

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PA 19406-1415

May 7, 2009

Mr. Peter T. Dietrich Site Vice President Entergy Nuclear Northeast James A. FitzPatrick Nuclear Power Plant Post Office Box 110 Lycoming, NY 13093

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT - NRC INTEGRATED

INSPECTION REPORT 05000333/2009002

Dear Mr. Dietrich:

On March 31, 2009, 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 9, 2009, 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.

Based on the results of this inspection, two NRC identified findings of very low safety significance (Green) were identified. These findings were determined to be violations of NRC requirements. However, because of the very low safety significance, and because the violations were entered into your corrective action program, the NRC is treating these violations as noncited violations (NCVs) in accordance with Section VI.A.1 of the NRC Enforcement Policy. If you contest any NCV, you should provide a response within 30 days of the date of the inspection report, with the basis for your denial, to the U. S. Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington, D.C. 20555-0001; with a copy to the Regional Administrator, Region I; Office of Enforcement; U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Senior Resident Inspector at FitzPatrick. In addition, if you disagree with the characterization of any finding 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 Inspectors at FitzPatrick. The information you provide will be considered in accordance with Inspection Manual Chapter 0305.

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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 05000333/2009002

w/Attachment: Supplemental Information

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NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely, /RA/

Mel Gray, Chief Projects Branch 2 Division of Reactor Projects

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

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w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION REGION I

Docket No.: 50-333

License No.: DPR-59

Report No.: 05000333/2009002

Licensee: Entergy Nuclear Northeast (Entergy)

Facility: James A. FitzPatrick Nuclear Power Plant

Location: Scriba, New York

Dates: January 1 through March 31, 2009

Inspectors: G. Hunegs, Senior Resident Inspector

S. Rutenkroger, PhD, Resident Inspector

J. Commiskey, Health Physicist

Approved by: Mel Gray, Chief

Projects Branch 2

Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000333/2009002; 01/01/2009 - 03/31/2009; James A. FitzPatrick Nuclear Power Plant; Surveillance Testing and Event Follow-Up.

The report covered a three-month period of inspection by resident inspectors and announced inspections by region based inspectors. One Severity Level IV and one Green finding associated with two non-cited violations were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). The cross-cutting aspect for each finding was determined using IMC 0305, "Operating Reactor Assessment Program." Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

Severity Level IV: The inspectors identified a Severity Level IV, non-cited violation (NCV) because Entergy did not provide a written 60-day report to the NRC as required by 10 CFR 50.73 relative to a condition which was prohibited by Technical Specifications (TS) 3.8.3. Specifically, on several occasions between September 2006 and July 2007 the volume for either the 'A' or 'B' fuel oil storage tanks (FOST) was such that there was an insufficient quantity of fuel oil to provide a seven day fuel oil supply for the associated emergency diesel generator (EDG) as required per Technical Specifications. Entergy personnel, in determining past reportability, improperly credited the associated fuel oil day tank towards the seven day supply and erroneously concluded on September 18, 2007, that the issue was not reportable. Entergy's corrective actions included initiation of CR-JAF-2008-04323 and issuance of licensee event report (LER) 2009-001, "Inadequate Engineering Calculation Results in Insufficient Inventory in EDG Fuel Oil Storage Tanks." In addition, Entergy revised applicable procedures to ensure the fuel oil storage tanks contain adequate fuel oil inventory to remain in compliance with the TS.

This violation involved a failure to make a required report to the NRC and is considered to impact the regulatory process. Such violations are dispositioned using the traditional enforcement process instead of the Significance Determination Process. Using the Enforcement Policy Supplement I, "Reactor Operations," example D4 which states, "A failure to make a required LER;" the NRC determined this violation is more than minor and categorized as a Severity Level IV violation.

The inspectors determined that this finding had a cross-cutting aspect in the area of problem identification and resolution related to the evaluation component because Entergy personnel did not properly consider the TS basis and, therefore, did not properly evaluate the reportability for the EDG FOSTs. (P.1(c)) (Section 4OA3)

Cornerstone: Barrier Integrity

• Green: The inspectors identified an NCV of very low safety significance of 10 CFR 50, Criterion XVI, "Corrective Action," because Entergy did not identify and correct a condition adverse to quality related to a control room envelope boundary door. Specifically, on several occasions, Entergy did not identify and implement adequate actions to ensure a control room envelope boundary door, 70DOR-A-300-5, remained latched and able to perform its safety function. Entergy implemented corrective actions which included repair of the latching mechanism to improve the reliability of the door and initiated condition reports CR-JAF-2009-01021 and CR-JAF-2009-01070.

This finding was greater than minor because it affected the barrier integrity attribute of structures, systems, components, and barrier performance under maintaining radiological barrier functionality of the control room and affected the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect operators in the control room from radionuclide releases caused by accidents or events. The finding was evaluated using the SDP Phase I and Phase III because the finding represented a degradation of the barrier function provided for the control room against toxic atmosphere and smoke as well as radiological conditions. The finding was determined to be of very low safety significance, because the amount of time the door was unlatched and ajar was limited to 51 days and, considering the TS allowed outage time of 90 days, the maximum potential time of 51 days represented very low safety significance considering the low probability of a design basis accident during this time period.

The inspectors determined this finding had a cross-cutting aspect in the area of problem identification and resolution related to the identification component because Entergy personnel did not identify the degraded condition completely and did not recognize the impact that the degraded CRE boundary door had on the control room envelope. (P.1(a)) (Section 1R22)

B. Licensee-Identified Violations

None

REPORT DETAILS

Summary of Plant Status

The James A. FitzPatrick Nuclear Power Plant (FitzPatrick) began the inspection period operating at 100 percent reactor power. On January 14, 2009, Entergy reduced reactor power to 55 percent to perform a control rod sequence exchange and to repair leaking condenser tubes and returned to 100 percent the following day. On February 18, 2009, the 'A' traveling water screen was isolated to facilitate repairs. This resulted in an increase in water velocity through the operating traveling water screens and subsequent transport of additional debris to the condensers. The following condenser cleaning operations were conducted to address increased condenser differential temperature as a result of the additional debris while the 'A' traveling water screen was isolated:

- On February 19, 2009, Entergy reduced reactor power to 75 percent to clean the 'B2' condenser water box and returned to 100 percent reactor power the same day;
- On February 21, 2009, Entergy reduced reactor power to 75 percent to clean the 'B1' and 'B2' condenser water boxes and returned to 100 percent reactor power the following day;
- On February 24, 2009, Entergy reduced reactor power to 75 percent to clean the 'B1' and 'B2' condenser water boxes and returned to 100 percent the same day; and
- On February 26, 2009, Entergy reduced reactor power to 85 percent to clean the 'A1', 'B1' and 'B2' condenser water boxes and returned to 100 percent the following day.

Operators maintained the reactor at 100 percent power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 – 1 sample)

a. <u>Inspection Scope</u>

During the week beginning January 12, 2009, the site experienced severe cold weather conditions and high winds. The inspectors reviewed the operating status of the reactor and turbine building heating, ventilation, and air conditioning systems; reviewed the procedural limits and actions associated with cold weather; and walked down accessible areas of the reactor and turbine buildings to assess the effectiveness of the heating and ventilation systems. The inspectors reviewed the Updated Final Safety Analysis Report (UFSAR) and performance requirements for systems selected for inspection. The inspectors conducted discussions with operations and engineering personnel to ensure personnel were aware of temperature restrictions and required actions. The documents reviewed are listed in the Attachment.

This activity constitutes one seasonal extreme weather condition inspection sample.

b. <u>Findings</u>

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Quarterly Partial System Walkdown (71111.04Q – 4 samples)

a. <u>Inspection Scope</u>

The inspectors performed four partial system walkdowns to verify the operability of redundant or diverse trains and components during periods of system train unavailability or following periods of maintenance. The inspectors referenced the system procedures, the Updated Final Safety Analysis Report (UFSAR), and system drawings in order to verify that the alignment of the available train was proper to support its required safety functions. The inspectors also reviewed applicable condition reports (CRs) and work orders to ensure that Entergy personnel identified and properly addressed equipment discrepancies that could impair the capability of the available equipment train, as required by 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." The documents reviewed are listed in the Attachment. The inspectors performed a partial walkdown of the following systems:

- 'B' core spray pump when the 'A' core spray pump was out of service due to planned maintenance;
- 'B' reactor protection system when 'A' reactor protection system was on a backup power supply due to system failure;
- 'B' low pressure coolant injection system and the 'A' and 'B' core spray systems while the 'A' low pressure coolant injection system was out of service for planned maintenance: and
- Reactor core isolation cooling system while the high pressure coolant injection (HPCI) system was out of service for planned maintenance.

These activities constituted four partial system walkdown inspection samples.

b. <u>Findings</u>

No findings of significance were identified.

.2 <u>Complete System Walkdown</u> (71111.04S – 1 sample)

a. <u>Inspection Scope</u>

The inspectors performed a complete system alignment inspection of the HPCI system to identify discrepancies between the existing equipment lineup and the required lineup. During the inspection, system drawings and operating procedures were used to verify proper equipment alignment and operational status. The inspectors reviewed the open maintenance work orders (WOs) associated with the system for deficiencies that could affect the ability of the system to perform its function. Documentation associated with unresolved design issues such as temporary modifications, operator workarounds and items tracked by plant engineering were also reviewed by the inspectors to assess their collective impact on system operation. In addition, the inspectors reviewed the condition

report database to verify that equipment problems were being identified and appropriately resolved. The documents reviewed are listed in the Attachment.

These activities constituted one complete system walkdown inspection sample.

b. <u>Findings</u>

No findings of significance were identified.

1R05 <u>Fire Protection</u> (71111.05)

.1 Routine Resident Inspector Tours (71111.05Q – 5 samples)

a. Inspection Scope

The inspectors conducted tours of fire areas to assess the material condition and operational status of fire protection features. The inspectors verified, consistent with applicable administrative procedures, that combustibles and ignition sources were adequately controlled; passive fire barriers, manual fire-fighting equipment, and suppression and detection equipment were appropriately maintained; and compensatory measures for out-of-service, degraded, or inoperable fire protection equipment were implemented in accordance with Entergy's fire protection program. The inspectors evaluated the fire protection program against the requirements of Licensee Condition 2.C.3. The documents reviewed are listed in the Attachment.

- Fire Area/Zone 1A/AD-1, elevation 272 foot;
- Fire Area/Zone 1A/AD-3, elevation 272 foot;
- Fire Area/Zone 1A/AD-4, elevation 286 foot;
- Fire Area/Zone 1A/AD-5, elevation 286 foot; and
- Fire Area/Zone 1A/AD-6, elevation 300 foot.

These activities constituted five quarterly fire protection inspection samples.

b. <u>Findings</u>

No findings of significance were identified.

1R11 <u>Licensed Operator Requalification Program</u> (71111.11)

.1 <u>Quarterly Review</u> (71111.11Q – 1 sample)

a. <u>Inspection Scope</u>

On March 16, 2009, the inspectors observed licensed operator simulator training to assess operator performance during scenarios to verify that operator performance was adequate and evaluators were identifying and documenting crew performance problems. The inspectors evaluated the performance of risk significant operator actions, including the use of emergency operating procedures. The inspectors assessed the clarity and effectiveness of communications, the implementation of appropriate actions in response to

alarms, the performance of timely control board operation and manipulation, and the oversight and direction provided by the shift manager. The inspectors also reviewed simulator fidelity to evaluate the degree of similarity to the actual control room. Licensed operator training was evaluated for conformance with the requirements of 10 CFR Part 55, "Operators' Licenses." The documents reviewed are listed in the Attachment.

This activity constitutes one operator simulator training inspection sample.

b. Findings

No findings of significance were identified.

1R12 <u>Maintenance Effectiveness</u> (71111.12 – 2 samples)

a. <u>Inspection Scope</u>

The inspectors reviewed performance-based problems involving selected in-scope structures, systems, or components (SSCs) to assess the effectiveness of the maintenance program. The reviews focused on the following aspects when applicable:

- Proper Maintenance Rule scoping in accordance with 10 CFR Part 50.65;
- · Characterization of reliability issues;
- Changing system and component unavailability;
- 10 CFR Part 50.65 (a)(1) and (a)(2) classifications;
- Identifying and addressing common cause failures;
- Trending of system flow and temperature values;
- Appropriateness of performance criteria for SSCs classified (a)(2); and
- Adequacy of goals and corrective actions for SSCs classified (a)(1).

The inspectors reviewed system health reports, maintenance backlogs, and Maintenance Rule basis documents. The inspectors evaluated the maintenance program for conformance with the requirements of 10 CFR Part 50.65. The documents reviewed are listed in the Attachment.

- 125 VDC power system; and
- High pressure coolant injection.

These activities constituted two quarterly maintenance effectiveness inspection samples.

b. Findings

No findings of significance 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 verified that 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 verified that the plant risk was promptly reassessed and managed. The documents reviewed are listed in the Attachment.

- The week of January 5, 2009, which included high potential conditions for frazil ice, planned maintenance on the 'A' low pressure coolant injection subsystem, and surveillances involving the reactor core isolation cooling system and the 'A' residual heat removal (RHR) system;
- The week of January 12, 2009, which included 'A' average power range monitor power supply replacement, instrument surveillances that affected the reactor core isolation cooling system, a scheduled downpower for condenser tube leak repair and high potential conditions for frazil ice;
- The week of January 19, 2009, which included high potential conditions for frazil ice, planned maintenance on the HPCI system, and instrument surveillances and calibrations:
- The week of February 9, 2009, which included troubleshooting and repair of the 'A' reactor protection system motor-generator set, instrument surveillance tests and increased trip risk from severe weather; and
- The week of February 16, 2009, which included a failure of the 'A' traveling water screen, the 'A' reactor protection system motor generator set out-of-service due to anomalies in operation and troubleshooting, and planned maintenance and surveillances on the 'B' emergency diesel generator system, 'B' standby liquid control system, 'B' core spray system, 'B' RHR service water (SW) system, and 'B' standby gas treatment system.

These activities constituted five inspection samples.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 – 4 samples)

a. <u>Inspection Scope</u>

The inspectors reviewed operability determinations to assess the acceptability of the evaluations; when needed, the use and control of compensatory measures; and compliance with Technical Specifications (TS). The inspectors' review included a verification that the operability determinations were conducted as specified by ENN-OP-104, "Operability Determinations." The technical adequacy of the determinations was reviewed and compared to the TSs, UFSAR, and associated design basis documents. The documents reviewed are listed in the Attachment.

- CRs-JAF-2009-00474, 00436 and 00358, Degraded 125 VDC battery room ventilation system;
- CR-JAF-2009-00229, Initial performance test failures of the 'A' low pressure coolant injection inverter;
- CR-JAF-2009-00241, Operation of the RHR system in the suppression pool cooling mode for more than 2 percent; and

CR-JAF-2009-00350, HPCI valve 23HOV-1 failed to open.

These activities constitute four inspection samples.

b. Findings

No findings of significance were identified.

1R18 Plant Modifications (71111.18 – 1 sample)

a. Inspection Scope

The inspectors reviewed the following plant modification to verify the design bases, licensing bases, and performance capability of the systems were not degraded by the modification. The inspectors reviewed the modification against the requirements of 10 CFR 50.59.

The inspectors reviewed permanent plant modification EC -1630 which was implemented to provide a 125 VDC temporary station battery charger, 71BC-9. 71BC-9 is utilized to maintain the battery charged during normal plant loads while a station battery charger is isolated. The inspectors verified that the installation was consistent with the modification documentation; that the drawings and procedures were updated as applicable; and that the post-installation testing was adequate.

This activity constitutes one permanent plant modification inspection sample.

b. Findings

No findings of significance were identified.

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

a. <u>Inspection Scope</u>

The inspectors reviewed post-maintenance test procedures and associated testing activities for selected risk-significant mitigating systems to assess whether the effect of maintenance on plant systems was adequately addressed by control room and engineering personnel. The inspectors verified that test acceptance criteria were clear, demonstrated operational readiness, and were consistent with design basis documentation; test instrumentation had current calibrations, adequate range, and accuracy for the application; and tests were performed, as written, with applicable prerequisites satisfied. Upon completion, the inspectors verified that equipment was returned to the proper alignment necessary to perform its safety function. Post-maintenance testing was evaluated for conformance with the requirements of 10 CFR 50, Appendix B, Criterion XI, "Test Control." The documents reviewed are listed in the Attachment.

- Work Order (WO) 00178518, troubleshoot and repair 'A' average power range monitor;
- WO 51692523 and WO 00115984, 'A' low pressure coolant injection battery and inverter preventive maintenance;

- WO 51103192, replacement of RHR SW check valve 10RHR-431B;
- WO 00180283, repair of HPCI valve 23HOV-1;
- WO 00179962, repair and restoration of the station battery ventilation system; and
- WO 00110513, replacement of fuel oil transfer pump 93P1-B2.

This inspection constitutes six post-maintenance test samples.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 – 6 samples)

a. Inspection Scope

The inspectors witnessed performance of surveillance tests (STs) and/or reviewed test data of selected risk-significant SSCs to assess whether the SSCs satisfied TSs, UFSAR, Technical Requirements Manual, and Entergy procedure requirements. The inspectors verified that test acceptance criteria were clear, demonstrated operational readiness, and were consistent with design basis documents; test instrumentation had current calibrations, adequate range, and accuracy for the application; and tests were performed, as written, with applicable prerequisites satisfied. Upon ST completion, the inspectors verified that equipment was returned to the status specified to perform its safety function. The documents reviewed are listed in the Attachment. The following STs were reviewed:

- ST-2XB, "RHR SW Loop B Quarterly Operability Test (IST)," Revision 9;
- ST-5QB, "APRM System B Flow Bias Channel Functional Test," Revision 0;
- ST-9BA, "A and C EDG Full Load Test and ESW Pump Operability Test," Revision 10;
- ST-24J, "RCIC Flow Rate and In-service Test (IST)," Revision 38;
- ST-18BB, "CREVAS B Operability Test," Revision 1; and
- ST-15G, "Pressure Suppression Chamber Reactor Building Vacuum Breaker Operability and Setpoint Test (IST)," Revision 21.

These activities represented six surveillance testing inspection samples.

b. Findings

Introduction: The inspectors identified an NCV of very low safety significance of 10 CFR 50, Criterion XVI, "Corrective Action," because Entergy did not identify and correct a condition adverse to quality related to a control room envelope (CRE) boundary door. Specifically, Entergy did not identify and implement adequate actions to ensure the safety-related CRE boundary door, 70DOR-A-300-5, remained latched and able to perform its safety function.

<u>Description:</u> Following the performance of ST-18BB, "CREVAS B Operability Test," on March 19, 2009, the inspectors walked down areas involved during the surveillance test approximately four hours after completion to ensure all equipment had been restored to an operable condition. The inspectors identified door 70DOR-A-300-5, a CRE boundary door between the control room chiller room and the control room HVAC room, to be unlatched

and slightly ajar.

After discovering the door unlatched and ajar, the inspectors verified no Entergy personnel were in the two rooms associated with door 70DOR-A-300-5, closed and latched the door, and notified the control room personnel of the deficiency. Entergy personnel verified the door's condition, initiated condition report CR-JAF-2009-001021, and initiated an engineering request to consider installing alarm capability to monitor the condition of the door. In addition, Entergy had previously identified the door to be unlatched on January 31, 2009 and initiated CR-JAF-2009-00387. Entergy closed CR-JAF-2009-00387 on February 6, 2009, considering its purpose to be sufficient for trending purposes only. The inspectors concluded it would have been reasonable to investigate the latch mechanism condition at that time.

On March 23, 2009, the inspectors identified door 70DOR-A-300-5 unlatched a third time and the door handle latch mechanism to be loose. Entergy continued to emphasize to personnel the importance of ensuring the door latched and attempted to tighten the mechanism.

On March 24, 2009, the inspectors identified door 70DOR-A-300-5 unlatched a fourth time and also identified that the latch mechanism was still loose. In addition, the inspectors identified that the latch became unlatched when the door was flexed a small amount. This flexing would occur with changes in the differential pressure across the door, which is a common event. Entergy initiated CR-JAF-2009-01070 and performed repairs and enhancements to the latching mechanism to improve the reliability of the door.

In order for the CREVAS subsystems to be considered operable, the CRE boundary must be maintained such that the CRE occupant dose from a large radioactive release does not exceed the calculated dose in the licensing basis consequence analyses for design basis accidents, and that CRE occupants are protected from hazardous chemicals and smoke. Door 70DOR-A-300-5 must be closed and latched in order to maintain these conditions. Although procedure AP-19.18, "Control Room Envelope Habitability Program," revision 0, allows intermittent opening of the CRE boundary under administrative controls, as permitted by a note included in TS 3.7.3, the door's condition in this case was not controlled and its state was unknown and unreliable.

Entergy's corrective actions included repair and enhancements to the latching mechanism to improve the reliability of the door, initiating condition reports CR-JAF-2009-01021 and CR-JAF-2009-01070, and initiating an engineering request to consider installing alarm capability when the door is not maintained closed and latched.

<u>Analysis:</u> There was an NRC-identified performance deficiency in that Entergy did not promptly identify and correct a condition adverse to quality associated with the CRE boundary door. This finding is greater than minor because it affected the barrier integrity attribute of structures, systems, components, and barrier performance under maintaining radiological barrier functionality of the control room and affected the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events.

The finding was evaluated using IMC 0309, "Significance determination process," (SDP)

Phase I and screened to a SDP Phase III review because the finding represented a degradation of the barrier function provided for the control room against toxic atmosphere and smoke as well as radiological conditions. The finding was determined to be of very low safety significance (Green) because the amount of time the door was unlatched and ajar was limited to 51 days. The mitigating actions immediately required by action statement B.1 are required by B.2 to be verified within 24 hours to ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits. In addition, action B.3 to restore the CRE boundary to operable status has a required completion time of 90 days. Therefore, considering the allowed outage time of 90 days, the maximum potential time of 51 days represents very low safety significance considering the low probability of a design basis accident during this time period.

The inspectors determined that this finding had a cross-cutting aspect in the area of problem identification and resolution within the identification component because Entergy personnel did not identify the degraded condition completely and therefore did not recognize the impact that the degraded CRE boundary door had on the control room envelope. (P.1(a))

Enforcement: 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. Contrary to the above, between January 31 and March 24, 2009, Entergy did not implement measures to promptly identify and correct a condition adverse to quality associated with a CRE boundary door's reliability. This resulted in short periods of time where the CRE boundary door was inoperable. Entergy took corrective actions to repair the latching mechanism to improve the reliability of the door. Because this violation was of very low safety significance, was not repetitive or willful, and it was entered into Entergy's corrective action program, this violation is being treated as an NCV, consistent with section VI.A.1 of the NRC Enforcement Policy. (NCV 05000333/2009002-01: Inoperable Control Room Envelope Door.)

Cornerstones: Emergency Preparedness

1EP6 <u>Drill Evaluation</u> (71114.06 – 1 sample)

a. Inspection Scope

The inspectors observed emergency response organization activities during the emergency preparedness drill that was conducted on February 11, 2009. The inspectors verified that emergency classification declarations, notifications, and protective action recommendations were properly completed. The inspectors evaluated the drill for conformance with the requirements of 10 CFR 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities." The inspectors observed Entergy's critique and compared Entergy's self-identified issues with observations from the inspectors' review to ensure that performance issues were properly identified.

This activity constitutes one drill evaluation inspection sample.

b. <u>Findings</u>

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupation Radiation Safety

2OS3 Radiation Monitoring Instrumentation and Protective Equipment

a. <u>Inspection Scope</u> (71121.03 - 9 samples)

During January 26-29, 2009, the inspectors conducted the following activities to evaluate the operability and accuracy of radiation monitoring instrumentation, and the adequacy of the respiratory protection program for issuing self-contained breathing apparatus (SCBA) to emergency response personnel. Implementation of these programs was reviewed against the criteria contained in 10 CFR 20, applicable industry standards, and the licensee's procedures.

- Updated final safety analysis report (UFSAR) describing the liquid radwaste system, solid radwaste system, and gaseous radwaste system were reviewed by the inspections to identify applicable radiation monitors associated with transient high radiation areas in the plant.
- 2. The inspectors identified and reviewed documentation for various radiation detection instruments used at the licensee's facility. The radiation protection (RP) instrument issue area provided for the selection of portable RP instruments that were available for use for job coverage of radiologically significant areas.
- Current calibration records, functional check records, and applicable calibration
 procedures were reviewed by the inspectors for the following plant radiation monitors
 and portable RP instruments. In addition, the applicable calibrators utilized were
 reviewed for appropriate instrument calibration geometries and National Institute for
 Science and Technology (NIST) standard traceability.

Plant Radiation Monitors

Main steam line radiation monitors (17RM-251A/B/C/D)
Transverse in-core probe (TIP) room area radiation monitors (18RM-21-23/24)
Refuel floor area radiation monitors (18RM-021-12/13/14/30)
Containment radiation monitors (27RM-104A/B)
Steam Jet Air Ejector (SJAE) gas monitors (17RM-150A/B)

RP Instruments

Electronic dosimeters
Radiation survey instruments
Extendable probe survey instruments
Neutron radiation survey instruments
Continuous air monitors
Air samplers
Personal lapel air sampler

Beta and Alpha sample counters Personnel Contamination Monitors (PM7, IPM7, IPM8) Small Article Monitors (SAM)

Calibrators

- 2 Shepherd 89 survey instrument calibrators (RP Instrument Calibration Lab) 1 Shepherd 142-10 panoramic calibrator (Radwaste Building, 298' elevation)
- 4. The inspectors reviewed radiological incidents involving internal exposures identified by condition reports for 2008. In addition, dosimetry electronic records were queried for any internal exposures >50 mrem committed effective dose equivalent. None were identified for further review.
- 5. Condition reports were reviewed (See Section 4OA2), with respect to radiation protection program deficiencies to determine if the deficiencies were appropriately characterized and corrected commensurate with their safety significance.
- 6. Based on the condition reports reviewed (See Section 4OA2), no repetitive deficiencies were identified for further follow up.
- 7. With respect to the RP portable instruments listed in 3) above, the instrument's calibration expiration and response checks were reviewed. The applicable response check beta-source and instrument sign-out procedures were also reviewed. The inspectors queried radiation protection technicians regarding appropriate instrument selection and observed self verification of instrument operability prior to use.
- 8. Emergency plan-specified self contained breathing apparatus (SCBA) equipment and qualified users were sampled based on Fitzpatrick Emergency Plan documents, this included inspection of selected SCBAs (Control Room, Operations Support Center, Security), air bottle cascade systems, the Bauer Breathing Air Compressor (39AC-8), and the Service Air Compressors (39AC-2A/2B/2C). SCBA qualification records for all on-shift reactor operators were verified for currency and that required spectacles were stored nearby and readily available. The inspectors also verified that air used to fill the SCBAs met the Grade D quality criteria of the Compressed Gas Association.
- The inspectors examined selected SCBA units in the main control room, security building and operations support center for periodic air cylinder hydrostatic testing and maintenance records. Review of approved replacement parts documentation and certification of the repair personnel was performed.

b. <u>Findings</u>

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA2 Identification and Resolution of Problems (71152)

.1 Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," to identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of all items entered into Entergy's corrective action program. The review was accomplished by accessing Entergy's computerized database for CRs and attending CR screening meetings.

In accordance with the baseline inspection procedures, the inspectors selected items across the initiating events, mitigating systems, and barrier integrity cornerstones for additional follow-up and review. The inspectors assessed Entergy's threshold for problem identification, the adequacy of the cause analyses, and extent of condition review, operability determinations, and the timeliness of the specified corrective actions. The CRs reviewed are listed in the Attachment.

b. <u>Assessment and Observations</u>

No findings of significance were identified. The inspectors determined that Entergy staff appropriately identified equipment, human performance and program issues at an appropriate threshold and entered them into the corrective action program.

.2 <u>Annual Sample: Operator Workaround Program (71152 - 1 sample)</u>

a. <u>Inspection Scope</u>

The inspectors reviewed the cumulative effects of operator workaround conditions on the reliability, availability, potential for mis-operation of a system, and on the operators' ability to implement abnormal or emergency operating procedures. The inspectors reviewed the results of Entergy surveillance test ST-99H, "Operations Cumulative Impact Assessment," and the resolution of items identified in the assessment. The inspectors reviewed Entergy's program for identifying operator workaround conditions at an appropriate threshold and for entering them into the corrective action program. In addition, the inspectors reviewed operating department records including standing orders for operational decision-making issues and operability evaluations.

This activity constitutes one inspection sample.

b. Assessment and Observations

No findings of significance were identified. The inspectors determined that Entergy's corrective action program was effectively used to identify and resolve operator workaround conditions.

4OA3 Event Follow-up (71153)

.1 (Closed) Licensee Event Report (LER) 05000333/2009001-00, Inadequate Engineering Calculation Results in Insufficient Inventory in EDG Fuel Oil Storage Tanks

Introduction: The inspectors identified a Severity Level IV, non-cited violation (NCV) because Entergy did not provide a written 60-day report to the NRC as required by 10 CFR 50.73 relative to a condition which was prohibited by Technical Specifications (TS) 3.8.3. Specifically, on several occasions between September 2006 and July 2007 the volume for the 'A' or 'B' fuel oil storage tanks (FOST) was such that there was an insufficient quantity of fuel oil to provide a seven day fuel oil supply for the associated emergency diesel generator as required per TS.

<u>Description:</u> On June 29, 2007, Entergy personnel determined that the TS allowed a range of energy (or "heat") content of the fuel oil as represented by American Petroleum Institute (API) gravity from 27 degrees to 39 degrees, which would result in the TSs specified minimum volume of 32,000 gallons to be insufficient for seven days continuous operation of the emergency diesel generators without resupply from an external source. Entergy initiated CR-JAF-2007-02392 in order to evaluate and correct the condition and evaluate the issue for reportability based upon actual past FOST volumes and API gravities.

In addition, as documented in NRC inspection report 05000333/2007006, the NRC determined that Entergy staff did not properly identify and evaluate the potential for vortexing in the EDG fuel oil transfer pump suction inlet piping. Specifically, Entergy's EDG FOST inventory calculation did not include any allowance for suction line submergence to prevent air entrainment resulting from the effects of vortexing. Entergy personnel initiated CR-JAF-2007-02490 in order to evaluate and correct the condition and evaluate the issue for reportability in combination with CR-JAF-2007-02392 due to the cumulative effect of the two issues.

Although Entergy maintains the quantity of oil in the FOSTs at greater than the minimum required by TS for both volume and heat content, the inspectors determined that there were, at a minimum, four occasions between September 17, 2006 and July 6, 2007 in which a condition prohibited by TSs occurred, i.e. the FOST did not have a sufficient quantity of fuel oil to support seven days of operation for a duration greater than 16 days (the duration allowed by TSs prior to requiring actions to begin shutdown of the plant). Specifically, the 'A' FOST did not have a sufficient capacity at least three times for durations of 19, 51, and 21 days, and the 'B' FOST did not have a sufficient quantity at least once for 19 days.

The inspectors determined that Entergy staff improperly credited the fuel oil stored within the day tank (crediting a volume of fuel oil up to 525 gallons) in order to conclude that there had not been a time when seven days of fuel oil supply had been not been maintained for greater than 16 days, including those four occasions. The inspectors determined that crediting the day tank supply, however, conflicts with the safety function of the FOST, as described in the station's licensing basis, to be the sole source of the seven days of supply. Specifically, at the end of seven days of EDG operation, only the FOST may be analyzed to be depleted, and not the day tank.

The safety function for the emergency AC power system with respect to the fuel oil supply is defined within the Final Safety Analysis Report, as updated in 2007, in Section 8.6, "Emergency AC Power System" and specifically within Subsection 8.6.7, "Safety Evaluation," by stating "The two diesel units comprising each emergency AC power source are capable of starting and operating continuously under postulated accident conditions

for a period of seven days, using fuel stored in underground fuel storage tanks." This safety function design is consistent with Regulatory Guide 1.137, "Fuel-Oil Systems for Standby Diesel Generators," Revision 1 and ANS 59.51/ANSI N195-1976, "American National Standard for Fuel Oil Systems for Standby Diesel-Generators" and the most recent revision ANSI/ANS-59.51-1997.

This condition met the criteria for reporting under 10 CFR 50.73 (a)(2)(i)(B) in that the condition was not allowed by the plant's TSs (i.e. that after the sixteen days of allowed outage time the plant was required to begin shutting down, but did not). However, on September 18, 2007, Entergy incorrectly concluded that no reportability criteria applied and decided to not submit a 60-day report.

Analysis: The NRC identified a performance deficiency in that Entergy did not provide a 60-day written report, as required by 10 CFR 50.73(a)(2)(i)(B). This violation involved a failure to make a required report to the NRC and is considered to impact the regulatory process. Such violations are dispositioned using the traditional enforcement process instead of the Significance Determination Process. Using the Enforcement Policy Supplement I, "Reactor Operations," example D4 which states, "A failure to make a required LER;" the NRC determined this violation impacted the regulatory process and is more than minor and categorized as a Severity Level IV violation.

Entergy's corrective actions included initiating CR-JAF-2008-04323 and filing LER 2009-001, "Inadequate Engineering Calculation Results in Insufficient Inventory in EDG Fuel Oil Storage Tanks" on January 12, 2009. In addition, as part of the corrective actions already performed as part of CR-JAF-2007-02392 and CR-JAF-2007-02490, Entergy had revised the applicable procedures to ensure the FOSTs contain adequate fuel oil inventory to remain in compliance with the Technical Specifications and pursued license revisions to the Technical Specifications to remove non-conservative values.

The inspectors determined this finding had a cross-cutting aspect in the area of problem identification and resolution within the corrective action program component because Entergy personnel incorrectly concluded that the safety function to provide a seven day supply of fuel oil could utilize sources other than the FOST, specifically the day tank, and therefore did not properly evaluate for reportability a condition adverse to quality on September 18, 2007. (P.1(c))

<u>Enforcement:</u> 10 CFR 50.73 requires licensees to submit a LER for any operation or condition which was prohibited by the plant's Technical Specifications within 60 days of discovering the event. Contrary to the above, Entergy failed to submit a report within 60 days of June 29, 2007, when the event associated with inadequate EDG fuel oil supply was discovered. Because this violation was of very low safety significance, was not repetitive or willful, and it was entered into Entergy's corrective action program, this violation is being treated as an NCV, consistent with section VI.A.1 of the NRC Enforcement Policy. (NCV 05000333/2009002-02: Failed to Submit an LER For a Condition Prohibited by TS Associated With EDG Fuel Oil Supply.)

4OA5 Other Activities

.1 (Closed) Unresolved Item (URI) 05000333/2008003-01: Station Batteries With Indications On the Negative Plate Straps

As documented in inspection report 05000333/2008003, the inspectors identified indications on the negative plate straps of multiple cells of station battery 71SB-1 and one cell of station battery 71SB-2 that visually appeared to be cracks. Entergy removed cell 23 from service during their Fall 2008 refueling outage. Cell 23 was disassembled and the negative plate strap was inspected in order to characterize the indication.

Without electrolyte and container material to obscure the view, Entergy personnel determined that the suspected cracks were marks that appear on the surface against the tooling and away from the welding torch and its operator. The tooling acts as a dam that prevents molten lead from flowing into unintended areas. Lead in contact with the tooling can develop thermal gradients causing it to freeze in shapes resembling plains, creases, striations, and laminations. In this case, the lead had frozen into shapes that resembled cracks.

The inspectors reviewed Entergy's analysis, including photographs of the negative plate strap with the electrolyte and container material removed, and concluded that the suspected cracks were surface anomalies. Therefore, no adverse condition existed and no violation of regulatory requirements was identified by the inspectors. URI 05000333/2008003-01, Station Batteries with Indications on the Negative Plate Straps, is closed.

.2 Quarterly Resident Inspector Observations of Security Personnel and Activities

a. <u>Inspection Scope</u>

During the inspection period, the inspectors conducted observations of security force personnel and activities to ensure that these activities were consistent with Entergy security procedures and applicable regulatory requirements. Although these observations did not constitute additional inspection samples, they were considered an integral part of the normal, resident inspectors' plant status reviews during implementation of the baseline inspection program.

b. <u>Findings</u>

No findings of significance were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

The inspectors presented the inspection results to Mr. P. Dietrich and other members of Entergy's management at the conclusion of the inspection on April 9, 2009. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Entergy Personnel

- P. Dietrich, Site Vice President
- C. Adner, Manager Operations
- J. Barnes, Manager, Training and Development
- P. Cullinan, Manager, Emergency Preparedness
- B. Finn, Director Nuclear Safety Assurance
- D. Johnson, Manager, System Engineering
- J. LaPlante, Manager, Security
- K. Mulligan, General Manager, Plant Operations
- J. Pechacek, Licensing Manager
- J. Solowski, Radiation Protection
- M. Woodby, Director Engineering

LIST OF ITEMS OPEN, CLOSED, AND DISCUSSED

Opened and Closed

05000333/2009002-01 05000333/2009002-02	NCV	Inoperable Control Room Envelope Door (Section 1R22) Failed to Submit an LER For a Condition Prohibited by TS Associated With EDG Fuel Oil Supply (Section 4OA3)
Closed		
05000333/2008003-01	URI	Station Batteries With Indications on the Negative Plate Straps (Section 4OA5)
05000333/2009001-00	LER	Inadequate Engineering Calculation Results in Insufficient Inventory of EDG fuel Oil Storage Tanks (Section 4OA3)

<u>Discussed</u>

None

LIST OF DOCUMENTS REVIEWED

Section 1RO1: Adverse Weather Protection

RT-04.05, "Ice Potential Determination," Revision 1

OP-4, "Circulating Water System," Revision 63

Section 1RO4: Equipment Alignment

OP-18, "Reactor Protection System," Revision 28

OP-13A, "RHR-Low Pressure Coolant Injection," Revision 16

OP-14, "Core Spray System," Revision 31

OP-19, "Reactor Core Isolation Cooling System," Revision 46

Section 1RO5: Fire Protection

JAF-RPT-04-00478, "JAF Fire Hazards Analysis," Revision 2

PFP-PWR03, "Administration Building, EL 272' Fire Area/Zone IA/AD-1, AD-3," Revision 2

PFP-PWR05, "Building: Admin Building Elev. 286' Fire Area/Zone IA/AD-4, AD-5," Revision 4

PFP-PWR08, "Administration Building, EL 300' Fire Area/Zone IA/AD-6," Revision 2

FPSSK-2, "Fire Area/Zone Arrangement Plan EL 272'-0"," Revision 3

FPSSK-3, "Fire Area/Zone Arrangement Plan EL 300'-0"," Revision 2

FPSSK-4, "Fire Area/Zone Arrangement Plan EL 286'-0", 326'-9", 344'-6" and EL 369'-6"," Revision 2

Section 1R11: Licensed Operator Regualification Program

SEG-71090-3-LOR, "NRHX Tube Leak, Gp 1 Isolation Due to MSL Rupture and Coolant Leak," Revision 0

SEG-71775-0-LOI, "Loss of RPS Bus with SDIV Rupture After Manual Scram," Revision 4

AOP-39, "Loss of Coolant," Revision 17

AOP-60, "Loss of RPS Bus B Power," Revision 5

Section 1R12: Maintenance Effectiveness

Procedures

EN-DC-203, "Maintenance Rule Program," Revision 0

EN-DC-204, "Maintenance Scope and Basis," Revision 0

EN-DC-205, "Maintenance Rule Monitoring," Revision 0

EN-DC-324, "Preventive Maintenance Process," Revision 3

EN-LI-102, "Corrective Action Process," Revision 10

ENN-DC-171, "Maintenance Rule Monitoring," Revision 2

Miscellaneous

ENN-MS-S-004-JAF, "System Categorization – JAF," Revision 2

ENN-MS-S-009-JAF, "JAF Safety System Function Sheets," Revision 1

Maintenance rule quarterly report 1st quarter 2008

Maintenance rule quarterly report 2nd quarter 2008

JAF-RPT-MISC-02272, "Maintenance Rule Basis Document for Plant Level Performance," Revision 7

Maintenance Rule Quarterly Report, 3rd quarter 2008

JAF-RPT-ELEC-02302, "System 71-DC/DC Electrical Dist,: Revision 4

JAF-RPT-HPCI-02289, "Maintenance Rule Basis Document for System 023 High Pressure Coolant Injection System," Revision 5

System Health Report, 23 High Pressure Coolant Injection, 4th guarter 2008

System Health Report, 71 DC Distribution, 4th guarter 2008

EC-1630 and 1631, 125 VDC Swing Charger for Station Batteries

CR-JAF-2009-00225

CR-JAF-2009-00346

CR-JAF-2009-00358

CR-JAF-2009-00436

CR-JAF-2009-00474

CR-JAF-2009-00507

CR-JAF-2006-04738

CR-JAF-2006-04754

CR-JAF-2007-01665

CR-JAF-2008-04718 CR-JAF-2008-04720

CR-JAF-2009-00090

CR-JAF-2009-00274

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

AP-12.12, "Protected Equipment Program," Revision 4

AP-10.10, On-Line Risk Assessment; Revision 6

Section 1R15: Operability Evaluations

JAF-CALC-ELEC-00523, "Testing Duty Cycle," Revision 3

JAF-CALC-ELEC-02213, "LPCI UPS System Testing Load Bank Characteristics and LPCI Battery and Inverter On Line Testing Conditions and/or Limitations," Revision 0

Technical Specification Interpretation Number 29, "LPCI MOV Independent Power Supplies – Battery Charger & Inverter Performance Test," Revision 2

CR-JAF-2009-00284

CR-JAF-2009-00360

CR-JAF-2009-00378

CR-JAF-2009-00380

CR-JAF-2009-00381

CR-JAF-2009-00382

CR-JAF-2009-00384

CR-JAF-2009-00386

Section 1R19: Post Maintenance Testing

ISP-20A, "APRM Upscale and Downscale Instrument Functional Test/Calibration" Revision 24

OP-16, "Neutron Monitoring," Revision 27

CR-JAF-2009-0088

MP-057.06, "Battery Maintenance," Revision 38

MST-071.11, "LPCI Battery Quarterly Surveillance Test," Revision 19

MST-071.25, "LPCI Battery Modified Performance Test," Revision 12

MST-071.29, "LPCI Charger-Inverter Performance Surveillance Test," Revision 9

ER JAF-04-13679, "RHRSW Keep-Full Check Valve Replacement," Revision 0

WO 180283-37, "Perform Oil Leak Test"

ST-9LB, "EDG B & D Fuel Oil Transfer Pump Operability Test," Revision 6 WO 51692523, "ST – Quarterly Inspection on 'A' LPCI Battery"

Section 1R22 Surveillance Testing

FB-35E, "Flow Diagram Control Room Area Service & Chilled Water System 70," Revision 34 FB-45A, "Flow Diagram Control and Relay Rooms Heating and Ventilation System 70," Revision 41

FM-18B, "Flow Diagram Drywell Inerting C.A.D. Purge and Containment Differential Pressurization System 27," Revision 39

JAF-CALC-RAD-00042, "Control Room Radiological Habitability Under Power Uprate Conditions and CREVASS Reconfiguration," Revision 3

OP-37, "Containment Atmosphere Dilution System," Revision 77

OP-55A, "Control and Relay Room Refrigeration Water Chiller," Revision 21

Section 2OS3: Radiation Monitoring Instrumentation

Procedures

EN-RP-302, "Operation of Radiation Protection Instrumentation," Revision 1

EN-RP-303, "Source Checking of Radiation Protection Instrumentation," Revision 2

EN-RP-308, "Operation & Calibration of Gamma Scintillation Tool Monitor," Revision 3

EN-RP-309, "Operation & Calibration of the Eberline AMS-3/3A Continuous Air Monitor," Revision 1

EN-RP-310, "Operation & Initial Setup of the Eberline AMS-4 Continuous Air Monitor," Revision 2

EN-RP-502, "Inspection & Maintenance of Respiratory Protection Equipment." Revision 4

EN-RP-503, "Selection, Issue & Use of Respiratory Protection Equipment," Revision 3

EN-RP-504, "Breathing Air," Revision 2

ISP-95A, "Post Accident Containment High Range Radiation Monitor A Functional Test / Calibration," Revision 0

RP-INST-02.01, "Teletector Survey Meter, Model 6112B," Revision 2

RP-INST-02.04, "Count Rate Meter, Ludlum Model 177," Revision 5

RP-INST-02.05, "Geiger Meuller Survey Meter," Revision 2

RP-INST-02.06, "Dose Rate Meter, Bicron Micro-Rem," Revision 2

RP-INST-02.08, "Ion Chamber Dose Rate Meter," Revision 3

RP-INST-02.09, "Mini-Scalar MS-2, MS-3," Revision 3

RP-INST-02.10, "Scintillation Alpha Counter, Eberline Model SAC-4," Revision 1

RP-INST-02.12, "Electronic Dosimeter, Merlin Gerin Products Instruments," Revision 2

RP-INST-03.01, "Area Radiation Monitors," Revision 3

RP-INST-03.03, "Containment Radiation Monitor System," Revision 7

RP-INST-04.01, "Area Radiation Monitor, Dosimeter Corporation," Revision 4

RP-INST-04.02, "Whole Body Contamination Monitor IPM," Revision 4

RP-INST-04.05, "Small Article Monitor (SAM) Model 9," Revision 4

RP-INST-04.07, "Area Radiation Monitor, AMP-100/200," Revision 2

RP-INST-04.08, "MGPI Telepole WR Extendable GM Survey Meter," Revision 2

RP-RESP-04.10, "Constant Air Monitor Eberline Model AMS-4," Revision 6

RP-INST-05.02, "Electrometer, Victoreen Model 500," Revision 0

RP-INST-05.03, "Calibrator, J. L. Shepherd Model 89," Revision 2

RP-INST-05.04, "Irradiator, Shepherd Panoramic Model 142-10," Revision 4

RP-RESP-02.03, "Self-Contained Breathing Apparatus, Scott Pressure Pack 4.5," Revision 7

RP-RESP-03.03, "Breathing Air Testing and Use," Revision 5

SAP-2, "Emergency Equipment Inventory," Revision 44

SAP-20, "Emergency Plan Assignments," Revision 25

SP-03.01, "Main Steam Line & SJAE Radiation Monitor Calibration," Revision 13

Audits/Assessments

QA-7-2008-JAF-1, Emergency Preparedness Program

QS-2008-JAF-0011, Review of Processes, Procedures & Controls for RP Instrumentation

Miscellaneous

ARM No. 18-RM-021-12, Spent Fuel Area RB 369' East. Temporary Set point Change

Scott PosiChek3, Visual / Functional Test Results, PAK2211, dated 6/18/2008 (Control Room)

Scott PosiChek3, Visual / Functional Test Results, PAK2189, dated 6/18/2008 (Control Room)

Scott PosiChek3, Visual / Functional Test Results, PAK2141, dated 6/18/2008 (OSC)

Scott PosiChek3, Visual / Functional Test Results, PAK2159, dated 6/17/2008 (Security)

Scott PosiChek3, Visual / Functional Test Results, PAK2157, dated 6/17/2008 (Security)

Breathing Air Quality / Activity Analysis, dated 10/30/2008 and 11/03/2008

WO #, 51691608, Functional Test / Calibration of 27RM-104A

WO #, 51693777, Functional Test / Calibration of 27RM-104B

Calibration & Functional Checks for Main steam line radiation monitors (17RM-251A/B/C/D)

SCOTT Authorized Service Center Maintenance & Overhaul Certifications

Daily Routine Surveys / Inspections Frisker Counting Equipment Inspections sheets

Electronic Dosimeter Response Test Records

Calibration records for listed instruments

Instrument Surveillance Records

Whole Body Counter Calibration and Response Checks

Section 4OA2: Identification and Resolution of Problems

JAF-CALC-07-00019, "Volume in EDG Underground Fuel Oil Storage Tanks as a Function of Level," Revision 0

JAF-CALC-07-00020, "Revised Emergency Diesel Generator (EDG) Fuel Oil Storage Quantities for 7 Day and 6 Day Supplies," Revision 0

EN-ME-G-001, "Evaluation of Pump Protection from Low Submergence," Revision 0

Condition	Reports

Condition Reports		
2008-00916	2009-00380	2009-01053
2008-01113	2009-00382	
2008-02602	2009-00381	
2008-04467	2009-00384	
2008-04468	2009-00385	
2008-04608	2009-00386	
2008-04610	2009-00872	
2008-00781	2009-00884	
2009-00284	2009-00906	
2009-00350	2009-00924	
2009-00360	2009-01019	
2009-00378	2009-01021	

LIST OF ACRONYMS

ADAMS Agencywide Documents Access and Management System

API American Petroleum Institute CFR Code of Federal Regulations

CR condition report

CRE control room envelope

CREVAS control room emergency ventilation air supply

EDG emergency diesel generator Entergy Entergy Nuclear Northeast

FitzPatrick James A. FitzPatrick Nuclear Power Plant

FOST fuel oil storage tank

HPCI high pressure coolant injection IMC inspection manual chapter

IST in-service test

LER licensee event report NCV non-cited violation

NRC Nuclear Regulatory Commission

OA other activities

PARS Publicly Available Record RHR residual heat removal RP radiation protection

SCBA self-contained breathing apparatus SDP significance determination process

SJAE steam jet air ejector

SSC structures, systems, or components

ST surveillance test SW service water

TS technical specification

UFSAR updated final safety analysis report

URI unresolved item WO work order