.54(q) Evaluation Form, Fuel Building Mid-Range Channel, dated 6/25/14
 10 CFR 50.54(q) Screening Form, Plant Vent Mid-Range Channel, dated 6/24/14
 10 CFR 50.54(q) Evaluation Form, Plant Vent Mid-Range Channel, dated 6/25/14

Corrective Action Documents

AR 1971787, Administrative change to the Emergency Plan
 AR 2021286, Revise RAD EAL DBD to remove reference to PC-11 and Eberline

Section 1EP5: Maintenance of Emergency PreparednessProcedures

St. Lucie Plant Radiological Emergency Plan, Rev. 60
 EP-AA-100-1001, Guidelines for Maintaining Emergency Preparedness, Rev. 7
 EP-AA-101, Nuclear Division Drill and Exercise Program, Rev. 1
 EP-AA-101-1000, Nuclear Division Drill and Exercise Procedure, Rev. 9
 EP-AA-105, Maintaining Equipment Important to Emergency Preparedness, Rev. 4
 EPG-02, Emergency Response Facility and Equipment Surveillance, Rev. 19
 EPG-03, Review and Revision of Emergency Preparedness Documents, St Lucie Plant, Rev. 20
 EPG-04, Drill and Exercise Program, Rev. 16
 EPIP-06, Activation and Operation of the Emergency Operations Facility, Rev. 40
 EPIP-13, Maintaining Emergency Preparedness – Emergency Exercises, Drills, Tests and Evaluations, Rev. 20
 PI-AA-101, Self-Assessment and Benchmarking Program, Rev. 16
 PI-AA-104-1000, Corrective Action, Rev. 2

Records and Data

2014 Agreement Letters with local governmental agencies/medical service providers
 Emergency Preparedness Quarterly Training Drill Reports, March 2013 – November 2014
 2014 HAB Exercise Report, dated 3/7/14
 PSL-13-016, St. Lucie Nuclear Oversight Report – Emergency Preparedness, Dated 08/13/13
 PSL-14-008, St. Lucie Nuclear Oversight Report – Emergency Preparedness, Dated 08/12/14
 QHSA – July 2013 to May 2014, Undated

Self-Assessment Report - SA 1921866, Undated
 Self-Assessment Report - SA 1951750-02, Undated
 Focused Self-Assessment Report, FSA # 1837464, Equipment Important to Emergency Preparedness, Rev. 1
 Self-Assessment Report-SA 1900646, Preparation for INPO EP Review Visit, dated 12/13/13

Corrective Action Documents

AR 1850017, Unsat State Notification During Simulator Evaluations
 AR 1852790, Incorrect Information Transmitted to the State
 AR 1867128, PSL April 2013 EP Drill Inaccurate PAR Escalation
 AR 1942350, PSL HAB – Procedure Not Followed – GE PAR
 AR 1942353, 2014 PSL HAB Exercise NRC Event Notification Timing
 AR 1942358, 2014 PSL HAB Exercise Interpretation of Hostile Action
 AR 1942518, HAB Drill Improvement Opportunity – Invoking 50.54(x)
 AR 1942786, HAB Drill – Unsat Demonstration Criteria
 AR 1942817, PSL HAB – NRC Observations and Comments
 AR 1980677, Annual Briefing/ Media Day Shortfalls
 AR 20211326, 2014 Annual Media Day Brief Not Rescheduled Post-Audit
 AR 2021366, EP Van #2232 Failed to Start Due to Dead Battery
 AR 2021412, All NRC FTS Phones Out of Service in TSC
 AR 2021755, Roll Up of NRC Observations During 2015 Inspection

Section 40A1: Performance Indicator Verification

Procedures

ADM-25.02, NRC Performance Indicators, Rev. 30
 EPG-01, Emergency Preparedness Assessment and Performance Monitoring, Rev. 17
 EPIP-01, Classification of Emergencies, Rev. 25
 EPIP-02, Duties and Responsibilities of the Emergency Coordinator, Rev. 39, 1/10/2014
 EPIP-04, Activation of the Technical Support Center, Rev. 46, 9/25/2014
 EPIP-08, Off-Site Notifications and Protective Action Recommendations, Rev. 36

Records and Data

Documentation of Performance Indicator data from January 1, 2014, through December 31, 2014, for DEP, ANS, and ERO

Corrective Action documents

AR 1890357, Incorrect State Notification Transmitted From EOF
 AR 1892823, Missed DEP PI Point During Simulator Evaluations
 AR 1921356, Unsat E-Plan Classification During LOCT Performance Evaluation
 AR 1932222, Evaluate Implementation of E-Plan on 1/9/14

Guidance Documents and Manuals

LI-AA-204-1001, NRC Performance Indicator Guideline, Rev. 3

Section 40A2: Problem Identification and Resolution (Inspection Procedure 71152)

Corrective Action Documents

CR1951667, Feeding Supports, 3/25/14

Procedures

PI-AA-104-1000, Corrective Action, Rev. 1

Other Documents

Documentum #130-9221275-002, St. Lucie Unit 2 Feedwater Ring Support Damage Root Cause Analysis (CR# 2014-2213), December 10, 2014

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

Procedures

2-EOP-01, Standard Post Trip Actions

2-EOP-02, Reactor Trip Recovery

2-GOP-123, Turbine Shutdown – Full Load To Zero Load

2-AOP-22.01, Rapid Downpower

2-GOP-302, Reactor Plant Startup-Mode 3 to Mode 2

Section 4OA5: Other Activities

Corrective Action Documents

AR 02011678, Design Basis Review for Steam Generator Tubesheet Design, 12/8/14

Procedures

PI-AA-104-1000, Corrective Action, Rev. 1