



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I**
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

April 23, 2012

Mr. Michael J. Colomb
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 PROBLEM
IDENTIFICATION AND RESOLUTION INSPECTION REPORT
05000333/2012008**

Dear Mr. Colomb:

On March 16, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your James A. FitzPatrick Nuclear Power Plant (FitzPatrick). The enclosed report documents the inspection results, which were discussed with you and other members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

Based on the samples selected for review, the inspection team concluded that Entergy was generally effective in identifying, evaluating, and resolving problems. FitzPatrick personnel identified problems and entered them into the Corrective Action Program at a low threshold. FitzPatrick staff prioritized and evaluated issues commensurate with the safety significance of the problems and corrective actions were generally implemented in a timely manner.

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the

M. Colomb

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Sincerely,

/RA/

Mel Gray, Chief
Projects Branch 2
Division of Reactor Projects

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

Enclosure: Inspection Report 05000333/2012008
w/Attachment: Supplemental Information

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ADAMS ACCESSION NUMBER: **ML12114A279**

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-333

License No.: DPR-59

Report No.: 05000233/2012008

Licensee: Entergy Nuclear Northeast (Entergy)

Facility: James A. FitzPatrick Nuclear Power Plant

Location: Scriba, New York

Dates: February 27 through March 16, 2012

Team Leader: David Kern, Senior Reactor Inspector, Division of Reactor Safety (DRS)

Inspectors: Anne DeFrancisco, Enforcement Specialist, Office of the Regional
Administrator
Niklas Floyd, Reactor Engineer, Division of Reactor Projects (DRP)
Beth Siemel, Resident Inspector, DRP
Andrey Turilin, Project Engineer, DRP

Approved by: Mel Gray, Chief
Projects Branch 2
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000333/2012008; 2/26/12 – 3/16/12; James A. FitzPatrick Nuclear Power Plant; Biennial Baseline Inspection of Problem Identification and Resolution.

This NRC team inspection was performed by four regional inspectors and one resident inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, December 2006.

Identification and Resolution of Problems

The inspectors concluded that Entergy was generally effective in identifying, evaluating, and resolving problems. James A. FitzPatrick Nuclear Power Plant (FitzPatrick) personnel identified problems, entered them into the corrective action program (CAP) at a low threshold, and prioritized issues commensurate with their safety significance. In most cases, station personnel appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent-of-condition, generic issues, and previous occurrences. The inspectors also determined that Entergy personnel typically implemented corrective actions to address the problems identified in the corrective action program in a timely manner.

The inspectors concluded that, in general, Entergy adequately identified, reviewed, and applied relevant industry operating experience to FitzPatrick operations. In addition, based on those items selected for review, the inspectors determined that Entergy's self-assessments and audits were self-critical and thorough. Station personnel effectively identified and elevated adverse performance trends for senior site management review through use of the Entergy Trending Process.

Based on interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify indications that site personnel were unwilling to raise safety issues nor did they identify conditions that could have had a negative impact on the site's safety conscious work environment.

No findings were identified.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (PI&R) (71152B)

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. Documents reviewed during this inspection are listed in the Attachment to this report.

.1 Assessment of the Corrective Action Program Effectiveness

a. Inspection Scope

The team reviewed Entergy's procedures that describe the Corrective Action Program (CAP) at FitzPatrick. Entergy personnel identified problems by initiating condition reports (CRs) for conditions adverse to quality, plant equipment deficiencies, industrial or radiological safety concerns, and other significant issues. The team evaluated the process for assigning and tracking issues to ensure that issues were screened for operability and reportability, prioritized for evaluation and resolution in a timely manner commensurate with their safety significance, and tracked to identify adverse trends and repetitive issues. In addition, the team interviewed plant staff and management to determine their understanding of, and involvement with, the CAP.

To assess the effectiveness of the corrective action program, the team reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The team compared performance in these areas to the requirements and standards contained in 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," and Entergy procedure EN-LI-102, "Corrective Action Process," Revision 17. Insights from the station's risk analyses were considered to focus inspection sample selection and plant walkdowns on risk-significant systems and components. Additionally, the inspectors attended multiple operational focus meetings, Condition Review Group (CRG) meetings, and Corrective Action Review Board (CARB) meetings to evaluate real-time prioritization and assignment of CRs. The inspectors reviewed a sample of CRs across the seven cornerstones of safety in the NRCs Reactor Oversight Process (ROP) and selected items from the following functional areas: engineering, operations, maintenance, emergency preparedness, radiation protection, chemistry, physical security, and oversight programs to ensure that Entergy personnel appropriately addressed problems identified in these functional areas.

(1) Effectiveness of Problem Identification

The team selected issues from various processes at FitzPatrick to verify that they were appropriately considered for entry into the CAP. Specifically, the team reviewed a sample of engineering evaluations, system health reports, operator workarounds, operability determinations, equipment problem lists, completed corrective and preventive maintenance work orders (WOs), completed surveillance test procedures, operator logs,

periodic trend reports, and issues entered into the Employee Concerns Program (ECP). Plant areas walked down included the emergency service water (ESW) and the direct current (DC) electrical distribution systems, the control building (including control room), screenwell, emergency diesel generators, warehouse, and the reactor building. Additionally, the inspectors reviewed a sample of CRs written to document issues identified through internal self-assessments, audits, emergency preparedness drills, and the operating experience program. The inspectors completed this review to verify that Entergy staff entered conditions adverse to quality into their corrective action program as appropriate.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the evaluation and prioritization of a sample of CRs issued since April 2010, approximately 6 months prior to the last NRC biennial Problem Identification and Resolution inspection. The CRs reviewed encompassed the full range of evaluations, including root cause analyses, apparent cause evaluations, and common cause analyses. A sample of CRs that were assigned lower levels of significance which did not include formal cause evaluations were reviewed to ensure they were properly classified. The inspectors' review included the appropriateness of the assigned significance, the scope and depth of the causal analysis, and the timeliness of resolution. The inspectors assessed whether the evaluations identified likely causes for the issues and developed appropriate corrective actions to address the identified causes. Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected problems to verify these processes adequately addressed equipment operability, reporting of issues to the NRC, and the extent of the issues.

(3) Effectiveness of Corrective Actions

The inspectors reviewed Entergy's completed corrective actions through documentation review and, in some cases, field walkdowns to determine whether the actions addressed the identified causes of the problems. The inspectors also reviewed CRs for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed Entergy's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors also reviewed a sample of CRs associated with selected non-cited violations (NCVs) and findings to verify that Entergy personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to five years to evaluate Entergy's actions related to ESW and DC electrical distribution system issues.

b. Assessment

(1) Effectiveness of Problem Identification

Station personnel initiated approximately 15,000 CRs between April 2010 and February 2012. Based on the selected sample reviews, plant walkdowns, and interviews of site personnel in multiple functional areas, the inspectors determined that Entergy staff at FitzPatrick identified problems and entered them into the corrective action program at a low threshold. The team observed managers and supervisors at CRG meetings and CARB meetings appropriately questioning and challenging CRs to ensure issues were accurately documented, prioritized, and immediate corrective actions implemented if appropriate. The inspectors determined that Entergy personnel trended equipment and programmatic issues, and properly identified and documented problems in CRs. The inspectors verified that conditions adverse to quality identified through this review were entered into the corrective action program as appropriate. Additionally, inspectors concluded that personnel were identifying trends at low levels. The inspectors did not identify any significant issues or concerns that had not been entered into the corrective action program for evaluation and resolution. In response to questions and minor equipment observations identified by the inspectors during plant walkdowns, Entergy personnel promptly initiated condition reports and/or took action to address the issues.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that, in general, Entergy prioritized and evaluated issues commensurate with the safety significance of the identified problem. Condition Reports were screened for operability and reportability, categorized by significance, and assigned to the appropriate department for evaluation and resolution. The CR screening process considered human performance issues, equipment issues, radiological safety concerns, repetitiveness, adverse trends, and potential impact on the safety conscious work environment. The team observed managers and supervisors at CRG meetings properly questioning and challenging CRs to ensure appropriate prioritization.

Based on the sample of CRs reviewed, the team determined the guidance provided by the Entergy CAP implementing procedures was sufficient to support consistency in categorization of the issues. Operability and reportability determinations were performed when conditions warranted and the evaluations supported the conclusions. Causal analyses appropriately considered extent-of-condition, generic issues, and previous occurrences. During this inspection, the team noted that Entergy's root cause analyses were generally thorough, and corrective and preventive actions addressed the identified causes. The identified causes were well supported. However, the team determined Entergy's evaluation of the following issue was deficient:

Evaluation of Emergency Response Organization (ERO) Call-Out Drill Deficiencies

Several CRs, including CR 2011-06634, documented and evaluated instances where duty section ERO staff did not successfully respond during backshift ERO call-out drills. Entergy staff identified duty section ERO responder deficiencies in seven consecutive

quarterly drills (April 2010 to December 2011). FitzPatrick ERO procedures require all qualified ERO staff to respond to call-out drills. The team concluded Entergy's evaluation and corrective actions for associated equipment related deficiencies were timely and successful by December 2010. However, the team determined that associated human performance related deficiencies were not fully evaluated and corrected in a timely manner. Duty section ERO responder deficiencies, due to human performance issues, continued until broader corrective actions were implemented toward the end of 2011.

The team determined the untimely evaluation and correction of duty section ERO staff call-out drill response issue was a performance deficiency. However, Entergy successfully achieved ERO minimum staffing response within the 60 minutes required by the FitzPatrick Emergency Response Plan for each call-out drill because all ERO shifts, including the ERO duty section, respond to ERO call-outs. Additionally, corrective actions associated with ERO human performance deficiencies were fully implemented and successfully demonstrated during the March 2012 ERO backshift call-out drill. Because Entergy maintained the ability to achieve ERO minimum staffing requirements during each drill and corrective actions were demonstrated to be effective in March 2012, the team determined the issue was of minor significance and not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(3) Effectiveness of Corrective Actions

The team concluded that corrective actions for identified deficiencies were timely and adequately implemented. For significant conditions adverse to quality, corrective actions were identified to prevent recurrence. The team concluded that corrective actions to address NRC NCVs and findings since the last PI&R inspection were timely and effective.

Notwithstanding overall effective corrective actions, the team noted an issue for which initial corrective actions were not effective and deficient performance continued. The issue involved a large number (111) of personnel contamination events (PCEs) during the fall 2010 refueling outage (R19) (CR 2010-07326). Entergy identified the issue and initiated corrective action in a timely manner. However, an elevated rate of PCEs continued through the end of R19. Entergy subsequently implemented additional levels of corrective action which have been successful to date. The team discussed the issue with station management to assess whether Entergy understood why initial corrective actions were not effective. The issue involved periods of elevated contractor workforce activity, knowledge deficiencies, and human error. Entergy incorporated the issue into the FitzPatrick Quarterly Trend Report to elevate management visibility and station focus on continued effective performance in this area. The personnel contaminations issue was documented and evaluated in previous NRC inspection reports and does not represent a new performance deficiency or NRC finding.

c. Findings

No findings were identified.

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The team selected a sample of CRs associated with the review of industry operating experience (OE) to determine whether Entergy personnel appropriately evaluated the OE information for applicability to FitzPatrick and had taken appropriate actions, when warranted. The team also reviewed CR evaluations of OE documents associated with a sample of NRC Generic Letters and Information Notices to ensure that Entergy adequately considered the underlying problems associated with the issues for resolution via their CAP. Additionally, the team reviewed selected FitzPatrick operating history issues to determine whether lessons learned had been properly incorporated into station programs or activities. The team observed plant activities to determine if industry OE was considered during the performance of routine and infrequently performed activities.

b. Assessment

The team determined that Entergy personnel appropriately considered industry OE information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues when appropriate. Industry OE was evaluated for applicability in a timely manner. The team determined that, in general, OE was appropriately applied and lessons learned were typically communicated and incorporated into plant operations. However, the team identified the following observations where industry OE and/or FitzPatrick OE was not thoroughly incorporated into FitzPatrick plant operations to support equipment reliability:

Deficient Implementation of Mechanical Expansion Joint (EXJ) Preventive Maintenance (PM) Template and Associated Manufacturer Instructions

The team reviewed Electric Power Research Institute (EPRI) Technical Report 1003189, "Expansion Joint Maintenance Guide," October 2002, which was developed based on over 20 years of related industry OE, and reviewed the Entergy PM template and 17 work orders (WOs) for periodic replacement of ESW and normal service water (NSW) EXJs. The WOs provided general instruction to remove the old EXJ, clean surfaces, install, and bolt the replacement EXJ in place. The team noted that contrary to the Entergy EXJ PM template, EPRI EXJ maintenance guidelines, and manufacturer instructions, the WOs did not contain instruction to perform measurement and installation checks of critical EXJ alignment parameters (i.e., EXJ elongation, compression, lateral alignment, angular alignment). Expansion joint installation outside of its design alignment tolerances can significantly shorten EXJ service life and thereby reduce system availability and reliability. The team discussed the issue with Entergy personnel and determined the EXJ PM template task content was not considered and implemented when developing ESW and NSW EXJ replacement maintenance work packages. Station personnel reviewed EN-DC-324, "PM Program," Revision 7 and EN-DC-335, "PM Basis Template," Revision 3 with the team and determined further evaluation was necessary to ensure PM templates were properly implemented in plant equipment PM WOs. The team also noted the Entergy EXJ PM template specified a 20-

24 year replacement periodicity, which is almost double that specified in several vendor manuals. Entergy could not provide a basis for the replacement periodicity.

The team independently evaluated this issue for significance in accordance with IMC 0612, Appendices B and E. The team also performed plant walkdowns of 20 installed EXJs, reviewed EXJ inspection PM and station material history records, and interviewed FitzPatrick staff to assess the condition of installed ESW and NSW EXJs. The team identified no EXJ-related material deficiencies. Although Entergy did not verify EXJs were installed in accordance with critical design alignment parameters, the team determined the installed ESW and NSW EXJs currently appeared capable of performing their design functions, and therefore did not have a significant impact on plant operations. The team determined this issue is of minor significance, and, as a result, it is not subject to enforcement action in accordance with the NRC's Enforcement Policy. Entergy initiated CR 2012-01474, CR 2012-01509, and CR HQN-2012-00345 to evaluate these issues and the associated extent-of-condition.

Deficient Use of Internal OE Associated with Main Condenser Tube Reliability

The team conducted interviews and reviewed the main condenser material condition, engineering evaluations, and corrective actions associated with eight plant downpowers to plug leaking condenser tubes since January 2011. Entergy determined that typical flow induced tube wall thinning over the condenser's operational life caused the tube leaks and that the condenser tubes were nearing their end of useful service life. The original condenser tubes were replaced in 1995 with identical brass material. The original condenser performed reliably for a 20 year period, which had included approximately 4 years of plant outages when the condenser was not in service. Engineers expected the current condenser tubes to perform reliably for 20 years (i.e., until about 2015), similar to the previous condenser tubes. The team observed that Entergy did not properly consider FitzPatrick operating history, specifically the 4 years of outages, when projecting the expected condenser tube life. Consequently, Entergy did not properly plan and design for condenser tube replacement prior to tube leakage which has necessitated frequent downpowers for repair. Planned corrective actions include condenser tube sleeving during the Fall 2012 refueling outage and a complete replacement of all condenser tubes in the Fall 2014 refueling outage.

The team determined that not correctly assessing plant operating experience for main condenser tube replacement was a performance deficiency. The team independently evaluated this issue for significance in accordance with IMC 0612, Appendices B and E. The evaluation took into consideration that: condenser tube leakage is a slowly developing phenomenon, automatic leakage monitoring equipment (i.e., condensate conductivity) is in place, and existing operating procedures provide instructions for operator response to condenser tube leaks. Additionally, the condenser remained capable of removing heat and did not adversely affect the Initiating Events, Mitigating Systems or Barrier Integrity objectives. The team determined the issue was of minor safety significance and, as a result, is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

c. Findings

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The team reviewed a sample of Quality Assurance (QA) audits, including the most recent audit of the CAP, departmental self-assessments, a variety of self-assessments focused on various plant programs, and assessments performed by independent organizations. These reviews were performed to determine if problems identified through these assessments were entered into the CAP, when appropriate, and whether corrective actions were initiated to address identified deficiencies. The effectiveness of the audits and assessments was evaluated by comparing audit and assessment results against self-revealing and NRC-identified observations made during the inspection. Additionally, the team reviewed FitzPatrick implementation of EN-LI-121, "Entergy Trending Process," Revision 11.

b. Assessment

Station personnel consistently developed detailed audit and self-assessment plans. The team concluded that QA audits and self-assessments were critical, thorough, and effective in identifying issues. The team observed that these audits and self-assessments were completed by personnel knowledgeable in the subject areas and were completed to a sufficient depth to identify issues that were then entered into the CAP for evaluation. Corrective actions associated with the issues were implemented commensurate with their safety significance. The team determined that FitzPatrick personnel effectively used the Entergy Trending Process to identify several trends at a precursor level and focus management attention to address issues before they significantly challenged safety. Notwithstanding, the team observed that 5 of 27 trend presentations in the fourth quarter 2011 Trend Report were not updated to reflect current trend status. The team concluded that use of outdated information could adversely affect the resulting Senior Assessment Review Board (SARB) decisions. Entergy Staff entered this issue into the CAP (CR 2012-01471). Overall, the team concluded that FitzPatrick staff effectively identified and elevated trends to the SARB for timely resolution.

c. Findings

No findings were identified.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

During interviews with station personnel, the team assessed whether issues exist that may represent challenges to the free flow of information, and whether underlying factors exist that would produce a reluctance to raise nuclear safety concerns at FitzPatrick. Specifically, the team interviewed personnel to determine their willingness to raise safety concerns to their management, and/or the NRC. The team also reviewed EN-EC-100, "Guidelines for Implementation of the Employee Concerns Program (ECP)," Revision 5 and interviewed the station ECP coordinator to determine what actions were implemented to ensure employees were aware of the program and its availability with regard to raising concerns. The team reviewed selected Employee Concerns Program files from January 2009 to February 2012, including employee termination and retirement debriefs, to ensure that Entergy entered issues into the corrective action program when appropriate. In addition, the team reviewed actions taken by Entergy personnel to address recommendations from the most recent ECP self-assessment.

b. Assessment

During interviews, plant staff expressed a willingness to use the CAP to identify plant issues and deficiencies, and stated that they were willing to raise safety issues. The team noted that no one interviewed stated that they personally experienced or were aware of a situation in which an individual had been retaliated against for raising a safety issue. All persons interviewed demonstrated an adequate knowledge of the CAP and ECP. The ECP Coordinator was knowledgeable of program implementation, participated in industry peer audits and ECP activities, and maintained ECP visibility at FitzPatrick. The team determined the issues employees entered into the ECP contained no new safety issues that were not already addressed through the CAP. Based on these limited interviews, the team concluded that there was no evidence of an unacceptable safety conscious work environment (SCWE) and no significant challenges to the free flow of information.

c. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On March 16, 2012, the team presented the inspection results to Mr. Michael Colomb, Site Vice President, and to other members of the FitzPatrick staff. The team verified that no proprietary information was documented in the report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

M. Colomb, Site Vice President
C. Adner, Manager, Operations
M. Annett, Mechanical Systems Engineering Supervisor
V. Bacanskas, Manager, Design Engineering
J. Barnes, Manager, Emergency Preparedness
J. Bouck, Manager, Planning Scheduling & Outage
A. Brais, Operating Experience Coordinator
K. Brazeau, Electrical Systems Engineering Supervisor
S. Breg, Manager, Projects
B. Brown, Radiation Protection Supervisor
C. Brown, Manager, Quality Assurance
B. Burnham, System Engineer
J. Cook, Equipment Reliability Engineer
K. Corbett, Corrosion Programs Engineer
R. Cushman, Security Shift Supervisor
B. Davis, Corrective Action and Assessments Specialist
R. Denbleyker, Employee Concerns Coordinator
D. Deretz, Corrective Action and Assessments Specialist
B. Dingman, Mechanical Planner
J. Festa, Training Superintendent
B. Finn, Director Nuclear Safety Assurance
K. Fox, Manager, Human Resources
M. Hawes, Licensing Specialist
W. Hall, Radiation Protection Technician
S. Hillestead, Radiation Protection Supervisor
T. Holden, Communications Specialist
D. Huwe, Quality Assurance Supervisor
H. Hunt, Manager, Corrective Action and Assessments
D. Johnson, Coordinator, Site Vice President Office
D. Kazyaka, Balance of Plant Systems Engineering Supervisor
A. King, RP Supervisor
D. Laing, Manager, Training
M. Lamardo, Electrical Maintenance Specialist
B. Landers, Chemistry Supervisor
D. Nacamuli, Senior Corrective Action and Assessments Specialist
M. Newshan, Operations Shift Manager
J. O'Farrill, Senior Licensing Specialist
J. Pechacek, Manager, Licensing
J. Perry, Preventive Maintenance Program Owner
D. Poulin, Manager, Systems Engineering

L. Rayle, Chemistry Superintendent
T. Redfearn, Manager, Security
M. Reno, Manager, Maintenance
T. Selby, Preventive Maintenance Coordinator
A. Storm, System Engineer
P. Scanlan, Manager, Programs Engineering
B. Sullivan, General Manager, Plant Operations
G. Sullivan, Security Superintendent
R. Sullivan, Manager, Operations Support
M. Tuffaro, Radiation Protection Supervisor
D. Wallace, Director, Engineering
E. Wolf, Manager, Radiation Protection

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

None

LIST OF DOCUMENTS REVIEWED

Audits and Self-Assessments

LO-JAFLO-2009-00090, Equipment Qualification Focused Self-Assessment
LO-JAFLO-2009-00092, Operations Work Control Focused Self-Assessment
LO-JAFLO-2009-00094, EP Focused Self-Assessment
LO-JAFLO-2010-00021, P&C Engineering Focused Self-Assessment LO-JAFLO-2011-00034,
Work Execution Focused Self-Assessment
LO-JAFLO-2011-00059, Self-Assessment and Benchmarking Program Focused Self-
Assessment
LO-JAFLO-2011-00068, Maintenance Focused Self-Assessment
LO-JAFLO-2011-00070, Weakness in Operator Fundamentals Focused Self-Assessment
LO-JAFLO-2011-00074, Work Package Quality Focused Self-Assessment
LO-JAFLO-2011-00099, Safeguards Information Snapshot Self-Assessment
LO-JAFLO-2011-00109, CAP Effectiveness Focused Self-Assessment
LO-JAFLO-2011-00125, Circuit Card Problems
LO-HQNLO-2011-00154, JAF Operating Experience Program Self-Assessment

QA-04-2010-JAF-1, Quality Assurance Audit Report – Engineering, Revision 1
QA-10-2010-JAF-1, Quality Assurance Audit Report - Maintenance
QA-03-2011-JAF-1, Quality Assurance Audit Report – CAP
QA-07-2011-JAF-1, Quality Assurance Audit Report for EP

QA-08-2011-JAF-1, Quality Assurance Audit Report for Engineering Program
 QA-12/18-2011-1, Quality Assurance Audit Report Combined Operations and Technical
 Specifications

Condition Reports

2003-00963	2010-03713	2010-08602
2005-05050	2010-03749	2011-00169
2005-05070	2010-03757	2011-00170
2006-00064	2010-03761	2011-00190
2007-01424	2010-03793	2011-00192
2007-01593	2010-03804	2011-00197
2007-01595	2010-04380	2011-00205
2007-01596	2010-04408	2011-00210
2007-02024	2010-04596	2011-00218
2007-02722	2010-04618	2011-00407
2007-02847	2010-04825	2011-00507
2007-03570	2010-05054	2011-00545
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2010-00001	2010-06314	2011-01112
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2011-05019	2011-06634	2012-01163
2011-05388	2011-06756	2012-01164
2011-05241	2011-06758	2012-01262*
2011-05315	2012-00050	2012-01436*
2011-05671	20120-0082	2012-01471*
2011-05683	2012-00313	2012-01473*
2011-05710	2012-00314	2012-01474*
2011-05867	2012-00572	2012-01509
2011-05966	2012-00623	

HQN-2011-01165
HQN-2012-00345*

*NRC Identified During Inspection

Drawings

FB-10H, Reactor Building Service Water Cooling System, Revision 43
FB-35E, Control Room Area Service & Chilled Water System, Revision 38
FM-20B, Residual Heat Removal System, Revision 99
FM-46A, Service Water System, Revision 91
FM-46B, ESW System, Revision 56

Operating Experience

CR 2011-0038, CR 2011-0976
NRC Information Notice (IN) 2009-11, Configuration Control Errors
NRC IN 2010-11, Potential Steam Voiding Causing RHR System Inoperability
NRC IN 2011-02, Operator Performance Issues Involving Reactivity Management at Nuclear Power Plants
NRC IN 2011-14, Component Cooling Water System Gas Accumulation and Other Performance Issues
NRC Part 21 Notice 2011-08-00, Actuator Failure Due To Undersized Shaft
NRC Part 21 Notice, KF Protective Relay
Industry OE Related to High Pressure Coolant Injection and Water Siphoning

Industry OE Related to Causes of Circuit Card Related Problems
Industry OE Related to RHR Heat Exchanger Tube Degradation

Licensee Event Reports (LERs)

LER-2011-003-00, Safety Relief Valve Set Points Outside of Allowable Tolerances

Non-Cited Violations and Findings

EA-09-060, Confirmatory Order [NRC Office of Investigations Report No. 3-2008-020]
NCV 05000333/2010002-01, Failure to Submit an LER for a Condition Prohibited by TS
Associated with HPCI
NCV 05000333/2010004-01, Appendix R Fire Door Blocked Open without Establishing
Required Measures
NCV 05000333/2010005-02, Failure to Maintain Equipment Status Control for a Manually
Operated Normally Locked Open RHR Injection Valve
NCV 05000333/2010006-02, Inaccurate Calculations for Offsite Power Availability
NCV 05000333/2010006-03, Inadequate Corrective Action on RHR SW Strainer Housing Wall
Degradation
NCV 05000333/2011002-01, Control Room Envelope Inoperable due to Unlatched Boundary Door
NCV 05000333/2011005-01, Mode Switch in Shutdown Scram Function Inoperable in Excess of
the TS Allowed Outage Time due to Personnel Error

Procedures

AP-12.08, LCO Tracking and Safety Function Determination Program, Revision 13
ARP 09-3-1-10, Core Spray 'A' or 'B' Discharge Line Not Full, Revision 3
EAP-17, Emergency Organization Staffing, Revision 119EN-DC-115, Engineering Change
Process, Revision 12
EN-DC-143, Engineering Health Reports, Revision 13
EN-DC-203, Maintenance Rule Program, Revision 1
EN-DC-204, Maintenance Rule Scope and Basis, Revision 2
EN-DC-205, Maintenance Rule Monitoring, Revision 3
EN-DC-206, Maintenance Rule (a)(1) Process, Revision 1
EN-DC-207, Maintenance Rule Periodic Assessment, Revision 2
EN-DC-313, Procurement Engineering Process, Revision 6
EN-DC-315, Flow Accelerated Corrosion Program, Revision 6
EN-DC-324, Preventative Maintenance Program, Revision 7
EN-DC-335, PM Basis Template, Revision 3
EN-DC-336, Unit Reliability Team, Revision 4
EN-DC-340, Microbiologically Influenced Corrosion (MIC) Monitoring Program, Revision 0
EN-EP-801, Emergency Response Organization, Revision 2
EN-FAP-LI-006, Senior Assessment Review Board (SARB) Process, Revision 1
EN-LI-102, Corrective Action Process, Revision 17
EN-LI-104, Self-Assessment and Benchmark Process, Revision 8
EN-LI-121, Entergy Trending Process, Revision 11

EN-MP-112, Shelf Life Program, Revision 4
 EN-MP-125, Control of Material, Revision 8
 EN-OC-100, Operating Experience Program, Revision 13
 EN-OP-104, Operability Determination Process, Revision 5
 EN-QV-109, Audit Process, Revision 20
 EN-QV-126, Oversight Follow-Up Procedure, Revision 14
 EN-QV-136, Nuclear Safety Culture Monitoring, Revision 0
 EN-PL-100, Nuclear Safety and Management Expectations, Revision 0
 EN-PL-187, Safety Conscious Work Environment (SCWE) Policy, Revision 1
 EN-PL-190, Maintaining A Strong Safety Culture, Revision 2
 EN-RP-110-03, Collective Radiation Exposure Reduction Guidelines, Revision 1
 EN-RP-105, Radiological Work Permit (RWP), Revision 9
 EN-RP-110-05, ALARA Planning and Controls, Revision 0
 EN-WM-100, Work Request Generation, Screening and Classification, Revision 7
 IM-S-03, Piping Installation, Revision 9
 JAF-NE-09-001, Fitzpatrick Probabilistic Safety Assessment, Revision 0
 MP-046.01, RHR Service Water Pumps and ESW Pumps, Revision 18
 MP-057.06, Battery Maintenance, Revision 38
 MP-059.70, Masoneilan Cage Trim Valve Maintenance, Revision 5
 MP-059.119, 34FCV-137, Cage Trim Valve Maintenance, Revision 1
 MST-071.11, LPCI Battery Quarterly Surveillance Test, Revision 20
 MST-071.13, 125 VDC Station Battery Quarterly Surveillance Test, Revision 21
 MST-071.25, LPCI Battery Modified Performance Test, Revision 12
 MST-071.26, Station Battery "A" Modified Performance Test, Revision 12
 MST-071.20, 125 VDC Station Battery Service Test, Revision 31
 MST-071.30, LPCI Charger-Inverter Performance and LPCI Battery Service Surveillance Test,
 Revision 17
 OP-14, Core Spray System, Revision 33
 OP-30A, Reactor Water Level Control, Revisions 14,15
 SAP-7, Quarterly Surveillance Procedure for On-Call Employees, Revision 41
 SAP-20, Emergency Plan Assignments, Revision 32
 SDLP-76, Fire Protection System, revision 20
 ST-3PB, Core Spray Loop 'B' Quarterly
 Operability Test, Revision 21
 ST-8Q, Testing of the Emergency Service Water System (IST), Revision 42
 ST-8QA, Testing of ESW Loop A (IST), Revision 2
 ST-8QB, Testing of ESW Loop B (IST), Revision 2
 ST-24J, RCIC Flow Rate and Inservice Test (IST), Revision 41
 ST-39J, Leak Testing of RHR and Core Spray Testable Check Valves (IST), Revision 17
 ST-40D, Daily Surveillance and Channel Check, Revision 108

Work Orders

00124461	00269604	51668303
00199740	00291831	51687547
00202449	20135900	51798221
00242628	20136100	52031125
00247296	20494214	52370107
00247297	30043600	52376650
00247538	51129471	52363959
00253042	51186209	52376646
00253043	51655079	
00269603	51668302	

Miscellaneous

EC-32187, Engineering Input to Support Operability
 EN-I&C – Electronic Circuit Cards PM Basis Template, Revision 5
 EN-I&C – Inteverter PM Basis Template, Revision 2
 Entergy Preventive Maintenance Template EN – Expansion Joint, Revision 3
 Entergy Quality Assurance Program Manual, Revision 22
 Evaluation of the November 4, 2005 Muster Drill
 Evaluation of the March 9, 2012 CAN/Pager Test
 Evaluation of the September 1, 2012 CAN/Pager Test
 Evaluation of the December 6, 2010 CAN/Pager Test
 Evaluation of the February 3, 2011 CAN/Pager Test
 Evaluation of the May 31, 201 CAN/Pager Test
 Evaluation of the September 13, 2011 CAN/Pager Test
 Evaluation of the December 12, 2011 CAN/Pager Test
 JAF Core Spray Monitoring Program (EN-DC-159) dated January 9, 2012
 JAF Team 1 Emergency Planning Drill Report, November 30, 2011
 AF Quarterly Trend Report – 4th Quarter 2010
 JAF Quarterly Trend Report – 1st Quarter 2011
 JAF Quarterly Trend Report – 2nd Quarter 2011
 JAF Quarterly Trend Report – 3rd Quarter 2011
 JAF Quarterly Trend Report – 4th Quarter 2011
 JAF-RPT-FWS-03079, Maintenance Rule Basis Document – System 34 Feedwater,
 Revisions 2, 3
 JAF-RPT-MISC-02272, Maintenance Rule Basis Document - Plant Level Performance,
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 JAF-RPT-RFC-02315, Maintenance Rule Basis Document - System 02-184 Reactor Water
 Recirculation Flow Control System, Revision 8
 JAF-RPT-RWR-02656, Maintenance Rule Basis Document - System 02-2 Reactor Water
 Recirculation System, Revision 7
 JRP-APL-2011-007, RP Outage Personnel Contamination Event Mitigation Action Plan,
 Revision 0
 LO-JAFLO-2009-00024
 Maintenance Rule Expert Panel Meeting Minutes, 16 November 2010

Maintenance Rule Expert Panel Meeting Minutes, 10 December 2010
Maintenance Rule Functional Failure Determination Form for CR 2010-4618
Maintenance Rule Functional Failure Determination Form for CR 2010-7124, 7120, 7093, 7064
Maintenance Rule Quarterly Report – 4th Quarter 2011
Modification D1-98-025, Expansion Joint Spacer Ring, Revision 0
Off Hours Unannounced Mobilization Drill Report June 9, 2010
Onsite Safety Review Committee Meeting Minutes dated March 2010 – December 2011.
Operability Determination DER 01-02298 and 01-02303, 46EXJ-9B, 9D, and 10D
Potential LCO Tracking Record TRACK-1-12-0015
Radiation Work Permits 20110023, 20110060, 20120041, and 20120043
Safety Review Committee Meeting Minutes dated September 2010 – October 2011
ST-8Q, Testing of the Emergency Service Water System (IST), completed 7/3/08
ST-8Q, Testing of the Emergency Service Water System (IST), completed 4/23/11
System Health Report, DC Distribution System (System 71), 2011 - 4th quarter
Vendor Manual M231-0108, Mercer Rubber Company Invincible Brand Rubber Expansion
 Joints
System Health Report – Emergency Service Water, 4th Quarter 2011
System Health Report – Feedwater, 4th Quarter 2011
System Health Report – Reactor Water Recirc, 4th Quarter 2011
System Health Report – Recirc Flow Control, 4th Quarter 2011
TEAR JAF-2011-26

LIST OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
CAP	Corrective Action Program
CARB	Corrective Action Review Board
CFR	Code of Federal Regulations
CR	Condition Report
CRG	Condition review Group
DC	Direct Current
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
ECP	Employee Concerns Program
EPRI	Electric Power Research Institute
ERO	Emergency Response Organization
ESW	Emergency Service Water
EXJ	Expansion Joint
FitzPatrick	James A. FitzPatrick Nuclear Power Plant
IMC	Inspection Manual Chapter
IN	Information Notice
LPCI	Low Pressure Coolant Injection
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NSW	Normal Service Water
OE	Operating Experience
PARS	Publicly Available Records System
PCE	Personnel Contamination Event
PCM	Performance Centered Maintenance
PI&R	Problem Identification and Resolution
QA	Quality Assurance
ROP	Reactor Oversight Process
SARB	Senior Assessment Review Board
SCWE	Safety Conscious Work Environment
SDP	Significance Determination Process
TS	Technical Specifications
WO	Work Order