



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

April 28, 2014

Mr. Lawrence Coyle
Site Vice President
Entergy Nuclear Northeast
James A. FitzPatrick Nuclear Power Plant
P.O. Box 110
Lycoming, NY 13093

**SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT - NRC INTEGRATED
INSPECTION REPORT 05000333/2014002**

Dear Mr. Coyle:

On March 31, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your James A. FitzPatrick Nuclear Power Plant (FitzPatrick). The enclosed inspection report documents the inspection results, which were discussed on April 24, 2014, with you and other members of your staff.

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

This report documents one NRC-identified violation of NRC requirements, which was of very low safety significance (Green). Also, a licensee-identified violation, which was determined to be of very low safety significance, is listed in this report. However, because of their very low safety significance, and because they are entered into your corrective action program, the NRC is treating these findings as non-cited violations, consistent with Section 2.3.2.a of the NRC Enforcement Policy. If you contest the non-cited violations in this report, 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 I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at FitzPatrick. In addition, if you disagree with the cross-cutting aspect assigned to any finding, or a finding not associated with a regulatory requirement in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at FitzPatrick.

Additionally, as we informed you in the most recent NRC integrated inspection report, cross-cutting aspects identified in the last six months of 2013 using the previous terminology were being converted in accordance with the cross-reference in Inspection Manual Chapter (IMC) 0310. Section 4OA5 of the enclosed report documents the conversion of these cross-cutting aspects which will be evaluated for cross-cutting themes and potential substantive cross-cutting

L. Coyle

2

issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review. If you disagree with the cross-cutting aspect assigned, 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 1, and the NRC Resident Inspector at FitzPatrick.

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390 of the NRCs "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 component of the NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Arthur L. Burritt, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket No. 50-333
License No. DPR-59

Enclosure: Inspection Report 05000333/2014002
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

L. Coyle

2

aspects which will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review. If you disagree with the cross-cutting aspect assigned, 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 1, and the NRC Resident Inspector at FitzPatrick.

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390 of the NRCs "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 component of the NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Arthur L. Burritt, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket No. 50-333
License No. DPR-59

Enclosure: Inspection Report 05000333/2014002
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

Distribution: (via email)

W. Dean, RA
D. Lew, DRA
M. Scott, DRP
E. Benner, DRP
R. Lorson, DRS
J. Trapp, DRS
A. Burritt, DRP
T. Setzer, DRP
L. McKown, DRP

J. Petch, DRP
E. Knutson, DRP, SRI
B. Sienel, DRP, RI
S. Quenneville, DRP, AA
J. Nick, RI OEDO
RidsNrrPMFitzPatrick Resource
RidsNrrDorLpl1-1 Resource
ROPreports Resource

DOCUMENT NAME: G:\DRP\BRANCH2\A - Fitzpatrick\Reports\2014\2014-002\IR 2014-002 final.docx
ADAMS ACCESSION NUMBER: **ML14118A306**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME	EKnutson/ALB for	TSetzer/TCS	ABurritt/ALB		
DATE	04/24/14	04/24/14	04/28/14		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No. 50-333

License No. DPR-59

Report No. 05000333/2014002

Licensee: Entergy Nuclear Northeast (Entergy)

Facility: James A. FitzPatrick Nuclear Power Plant

Location: Scriba, NY

Dates: January 1, 2014 through March 31, 2014

Inspectors: E. Knutson, Senior Resident Inspector
B. Sienel, Resident Inspector
E. Burket, Emergency Preparedness Inspector
J. Rady, Reactor Inspector

Approved by: Arthur L. Burritt, Chief
Reactor Projects Branch 2
Division of Reactor Projects

TABLE OF CONTENTS

SUMMARY	3
1. REACTOR SAFETY	5
1R04 Equipment Alignment	5
1R05 Fire Protection	6
1R07 Heat Sink Performance	7
1R11 Licensed Operator Requalification Program & Licensed Operator Performance	7
1R12 Maintenance Effectiveness	8
1R13 Maintenance Risk Assessments and Emergent Work Control	8
1R15 Operability Determinations and Functionality Assessments.....	9
1R19 Post-Maintenance Testing.....	10
1R22 Surveillance Testing	11
1EP4 Emergency Action Level and Emergency Plan Changes	11
1EP6 Drill Evaluation	12
4. OTHER ACTIVITIES	12
4OA1 Performance Indicator Verification	12
4OA2 Problem Identification and Resolution	13
4OA3 Follow-Up of Events and Notices of Enforcement Discretion	15
4OA5 Other Activities	18
4OA6 Meetings, Including Exit	18
4OA7 Licensee-Identified Violations.....	19
SUPPLEMENTARY INFORMATION	A-1
KEY POINTS OF CONTACT	A-1
LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED	A-1
LIST OF DOCUMENTS REVIEWED	A-2
LIST OF ACRONYMS.....	A-7

SUMMARY

IR 05000333/2014002; 01/01/2014 - 03/31/2014; James A. FitzPatrick Nuclear Power Plant (FitzPatrick); Follow-Up of Events and Notices of Enforcement Discretion.

This report covered a three-month period of inspection by resident inspectors and announced inspections and in-office reviews performed by regional inspectors. Inspectors identified one finding of very low safety significance (Green) which was a non-cited violation (NCV). The significance of most findings is 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. Cross-cutting aspects are determined using IMC 0310, "Aspects Within the Cross-Cutting Areas," dated December 19, 2013. 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 operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5.

Cornerstone: Mitigating Systems

- Green. The inspectors identified a Green NCV of Technical Specification (TS) 3.5.1, "ECCS [emergency core cooling system] - Operating," because filling the high pressure coolant injection (HPCI) system with low quality water from the suppression pool following maintenance caused the HPCI booster pump recirculation pressure control valve, 23PCV-50, to fail, thereby making the HPCI system inoperable, and this condition existed for greater than the TS allowed outage time of 14 days. Although the HPCI system was inoperable, it still maintained its safety function to provide emergency core coolant flow in the event of an accident. As corrective action, Entergy staff changed the procedure to indicate that the HPCI system should be filled using the CSTs, and submitted revision 1 to the associated licensee event report (LER) to report the TS violation. This issue was entered into the corrective action program (CAP) as condition report (CR)-JAF-2014-00961.

The inspectors determined that Entergy staff's actions to refill the HPCI system with water from the suppression pool following maintenance, thereby causing the failure of 23PCV-50 to control pressure the next time that the HPCI system was operated, was a performance deficiency that was reasonably within Entergy's ability to foresee and correct. The finding was more than minor because it was associated with the human performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the issue resulted in failure of 23PCV-50 to control pressure, which caused the HPCI system to be inoperable for greater than its TS allowed outage time. In accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 2 of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the inspectors determined that this finding was of very low safety significance (Green) because the performance deficiency was not a design or qualification deficiency, did not involve an actual loss of safety function, did not represent the actual loss of a safety function of a single train for greater than its TS allowed outage time, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. This finding had a cross-cutting aspect in the area of Problem Identification and Resolution, because FitzPatrick staff did not implement internal and external operating experience concerning the inadvisability of using suppression pool water to refill the HPCI system following maintenance [P.5] (Section 4OA3)

Other Findings

A violation of very low safety significance that was identified by Entergy staff was reviewed by the inspectors. Corrective actions taken or planned by Entergy staff have been entered into FitzPatrick's CAP. This violation and corrective action tracking number are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

James A. FitzPatrick Nuclear Power Plant (FitzPatrick) began the inspection period at 75 percent power, having reduced power from 100 percent to isolate a main condenser waterbox for tube leakage. Later on January 1, 2014, operators further reduced power to 50 percent to plug the leaking tubes, and then restored power to 100 percent. On 10 other occasions (January 20, February 5, February 19, February 28, March 1, March 7, March 12, March 18, March 22, and March 30), operators performed similar short duration power reductions to 50 percent to address main condenser tube leakage. Additionally, as part of another 50 percent power reduction to address condenser tube leakage on February 8, 2014, operators further reduced power to 15 percent to perform main turbine trip device testing. FitzPatrick operated at or near 100 percent power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R04 Equipment Alignment

.1 Partial System Walkdown (71111.04 - 4 samples)

a. Inspection Scope

The inspectors performed partial walkdowns of the following systems:

- 'B' core spray system due to increased risk significance while the 'A' residual heat removal (RHR) system was inoperable for planned maintenance on January 28, 2014
- 'B' residual heat removal service water (RHRSW) system due to increased risk significance while the 'A' RHR system was inoperable for planned maintenance on January 29, 2014
- 'B' and 'D' emergency diesel generators (EDGs) due to increased risk significance while the 115 kilovolt (kV) offsite power line 3 was inoperable due to an emergent equipment failure on March 19, 2014
- HPCI system while the reactor core isolation cooling (RCIC) system was inoperable for planned maintenance on March 25, 2014

The inspectors selected these systems based on their risk-significance relative to the reactor safety cornerstones at the time they were inspected. The inspectors reviewed applicable operating procedures, system diagrams, the updated final safety analysis report (UFSAR), TSs, CRs, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have impacted system performance of their intended safety functions. The inspectors performed field walkdowns of accessible portions of the systems to verify system components and support equipment were aligned correctly and were operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. The inspectors also reviewed

whether Entergy staff had properly identified equipment issues and entered them into the CAP for resolution with the appropriate significance characterization. Documents reviewed for each section of this inspection report are listed in the Attachment.

b. Findings

No findings were identified.

.2 Full System Walkdown (71111.04S - 1 sample)

a. Inspection Scope

On March 7, 2014, the inspectors performed a complete system walkdown of accessible portions of the 'B' RHR system to verify the existing equipment lineup was correct. The inspectors reviewed operating procedures, drawings, equipment line-up check-off lists, and the UFSAR to verify the system was aligned to perform its required safety functions. The inspectors also reviewed electrical power availability, component lubrication and equipment cooling, hangar and support functionality, and operability of support systems. The inspectors performed field walkdowns of accessible portions of the system to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. Additionally, the inspectors reviewed a sample of related CRs to ensure Entergy personnel appropriately evaluated and resolved any deficiencies.

b. Findings

No findings were identified.

1R05 Fire Protection

Resident Inspector Quarterly Walkdowns (71111.05Q - 5 samples)

a. Inspection Scope

The inspectors conducted tours of the areas listed below to assess the material condition and operational status of fire protection features. The inspectors verified that Entergy controlled combustible materials and ignition sources in accordance with administrative procedures. The inspectors verified that fire protection and suppression equipment was available for use as specified in the area pre-fire plan, and passive fire barriers were maintained in good material condition. The inspectors also verified that station personnel implemented compensatory measures for out of service, degraded, or inoperable fire protection equipment, as applicable, in accordance with procedures.

- East cable tunnel, fire area/zone II/CT-2, on February 6, 2014
- Relay room, fire area/zone VII/RR-1, on February 7, 2014
- East electric bay, fire area/zone II/SW-2, on February 14, 2014

- Reactor building 272 foot elevation, fire area/zone IX/RB-1A, X/RB-1B, on March 4, 2014
- Reactor building 300 foot elevation, fire area/zones VIII/RB-1C, IX/RB-1A, and X/RB-1B, on March 14, 2014

b. Findings

No findings were identified.

1R07 Heat Sink Performance (71111.07A - 1 sample)

a. Inspection Scope

The inspectors reviewed the “B” RHR heat exchanger, 10E-2B, inspection results to determine its readiness and availability to perform its safety functions. The inspectors reviewed the design basis for the component and verified Entergy’s commitments to NRC Generic Letter 89-13, “Service Water System Problems Affecting Safety-Related Equipment.” The inspectors reviewed and discussed the results of the November 2013 inspection with engineering staff and reviewed pictures of the as-found and as-left conditions. The inspectors verified that Entergy initiated appropriate corrective actions for identified deficiencies. The inspectors also verified that the number of tubes plugged within the heat exchanger did not exceed the maximum amount allowed.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program and Licensed Operator Performance (71111.11Q - 2 samples)

.1 Quarterly Review of Licensed Operator Requalification Testing and Training

a. Inspection Scope

The inspectors observed licensed operator simulator training on February 26, 2014, which included a condensate pump trip, a reactor coolant system leak in the drywell, and an anticipated transient without a reactor scram. The inspectors evaluated operator performance during the simulated event and verified completion of risk significant operator actions, including the use of abnormal and emergency operating procedures. The inspectors assessed the clarity and effectiveness of communications, implementation of actions in response to alarms and degrading plant conditions, and the oversight and direction provided by the control room supervisor. Additionally, the inspectors assessed the ability of the crew and training staff to identify and document crew performance problems.

b. Findings

No findings were identified.

.2 Quarterly Review of Licensed Operator Performance in the Main Control Room

a. Inspection Scope

On February 19, 2014, the inspectors observed operator performance during an unplanned power reduction to 50 percent to address main condenser tube leakage. The inspectors observed portions of the crew turnover, the shiftly reactivity manipulation brief, and reactivity manipulations using control rods and the reactor water recirculation system. The inspectors observed crew performance to verify that procedure use, crew communications, and coordination of activities between work groups met established expectations and standards.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12Q - 3 samples)

a. Inspection Scope

The inspectors reviewed the samples listed below to assess the effectiveness of maintenance activities on structure, system, or component (SSC) performance and reliability. The inspectors reviewed system health reports, CAP documents, and maintenance rule basis documents to ensure that Entergy staff was identifying and properly evaluating performance problems within the scope of the maintenance rule. For each sample selected, the inspectors verified that the SSC was properly scoped into the maintenance rule in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.65 and verified that the (a)(2) performance criteria established by Entergy staff was reasonable. For SSCs classified as (a)(1), the inspectors assessed the adequacy of goals and corrective actions to return these SSCs to (a)(2). Additionally, the inspectors ensured that Entergy staff was identifying and addressing common cause failures that occurred within and across maintenance rule system boundaries.

- Control rod drive hydraulic
- Instrument air
- EDG

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 - 5 samples)

a. Inspection Scope

The inspectors reviewed maintenance activities to verify that the appropriate risk assessments were performed prior to removing equipment for work. The inspectors reviewed whether risk assessments were performed as required by 10 CFR 50.65(a)(4), and were accurate and complete. When emergent work was performed, the inspectors reviewed whether plant risk was promptly reassessed and managed. The inspectors

also walked down selected areas of the plant which became more risk significant because of the maintenance activities to ensure they were appropriately controlled to maintain the expected risk condition. The reviews focused on the following activities:

- Planned maintenance on 'A' RHR and 'A' RHRSW systems during the week of January 28, 2014
- Replacement of 'C' normal service water pump, an emergent main condenser tube leak that led operators to reduce power to 50 percent to perform repairs, and emergent issues with the 'A' RHRSW keep-fill system which required an RHRSW pump to be running to maintain the system filled, the main turbine trip feature which led operators to reduce power to 15 percent for testing and repair, and plant computer issues which affected the ability to perform reactor heat balance calculations that are used to limit reactor power to 100 percent during the week of February 3, 2014
- 'B' and 'D' EDG eight-hour full load surveillance test, and emergent maintenance to address main condenser tube leakage that required a power reduction to 50 percent during the week of March 10, 2014
- 'B' core spray quarterly surveillance test, a one day maintenance period for the 'D' EDG, emergent maintenance on 115 kV offsite electrical supply line 3 that required the line to be removed from service for two days, and emergent maintenance to address main condenser tube leakage that twice required power reductions to 50 percent during the week of March 17, 2014
- Planned maintenance on the RCIC system during the week of March 25, 2014

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 - 6 samples)

a. Inspection Scope

The inspectors reviewed operability determinations for the following degraded or non-conforming conditions:

- CR-JAF-2014-00224 concerning identification that the FitzPatrick procedure for calibration of ultrasonic flow meters did not meet current vendor recommendations and therefore could have adversely affected current surveillance test results for the RHR, RHRSW, and emergency service water (ESW) systems on January 15, 2014
- CR-JAF-2014-00289 concerning the effect of high 'C' EDG lube oil cooler jacket water inlet temperature readings on 'C' EDG operability on January 17, 2014
- CR-JAF-2014-00541 concerning the effect of failure of the 'A' main turbine master trip solenoid valve on operability of the TS-required main turbine high water level trip function on February 3, 2014
- CR-JAF-2014-00652 concerning the possibility that wood flour, routinely being used to mitigate main condenser tube leakage, could degrade RHRSW and ESW system performance by fouling the system strainers, given that wood flour has been found in the normal service water system strainers on February 13, 2014

- CR-JAF-2014-01059 concerning the effect of air leakage through a Technical Support Center (TSC) ventilation boundary door in excess of its surveillance allowance on operability of the TSC on March 5, 2014
- CR-JAF-2014-00492 concerning the effect of a higher than acceptance criteria percentage of bio-diesel in the EDG fuel oil on EDG operability on March 11, 2014

The inspectors selected these issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the operability determinations to assess whether TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TSs and UFSAR to Entergy staff's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled by Entergy staff. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 - 6 samples)

a. Inspection Scope

The inspectors reviewed the post-maintenance tests (PMTs) for the maintenance activities listed below to verify that procedures and test activities ensured system operability and functional capability. The inspectors reviewed the test procedure to verify that the procedure adequately tested the safety functions that may have been affected by the maintenance activity, that the acceptance criteria in the procedure was consistent with the information in the applicable licensing basis and/or design basis documents, and that the procedure had been properly reviewed and approved. The inspectors also witnessed the test or reviewed test data to verify that the test results adequately demonstrated restoration of the affected safety functions.

- Work order (WO) 00370160 to replace HPCI CST tank level switch 23LS-74B on January 11, 2014
- WO 00372478, to replace the manual rod control system sequencer board that was causing the rod select matrix to malfunction such that control rods could not be selected for manual operation on January 22, 2014
- WO 00271953, to perform ST-2XA, "RHR Service Water Loop A Quarterly Operability Test (IST [inservice test])," per WO 52526564-01, as PMT for various maintenance activities performed on the system during the preceding three day maintenance period on January 30, 2014
- WO 00376146, to improve the door seal on TSC ventilation boundary door 52DR-A-272-1 on March 5, 2014

- WO 00327911 to replace the RCIC turbine steam inlet valve 13MOV-131 on March 28, 2014
- WO 00259241 to perform control room ventilation inlet damper maintenance on March 28, 2014

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22 - 6 samples)

a. Inspection Scope

The inspectors observed performance of surveillance tests and/or reviewed test data of selected risk-significant SSCs to assess whether test results satisfied TSs, the UFSAR, and station procedure requirements. The inspectors verified that test acceptance criteria were clear, tests demonstrated operational readiness and were consistent with design documentation, test instrumentation had current calibrations and the range and accuracy for the application, tests were performed as written, and applicable test prerequisites were satisfied. Upon test completion, the inspectors considered whether the test results supported that equipment was capable of performing the required safety functions. The inspectors reviewed the following surveillance tests:

- ST-4N, "HPCI Quick-Start, Inservice, and Transient Monitoring Test (IST)," on January 21, 2014
- ISP-100A-PCIS, "PCIS [primary containment isolation system] Instrument Functional Test/Calibration," on February 7, 2014
- ST-15G, "Pressure Suppression Chamber - Reactor Building Vacuum Breaker Operability and Setpoint Test (IST)," on February 19, 2014
- ST-9QB, "EDG B and D Full Load Test (8 Hour Run)," on March 10, 2014
- ST-21F, "Main Turbine Overspeed Trip Device and Mechanical Trip Valve Test," on March 14, 2014
- ISP-16, "Drywell Floor Drain Sump Flow Loop Functional Test/Calibration," on March 19, 2014

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04 - 1 sample)

a. Inspection Scope

Entergy staff implemented various changes to the Fitzpatrick Emergency Action Levels (EALs), Emergency Plan, and Implementing Procedures. Entergy staff had determined that, in accordance with 10 CFR 50.54(q)(3), any change made to the EALs, Emergency Plan, and its lower-tier implementing procedures, had not resulted in any reduction in

effectiveness of the Emergency Plan, and that the revised Emergency Plan continued to meet the standards in 50.47(b) and the requirements of 10 CFR 50 Appendix E.

The inspectors performed an in-office review of all EAL and Emergency Plan changes submitted by Entergy staff as required by 10 CFR 50.54(q)(5), including the changes to lower-tier emergency plan implementing procedures, to evaluate for any potential reductions in effectiveness of the Emergency Plan. This review by the inspectors was not documented in an NRC 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 requirements in 10 CFR 50.54(q) were used as reference criteria.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06 - 1 sample)

a. Inspection Scope

The inspectors observed a simulator training evolution for licensed operators on February 26, 2014, which required Emergency Plan implementation by an operations crew. Entergy staff planned for this evolution to be evaluated and included in performance indicator (PI) data regarding drill and exercise performance. The inspectors observed event classification and notification activities performed by the crew. The inspectors also attended the post-evolution critique for the scenario. The focus of the inspectors' activities was to note any weaknesses and deficiencies in the crew's performance and ensure that Entergy evaluators noted the same issues and entered them into the CAP.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Unplanned Power Changes (1 sample)

a. Inspection Scope

The inspectors reviewed FitzPatrick staff's submittals for the following Initiating Events Cornerstone PIs for the period of January 1 through December 31, 2013.

- Unplanned Power Changes

To determine the accuracy of the PI data reported during that period, the inspectors used definitions and guidance contained in Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7. The

inspectors reviewed FitzPatrick's operator narrative logs, CRs, and NRC integrated inspection reports to validate the accuracy of the submittals.

b. Findings

No findings were identified.

.2 Safety System Functional Failures (1 sample)

a. Inspection Scope

The inspectors sampled FitzPatrick staff's submittals for the Safety System Functional Failures PI for the period of January 1 through December 31, 2013. To determine the accuracy of the PI data reported during that period, inspectors used definitions and guidance contained in NEI Document 99-02 and NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 10 CFR 50.73." The inspectors reviewed FitzPatrick's LERs and NRC integrated inspection reports to validate the accuracy of the submittals.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

.1 Routine Review of Problem Identification and Resolution Activities

a. Inspection Scope

As required by Inspection Procedure 71152, "Problem Identification and Resolution," the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that Entergy staff entered issues into the CAP at an appropriate threshold, gave adequate attention to timely corrective actions, and identified and addressed adverse trends. In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the CAP and periodically attended CR screening meetings.

b. Findings

No findings were identified.

.2 Annual Sample: Loss of 4160 Volt Emergency Bus during Performance of Remote Shutdown System Surveillance Test (1 sample)

a. Inspection Scope

The inspectors performed an in-depth review of Entergy staff's failure analysis and corrective actions associated with CR-JAF-2013-00222 that documented an occurrence on January 15, 2013, where the 'B' and 'D' EDGs started unexpectedly while performing surveillance test ST-43D, "Remote Shutdown Panel 25ASP-3 Component Operation and Isolation Verification." When the 'B' and 'D' EDGs started and generator voltages

reached 75 percent of normal output voltage, the normal feeder breakers to the emergency bus tripped as expected. However, there was a total loss of the 4160 volt (V) emergency bus 10600 because the close circuitry of the 'B' and 'D' EDG output breakers had been disabled in a previous step of ST-43D. This event also resulted in a half scram from the 'B' channel of the reactor protection system and a Group II primary containment isolation actuation. As required by FitzPatrick's TSs, Limiting Condition for Operation (LCO) 3.8.7, Condition A, was entered and the 4160 V emergency bus 10600 was restored within eight hours.

The inspectors assessed Entergy staff's problem identification threshold, causal analyses, extent of condition reviews, compensatory actions, and the prioritization and timeliness of corrective actions to determine whether Entergy staff was appropriately identifying, characterizing, and correcting problems associated with this issue. The inspectors compared the actions taken to the requirements of Entergy's CAP and 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." In addition, the inspectors reviewed documentation associated with this issue, including condition and failure analysis reports, and interviewed engineering personnel to assess the effectiveness of the implemented corrective actions to complete full resolution of the issue.

b. Findings and Observations

No findings were identified.

The inspectors found that Entergy staff took appropriate actions to identify the root and contributing causes of the issue. The root cause of the issue was a failed undervoltage relay, 71-271AB-1HOEB04, which is part of the automatic start circuit for the 'B' and 'D' EDGs. More specifically, contacts 3-4 of the relay did not open as expected when the undervoltage relay was energized during implementation of surveillance test ST-43D. Entergy staff determined the contributing cause to have been the removal of fuses in the 'B' and 'D' EDG output breakers' close circuits without verifying that relay contacts 3-4 within undervoltage relay 71-271AB-1HOEB04 were open. No voltage or continuity checks were performed prior to pulling the fuses from the remote operation portion of the circuitry to ensure that the proper relay configuration had been obtained.

Entergy staff promptly replaced the failed undervoltage relay and updated surveillance test ST-43D to perform voltage checks of contacts in the loss of bus voltage circuit prior to pulling fuses in the remote operation portion of the circuitry. Entergy staff also performed an extent of condition review of all surveillance test procedures that could result in a reactor scram or entry into a TS LCO of less than or equal to 72 hours. The extent of condition review did not require any additional procedure updates.

The inspectors determined Entergy staff's overall response to the issue was commensurate with the safety significance, was timely, and the actions taken were reasonable to resolve the total loss of the 4160 V emergency bus 10600 issue while performing surveillance test ST-43D.

4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153 - 3 samples).1 (Closed) LERs 05000333/2012-002-00 and -01: High Pressure Coolant Injection Pressure Control Valve Failurea. Inspection Scope

On August 28, 2012, while operating the HPCI system for routine quarterly surveillance testing, operators identified that water was overflowing the 'A' reactor building equipment sump. Subsequent testing revealed that the source of this water had been the HPCI booster pump recirculation safety valve, 23SV-66, which was discharging 75 gallons per minute (gpm) to the equipment sump due to failure of the HPCI booster pump recirculation pressure control valve, 23PCV-50.

The HPCI system is normally aligned with pump suction from the CSTs. With 23PCV-50 failed, this would result in 75 gpm of CST water being rejected while HPCI was in operation, which would deplete the CST inventory more rapidly than would normally be expected to occur. FitzPatrick staff did not know if HPCI would be able to meet its mission time before automatically realigning to the suppression pool when the CST low level setpoint was reached. Operation of HPCI in this condition would be unacceptable because the rejection of 75 gpm of water from the suppression pool would exceed the 5 gpm limit for total leakage sources outside containment established by the UFSAR, and would be contrary to the requirement of TS 5.5.2 to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during an accident to levels as low as practicable. Therefore, HPCI was declared inoperable on August 30, 2012. Revision 0 of the subject LER was submitted in accordance with 10 CFR 50.73(a)(2)(v)(D), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident;" revision 1 was subsequently submitted to report a violation of TS in accordance with 10 CFR 50.73(a)(2)(i)(B).

b. Findings

Introduction. The inspectors identified a Green NCV of TS 3.5.1, "ECCS - Operating," because filling the HPCI system with low quality water from the suppression pool following maintenance caused the HPCI booster pump recirculation pressure control valve, 23PCV-50, to fail, thereby making the HPCI system inoperable, and this condition existed for greater than the TS allowed outage time of 14 days. Although the HPCI system was inoperable, it still maintained its safety function to provide emergency core coolant flow in the event of an accident.

Description. FitzPatrick staff determined the cause of the 23PCV-50 failure to control pressure was that the filter in its pressure sensing line had become plugged when water from the suppression pool had been used to refill the HPCI system following system maintenance in June 2012. The refill had been performed in accordance with Operating Procedure (OP)-15, "High Pressure Coolant Injection," section G.8, "Fill and Vent HPCI Suction Piping from Torus." This section had been added to the procedure in September 2007 to address inadequate venting of the HPCI suction piping that had resulted in difficulty performing leak rate testing of the HPCI torus suction valves. In April 2012, a new section, G.9, "Fill and Vent the HPCI Suction Piping from CST," had

been added as revision 59 to OP-15 to provide direction to fill and vent the HPCI suction piping from the CSTs.

Operating experience at FitzPatrick indicated that suppression pool water was not the preferable source for filling plant systems because it contains sediment from the suppression chamber (torus). Specifically, a plant modification was performed in 1988 to install a larger inline filter in the 23PCV-50 pressure sensing line due to its susceptibility to clogging by torus sediment. Industry operating experience also supported the preferability of CST water over the suppression pool; in that, other sites allowed only limited use of suppression pool water for HPCI system filling. However, revision 59 included no guidance concerning the use of section G.8 versus G.9, i.e., which was preferable or under what circumstances one should be used as opposed to the other.

The inspectors noted that FitzPatrick administrative procedure (AP)-02.04, "Control of Procedures," contains guidance concerning the use of operating experience in developing procedure revisions. Specifically, section 8.4.8 concerning procedure revisions references section 8.2.6, which states, "Writers shall develop adequate, technically accurate, complete, and usable procedures which adhere to the requirements and standards, guidelines, and industry practices that JAF [James A. FitzPatrick] is committed to, including but not limited to . . . Industry and in-house operating experience . . ." The inspectors concluded that, had OP-15 directed that the HPCI system been filled using the CST per section G.9, as supported by operating experience, the subject event would not have occurred.

The inspectors further noted that NUREG-1022, "Event Report Guidelines 10 CFR 50.72 and 50.73," states, "For testing that is conducted within the required time, it should be assumed that the discrepancy occurred at the time of its discovery unless there is firm evidence, based on a review of relevant information such as the equipment history and cause of failure, to indicate that the discrepancy existed previously." Since FitzPatrick staff concluded that the cause of the 23PCV-50 failure was because the sensing line had been clogged due to having refilled the HPCI system from the torus following the June 2012 maintenance, and given that 23PCV-50 failed during the first HPCI system operation since completion of PMT, the inspectors concluded that firm evidence existed that the HPCI system had been inoperable as of June 12, 2012, when the maintenance period had been completed. With HPCI inoperable, TS 3.5.1, "ECCS - Operating," requires the system to be restored to operable within 14 days, or the reactor must be in Mode 3 within 12 hours and have reduced reactor steam dome pressure to less than or equal to (\leq) 150 pounds per square inch gauge (psig) within 36 hours. Since this was not done, the inspectors determined that this aspect of the event was also reportable in accordance with 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications."

The inspectors discussed these observations with FitzPatrick staff. As a result, FitzPatrick staff changed the procedure to indicate that the HPCI system should be filled using the CSTs, and submitted revision one to the subject LER to report the condition which was prohibited by the plant's TSs. The issue was entered into the CAP as CR-JAF-2014-00961.

Analysis. The inspectors determined that Entergy staff's actions to refill the HPCI system with water from the suppression pool following maintenance, thereby causing the

failure of 23PCV-50 to control pressure which resulted in opening of safety valve 23SV-66 and the discharge of 75 gpm of CST inventory to the 'A' reactor building equipment sump the next time that the HPCI system was operated, was a performance deficiency that was reasonably within Entergy's ability to foresee and correct. Specifically, revision 53 of OP-15 added section G.8 to fill and vent the HPCI suction piping from the suppression pool, but did not adequately consider industry operating experience in accordance with AP-02.04 which would have identified this method of filling as being inadvisable. Additionally, revision 59 of OP-15 added section G.9 to fill and vent the HPCI suction piping from the CST, but contained no guidance to indicate that this method was preferable to using water from the torus per section G.8. The finding was more than minor because it was associated with the human performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the issue resulted in failure of 23PCV-50 to control pressure, which caused the HPCI system to be inoperable for greater than its TS allowed outage time. In accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 2 of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the inspectors determined that this finding was of very low safety significance (Green) because the performance deficiency was not a design or qualification deficiency, did not involve an actual loss of safety function, did not represent the actual loss of a safety function of a single train for greater than its TS allowed outage time, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. Although the HPCI system was inoperable, it still maintained its safety function to provide emergency core coolant flow in the event of an accident.

This finding had a cross-cutting aspect in the area of Problem Identification and Resolution, because FitzPatrick staff did not implement internal and external operating experience concerning the inadvisability of using suppression pool water to refill the HPCI system following maintenance (P.5).

Enforcement. FitzPatrick TS 3.5.1 requires that each ECCS injection/spray subsystem be operable in Mode 1. TS 3.5.1.C provides a 14 day allowed outage time if the HPCI system is inoperable. If the allowed outage time is exceeded, TS 3.5.1.G requires that the plant be in Mode 3 within 12 hours and reactor steam dome pressure be reduced to ≤ 150 psig within 36 hours. Contrary to the above, on June 26, 2012, when the HPCI system had been inoperable for 14 days, the plant was not taken to Mode 3 within 12 hours and reactor steam dome pressure was not reduced to ≤ 150 psig within 36 hours. Because this issue was of very low safety significance (Green) and it was entered into the CAP as CR-JAF-2014-00961, this finding is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy. This LER and its revision are closed. **(NCV 05000333/2014002-01, HPCI System Inoperable for Longer than Allowed by TS)**

- .2 (Closed) LER 05000333/2013005-00: Failure to Isolate the Reactor Building Results in a Condition Prohibited by Technical Specifications

At 7:40 a.m. on November 6, 2013, the 'A' reactor building ventilation radiation monitor was declared inoperable for maintenance. For this condition, TS 3.3.6.2 Condition A requires placing the associated secondary containment isolation instrumentation channel in trip within 24 hours. If Condition A is not met, Condition C requires that the reactor

building ventilation system be isolated or the associated secondary containment isolation valves be declared inoperable, and that the standby gas treatment (SGT) system be placed in operation within one hour. These time requirements were not met due to multiple human errors. The condition was recognized and the TS-required actions were completed approximately 29 hours after the 'A' reactor building ventilation radiation monitor had been declared inoperable.

The inspectors reviewed the LER and CR-JAF-2013-05676 regarding this event. The inspectors had reviewed this issue when it occurred and did not identify any new issues during the review of this LER. The enforcement aspects of the TS violation are discussed in Section 4OA7 of this report. This LER is closed.

.3 (Closed) LER 05000333/2013006-00: Loss of HPCI Safety Function Due to Failure of the "B" CST Level Switches

On December 17, 2013, while Entergy technicians were testing the CST water level switches that provide input to the circuit that controls automatic transfer of the HPCI suction from the CSTs to the suppression pool in the event that CST inventory has been depleted, the first level switch associated with the 'B' CST that was tested failed to actuate. Subsequent testing of the second 'B' CST level switch identified that it actuated below the TS-allowed minimum level. The combination of these two deficiencies caused the HPCI system to be TS-inoperable because they would have prevented the HPCI automatic suction transfer function until CST level was below the TS-allowed minimum value. This loss of safety function for a single-train system was subsequently reported to the NRC pursuant to 10 CFR 50.72(b)(3)(v)(D).

The inspectors had previously reviewed this issue, as addressed in NRC Integrated Inspection Report 05000333/2013005. The inspectors did not identify any new issues during the review of the LER. This LER is closed.

4OA5 Other Activities

The table below provides a cross-reference from the 2013 and earlier findings and associated cross-cutting aspects to the new cross-cutting aspects resulting from the common language initiative. These aspects and any others identified since January 2014, will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review.

Finding	Old Cross-Cutting Aspect	New Cross-Cutting Aspect
05000333/2013004-01	H.2(c)	H.7
05000333/2013007-01	H.4(c)	H.2

4OA6 Meetings, Including Exit

Exit Meeting

On April 24, 2014, the inspectors presented the inspection results to Mr. Lawrence Coyle, Site Vice President, and other members of the FitzPatrick staff. The inspectors

verified that no proprietary information was retained by the inspectors or documented in this report.

4OA7 Licensee-Identified Violations

The following violation of very low safety significance (Green) was identified by the Entergy staff and is a violation of NRC requirements which meets the criteria of the NRC Enforcement Policy for being dispositioned as an NCV.

- With a reactor building ventilation radiation monitor inoperable, TS 3.3.6.2 Condition A requires placing the associated secondary containment isolation instrumentation channel in trip within 24 hours. If Condition A is not met, Condition C requires that the reactor building ventilation system be isolated or the associated secondary containment isolation valves be declared inoperable, and that the SGT system be placed in operation within one hour. Contrary to the above, at 7:40 a.m. on November 6, 2013, the 'A' reactor building ventilation radiation monitor was declared inoperable for maintenance, but the associated secondary containment isolation instrumentation channel was not placed in trip within 24 hours, the reactor building ventilation system was not isolated, the associated secondary containment isolation valves were not declared inoperable, and the SGT system was not placed in operation within one hour. The cause of this TS violation was human error. Entergy staff entered this issue into the CAP as CR-JAF-2013-05676. The inspectors determined that the finding was of very low safety significance (Green) in accordance with IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," because the finding only represents a degradation of the radiological barrier function provided for the secondary containment.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

L. Coyle, Site Vice President
 C. Adner, Manager, Licensing
 B. Finn, Director, Nuclear Safety Assurance
 K. Irving, Manager, Systems and Components Engineering
 S. McAllister, Director, Engineering
 D. Poulin, Manager, Operations
 T. Redfearn, Manager, Security
 M. Reno, Manager, Maintenance
 B. Sullivan, General Manager, Plant Operations
 R. Brown, Manager, Radiation Protection

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Open/Closed

05000333/2014002-01	NCV	HPCI System Inoperable for Longer than Allowed by TS (Section 4OA3)
---------------------	-----	---

Closed

05000333/2012002-00, -01	LER	High Pressure Coolant Injection Pressure Control Valve Failure (Section 4OA3)
05000333/2013005-00	LER	Failure to Isolate the Reactor Building Results in a Condition Prohibited by Technical Specifications (Section 4OA3)
05000333/2013006-00	LER	Loss of HPCI Safety Function Due to Failure of the "B" CST Level Switches (Section 4OA3)

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment

Documents

DBD-10, "Design Basis Document for the Residual Heat Removal System," Revision 13
 DBD-014, "Design Basis Document for the Core Spray System 014," Revision 10
 DRN 13-00322 for OP-21, "Emergency Service Water," dated June 27, 2013

Procedures

OP-13, "Residual Heat Removal System," Revision 97
 OP-13C, "RHR Service Water," Revision 11
 OP-14, "Core Spray System," Revision 35
 OP-15, "High Pressure Coolant Injection," Revision 60
 OP-21, "Emergency Service Water (ESW)," Revision 38
 OP-22, "Diesel Generator Emergency Power," Revision 59
 OP-60, "Diesel Generator Room Ventilation," Revision 8

Drawings

FM-20A, "Flow Diagram, Residual Heat Removal," Revision 72
 FM-20B, "Flow Diagram, Residual Heat Removal," Revision 71
 FM-23A, "Flow Diagram Core Spray System 14," Revision 49
 FM-25A, "Flow Diagram, High Pressure Coolant Injection," Revision 74

Condition Reports

CR-JAF-2012-01828	CR-JAF-2012-05060	CR-JAF-2013-00385
CR-JAF-2012-01971	CR-JAF-2012-05345	CR-JAF-2013-03428
CR-JAF-2012-02149	CR-JAF-2012-06302	CR-JAF-2013-04933
CR-JAF-2012-02331	CR-JAF-2012-07011	CR-JAF-2013-05872
CR-JAF-2012-03017	CR-JAF-2012-07238	CR-JAF-2013-05875
CR-JAF-2012-03018	CR-JAF-2012-08177	CR-JAF-2013-05909
CR-JAF-2012-03948	CR-JAF-2012-08474	CR-JAF-2014-01132

Section 1R05: Fire Protection

Documents

JAF-RPT-04-00478, JAF Fire Hazards Analysis, Revision 1

Procedures

EN-DC-161, "Control of Combustibles," Revision 10
 PFP-PWR01, "East Cable Tunnel / Elev. 258' Fire Area/Zone II/CT-2," Revision 3
 PFP-PWR12, "Relay Room/Elev. 286' Fire Area/Zone VII/RR-1," Revision 4
 PFP-PWR20, "Reactor Building - East/Elev. 272' Fire Area/Zone IX/RB-1A," Revision 4
 PFP-PWR21, "Reactor Building - West/Elev. 272' Fire Area/Zone X/RB-1B," Revision 5
 PFP-PWR24, "Reactor Building-East/Elev. 300' Fire Area/Zone IX/RB-1A, VIII/RB-1C" Revision 5
 PFP-PWR25, "Reactor Building-West/Elev. 300' Fire Area/Zone X/RB-1B, VIII/RB-1C" Revision 3
 PFP-PWR29, "Switchgear Room-East / Elev. 272' Fire Area/Zone II/SW-2," Revision 4

Section 1R07: Heat Sink Performance

Documents

ENN-SEP-HX-007, "Entergy Nuclear JAF Heat Exchanger Program," Revision 0
SEP-HX-JAF-001, "JAF Eddy Current Testing of Heat Exchangers," Revision 4
SEP-SW-001, "JAF NRC Generic Letter 89-13 Service Water Program," Revision 1

Work Orders

WO 52341487

Condition Reports

CR-JAF-2013-05906

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

Procedures

OP-65, "Startup and Shutdown Procedure," Revision 115

Section 1R12: Maintenance Effectiveness

Documents

DBD-093, "Design Basis Document for Emergency Diesel Generator," Revision 12
JAF-RPT-EDG-02303, "Maintenance Rule Basis Document System 93 Emergency Diesel Generator," Revision 10
JAF-RPT-CAS-02304, "Maintenance Rule Basis Document System 39 Instrument Air System," Revision 6
JAF-RPT-CRD-02493, "Maintenance Rule Basis Document System 003, Control Rod Drive Hydraulic System," Revision 8
JENG-13-0001, "System 93 Emergency Diesel Generator (a)(1) Evaluation," dated January 7, 2013
JENG-13-0023, "System 93 Emergency Diesel Generator (a)(1) Evaluation," dated June 7, 2013
JENG-13-0028, "System 93 Emergency Diesel Generator (a)(1) Evaluation," dated September 19, 2013
JENG-APL-13-002, "Maintenance Rule (a)(1) Action Plan System 39," Revision 0
System Health Report, CRD Hydraulic, first through fourth quarter 2013
System Health Report, EDG, third and fourth quarters 2013
System Health Report, Instrument Air System / Service Air System / Breathing Air System, first through fourth quarter 2013

Procedures

EN-DC-203, "Maintenance Rule Program," Revisions 2
EN-DC-204, "Maintenance Rule Scope and Basis," Revision 3
EN-DC-205, "Maintenance Rule Monitoring," Revisions 5
EN-DC-206, "Maintenance Rule (a)(1) Process," Revisions 3
OP-39, "Breathing, Instrument, and Service Air System," Revision 35
ST-43D, "Remote Shutdown Panel 25ASP-3 Component Operation and Isolation Verification," performed September 7, 2012

Drawings

ESK-11BQ, "Elementary Diagram Emer. Diesel Generator EDG Control," Sheet 1, Revision 29

Condition Reports

CR-JAF-2011-00202	CR-JAF-2012-05037	CR-JAF-2013-01947
CR-JAF-2011-00246	CR-JAF-2012-05168	CR-JAF-2013-02149
CR-JAF-2011-01026	CR-JAF-2012-05554	CR-JAF-2013-02180
CR-JAF-2011-01750	CR-JAF-2012-06380	CR-JAF-2013-02274
CR-JAF-2011-02561	CR-JAF-2012-06521	CR-JAF-2013-02419
CR-JAF-2011-04144	CR-JAF-2012-06662	CR-JAF-2013-02484
CR-JAF-2011-04903	CR-JAF-2012-06718	CR-JAF-2013-02563
CR-JAF-2011-05068	CR-JAF-2012-06868	CR-JAF-2013-02700
CR-JAF-2011-06189	CR-JAF-2012-07765	CR-JAF-2013-02918
CR-JAF-2012-00023	CR-JAF-2012-08115	CR-JAF-2013-03018
CR-JAF-2012-00134	CR-JAF-2012-08149	CR-JAF-2013-03469
CR-JAF-2012-00414	CR-JAF-2012-08185	CR-JAF-2013-04231
CR-JAF-2012-00443	CR-JAF-2012-08535	CR-JAF-2013-04246
CR-JAF-2012-00448	CR-JAF-2012-08737	CR-JAF-2013-04293
CR-JAF-2012-00449	CR-JAF-2012-08964	CR-JAF-2013-04959
CR-JAF-2012-00815	CR-JAF-2013-00223	CR-JAF-2013-05105
CR-JAF-2012-00875	CR-JAF-2013-00400	CR-JAF-2013-05488
CR-JAF-2012-01830	CR-JAF-2013-01167	CR-JAF-2013-05782
CR-JAF-2012-02516	CR-JAF-2013-01263	CR-JAF-2013-05952
CR-JAF-2012-02620	CR-JAF-2013-01286	CR-JAF-2013-06042
CR-JAF-2012-02779	CR-JAF-2013-01388	CR-JAF-2013-06299
CR-JAF-2012-03268	CR-JAF-2013-01402	CR-JAF-2013-06367
CR-JAF-2012-03942	CR-JAF-2013-01730	CR-JAF-2014-00190
CR-JAF-2012-04304	CR-JAF-2013-01756	CR-JAF-2014-00492

Maintenance Rule Functional Failure determinations for the following CRs

CR-JAF-2012-04304	CR-JAF-2013-00223	CR-JAF-2013-02235
CR-JAF-2012-05168	CR-JAF-2013-01109	CR-JAF-2013-02517
CR-JAF-2012-06380	CR-JAF-2013-01110	CR-JAF-2013-03018
CR-JAF-2012-06868	CR-JAF-2013-01730	CR-JAF-2013-06042
CR-JAF-2013-00222	CR-JAF-2013-02180	

Section 1R13: Maintenance Risk Assessments and Emergent Work ControlProcedures

AP-10.10, "On-Line Risk Assessment," Revision 9
 EN-OP-119, "Protected Equipment Postings," Revision 6
 EN-WM-104, "On Line Risk Assessment," Revision 9

Section 1R15: Operability Determinations and Functionality AssessmentsDocuments

DBD-093, "Design Basis Document for Emergency Diesel Generator," Revision 12
 NRC IN 2009-02, "Biodiesel in fuel oil could adversely impact diesel engine performance," dated
 February 23, 2009

Procedures

ODSO-17, "Operator Plant Tour and Operating Logs," Revision 81

Condition Reports

CR-JAF-2003-01313	CR-JAF-2005-00999	CR-JAF-2014-00541
CR-JAF-2003-02040	CR-JAF-2012-08923	CR-JAF-2014-00652
CR-JAF-2003-02269	CR-JAF-2014-00224	CR-JAF-2014-01059
CR-JAF-2004-01049	CR-JAF-2014-00289	
CR-JAF-2004-01358	CR-JAF-2014-00492	

Work Orders

WO 00371765

Section 1R19: Post-Maintenance TestingProcedures

ISP-75, "HPCI CST Low Water Level Switch Functional Test/Calibration," Revision 26, performed January 11, 2014

MP-059.87, "Viper MOV Diagnostic Testing," Revision 14, performed March 28, 2014

ST-2XA, "RHR Service Water Loop A Quarterly Operability Test (IST)," Revision 13

ST-18A, "Technical Support Center Ventilation Operability Test," Revision 8

ST-24J, "RCIC Flow Rate and Inservice Test (IST)," Revision 44, performed March 28, 2014

ST-24R, "RCIC Turbine Slow Roll Test," Revision 3, performed March 28, 2014

Condition Reports

CR-JAF-2014-01101

Section 1R22: Surveillance TestingProcedures

AP-02.04, "Control of Procedures," Revision 51

EN-HU-106, "Procedure and Work Instruction Use and Adherence," Revision 2

ISP-16, "Drywell Floor Drain Sump Flow Loop Functional Test/Calibration," Revision 43

ST-15G, "Pressure Suppression Chamber - Reactor Building Vacuum Breaker Operability and Setpoint Test (IST)," performed June 19, 2009, September 11, 2009, December 5, 2009, February 22, 2010, February 24, 2012, and February 19, 2014

ST-4N, "HPCI Quick-Start, Inservice, and Transient Monitoring Test (IST)," Revision 63

ST-9QB, "EDG B and D Full Load Test (8 Hour Run)," Revision 11

Section 1EP4: Emergency Action Level and Emergency Plan Changes

EAP-4, Dose Assessment Calculation, Revision 44

EAP-14.1, Technical Support Center Activation, Revision 31

EAP-14.2, Emergency Operations Facility, Revision 29

EAP-14.5, Operational Support Center Activation, Revision 22

EAP-17, Emergency Organization Staffing, Revision 122

IAP-2, Classification of Emergency Conditions, Revision 32

James A. Fitzpatrick Emergency Plan, Appendix K, Revision 9

James A. Fitzpatrick Emergency Plan, Section 5, Revision 47

Section 4OA1: Performance Indicator VerificationDocuments

DBD-013, "Design Basis Document for the Reactor Core Isolation Cooling System," Revision 8
 NEI-99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7
 ODMI for 'C' Condensate Booster Pump Monitoring, Revisions 0 and 1

Condition Reports

CR-JAF-2013-05249

Section 4OA2: Problem Identification and ResolutionDocuments

201301738, Failure Analysis of Undervoltage Relay, dated March 11, 2013
 Root Cause Evaluation Report for CR-JAF-2013-00222, "Loss of 10600 Bus during Performance
 of Surveillance Test ST-43D," Revisions 0 and 1

Procedures

AP-19.10, "Drift Monitoring Program," Revision 3
 EN-LI-102, "Corrective Action Process," Revision 23
 EN-LI-118, "Cause Evaluation Process," Revision 20
 ST-43D, "Remote Shutdown Panel 25ASP-3 Component Operation and Isolation Verification,"
 Revision 17, performed January 16, 2013

Drawings

ESK-5BT, "Elementary Diagram 4160V Emergency Bus 10600 Undervoltage Operation,"
 Revision 24
 FE-1B, Sht. 2, "Main One Line Diagram Station Service Transformers," Revision 14
 FE-1J, Sht. 5, "4160V One Line Diagram Emergency Bus 10600," Revision 15

Condition Reports

CR-JAF-2012-06307	CR-JAF-2014-00357	CR-JAF-2014-00864
CR-JAF-2013-00222	CR-JAF-2014-00393	CR-JAF-2014-01048
CR-JAF-2013-00588	CR-JAF-2014-00463	CR-JAF-2014-01198
CR-JAF-2014-00036	CR-JAF-2014-00492	CR-JAF-2014-01291
CR-JAF-2014-00058	CR-JAF-2014-00522	CR-JAF-2014-01306
CR-JAF-2014-00082	CR-JAF-2014-00554	CR-JAF-2014-01356
CR-JAF-2014-00152	CR-JAF-2014-00562	CR-JAF-2014-01509
CR-JAF-2014-00235*	CR-JAF-2014-00675	CR-JAF-2014-01567
CR-JAF-2014-00245*	CR-JAF-2014-00770	
CR-JAF-2014-00253*	CR-JAF-2014-00844	

*Denotes CR initiated as a result of the inspection.

Work Orders

00328060
 00339051

LIST OF ACRONYMS

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
AP	administrative procedure
CAP	corrective action program
CR	condition report
CST	condensate storage tank
EAL	Emergency Action Levels
ECCS	emergency core cooling system
EDG	emergency diesel generator
Entergy	Entergy Nuclear Northeast
ESW	emergency service water
FitzPatrick	James A. FitzPatrick Nuclear Power Plant
gpm	gallons per minute
HPCI	high pressure coolant injection
IMC	Inspection Manual Chapter
IST	Inservice test
kV	kilovolt
LER	licensee event report
LCO	Limiting Condition for Operation
NCV	non-cited violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OP	operating procedure
PI	Performance Indicator
PMT	post-maintenance test
psig	pounds per square inch gauge
RCIC	reactor core isolation cooling
RHR	residual heat removal
RHRSW	residual heat removal service water
SGT	standby gas treatment system
SSC	structure, system, or component
TS	technical specification
TSC	Technical Support Center
UFSAR	Updated Final Safety Analysis Report
V	volts
WO	work order
≤	less than or equal to