November 8, 2004

Mr. Theodore Sullivan
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 05000333/2004004

Dear Mr. Sullivan:

On September 30, 2004, the US Nuclear Regulatory Commission (NRC) completed an inspection at your James A. FitzPatrick Nuclear Power Plant. The enclosed integrated inspection report documents the inspection findings which were discussed on October 5, 2004, with Mr. Kevin Mulligan and other members of your staff.

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

This report documents one NRC-identified finding of very low safety significance (Green). This finding was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it was entered into your corrective actions program, the NRC is treating this issue as a non-cited violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny the non-cited violation noted in this report, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspector at FitzPatrick.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web Site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Eugene W. Cobey, Chief
Reactor Projects Branch 3
Division of Reactor Projects

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

Enclosure: Inspection Report 05000333/2004004
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.:	05000333/2004004
Licensee:	Entergy Nuclear Northeast (Entergy)
Facility:	James A. FitzPatrick Nuclear Power Plant
Location:	268 Lake Road Scriba, New York 13093
Dates:	July 1, 2004 - September 30, 2004
Inspectors:	L. M. Cline, Senior Resident Inspector D. A. Dempsey, Resident Inspector J. D. Noggle, Senior Health Physicist D. M. Silk, Senior Emergency Preparedness Inspector
Approved by:	Eugene W. Cobey, Chief Reactor Projects Branch 3 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000333/2004004; 07/01/2004 - 09/30/2004; James A. FitzPatrick Nuclear Power Plant; Fire Protection.

The report covered a three-month period of inspection by resident inspectors, a senior health physicist, and a senior emergency preparedness inspector. One Green non-cited violation (NCV) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). 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 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified that transient combustible control requirements for resin storage in the screenwell house were not met. The weight and location of the resin exceeded administrative limits and a transient combustible evaluation was not performed. The finding was of very low safety significance (Green) and resulted in a non-cited violation of Technical Specification 5.4.1.d that requires fire protection program procedures be implemented.

  The performance deficiency involved failure to comply with procedure requirements concerning storage of transient combustible material. Traditional enforcement does not apply because the issue did not have any actual safety consequences or potential for impacting the NRC's regulatory function and it was not the result of any willful violation of NRC requirements. The finding was more than minor because the quantity of combustible material incorrectly stored exceeded the limits of the screenwell smoke and hot gas analysis. This issue was also associated with the protection against external factors attribute of the mitigating systems cornerstone and negatively affected the objective of maintaining the reliability of the mitigating systems located in the sceenwell house, the ESW and RHR service water pumps. The finding had a human performance cross-cutting aspect because it involved personnel not following procedure instructions. (Section 1R05)

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

The reactor began the inspection period operating in coastdown at approximately 99 percent power. On August 4, 2004, an unplanned reactor shutdown was performed to repair an electro-hydraulic (EHC) system fluid leak. The leak was repaired and the reactor was returned to power on August 5, 2004. The coastdown continued until approximately 83 percent power when the reactor was shutdown on September 24, 2004, to commence refueling outage (RFO) 16.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

Partial System Walkdown. (7111104 - 3 Samples) The inspectors performed partial system walkdowns to evaluate the operability of one train while the opposite train was inoperable or out of service for maintenance and testing. The inspectors compared system lineups to system operating procedures (OPs), system drawings, and the applicable chapters in the updated final safety analysis report (UFSAR). The inspectors also verified the operability of critical system components by observing component material condition during the system walkdown and reviewing the maintenance history for each component. Documents reviewed for this inspection are listed in the attachment. The inspectors performed partial walkdowns of the following systems.

- High pressure coolant injection (HPCI) while reactor core isolation cooling (RCIC) was out of service on July 27, 2004, for corrective maintenance on the RCIC barometric condenser.
- B emergency diesel generator (EDG) and emergency service water (ESW) trains during performance of surveillance test (ST)-9BA, “EDG A and C Full Load and ESW Pump Operability Test,” on August 27, 2004.
- B residual heat removal (RHR) train during scheduled maintenance on the A RHR train on August 24, 2004.

Complete System Walkdown. (7111104S - 1 Sample) The inspectors performed a complete walkdown of the standby liquid control (SLC) system to identify discrepancies between the existing equipment lineup and the specified lineup. During the walkdown system drawings and plant procedures were used to verify proper equipment alignment and operational status. The inspectors verified the operability of system components by observing component material condition during the system walkdown and reviewing condition reports (CRs) and maintenance work requests (WRs) on the system for the past two years. The inspectors reviewed the system health report for the SLC system to identify items tracked by the engineering department. The inspectors also reviewed recent ST results to determine adequate system performance. In addition, the inspectors reviewed the CR database to verify that equipment alignment problems were

being identified and appropriately resolved. Documents reviewed for this inspection are listed in the attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

Quarterly. (7111105Q - 10 Samples) The inspectors toured 10 areas important to reactor safety to evaluate conditions related to Entergy's control of transient combustibles and ignition sources; the material condition, operational status, and operational lineup of fire protection systems, equipment and features; and the fire barriers used to prevent fire damage or fire propagation. The inspectors referenced procedures ENN-DC-161, "Transient Combustible Program," and FPP-3.12, "Fire Protection Inspection/Power Block," in performing the inspection. Other documents reviewed are listed in the attachment. The areas inspected included:

- East electric bay, fire area 02/zone SW-2;
- West electric bay, fire area 1C/zone SW-1;
- Reactor building, fire area 09/zone RB-1A;
- Reactor building, fire area 09/zone RB-1B;
- Reactor building east crescent area, fire area 17/zone RB-1E;
- Reactor building west crescent area, fire area 18/zone RB-W;
- Screenwell house, fire area 1B/zone SH-2;
- Cable spreading room, fire area 07/zone CS-1;
- A battery and battery charger rooms, fire area 03/zones BR-1 and BR-2; and
- B battery and battery charger rooms, fire area 04/zones BR-3 and BR-4.

Annual. (7111105A - 1 Sample) The inspectors observed the performance of a fire brigade drill on August 27. The inspectors reviewed the post-drill critique and the disposition of identified deficiencies. Documents reviewed for this inspection are listed in the attachment.

b. Findings

Introduction. The inspectors identified that transient combustible control requirements for resin storage in the screenwell house were not met. The weight and location of the resin exceeded the limits of the screenwell smoke and hot gas analysis referenced in procedure ENN-DC-161, "Transient Combustible Program," and a transient combustible evaluation (TCE) was not performed. The finding was of very low safety significance (Green) and resulted in a NCV of Technical Specification (TS) 5.4.1.d that requires fire protection program procedures be implemented.

Description. Procedure ENN-DC-161, "Transient Combustible Program," requires that a TCE be performed when transient combustibles associated with a single work site exceed 25 pounds of loose ordinary combustibles. This procedure references New York

Power Authority (NYPA) Evaluation 3-93-48013-0010B, “Screenwell Smoke and Hot Gas Analysis,” that limits the amount of resin stored on the screenwell house 272 ft elevation to 1333 pounds and at least 2 feet away from structural columns. This ensures that a screenwell house fire would not challenge the operating temperature limit of safety-related ESW and RHR service water pump motors located in the building. During a walkdown on August 20, 2004, the inspectors observed approximately 1600 pounds (dry weight) of resin stored on the 272 ft elevation. The resin was contained primarily in five gallon plastic buckets with some buckets located immediately adjacent to a building structural column. The material procurement and control department had delivered two shipments of resin to the screenwell house between August 13 and August 19, 2004. Following the second shipment, operators did not recognize that the transient combustible weight limit was exceeded and did not request a TCE be performed as required by administrative procedure ENN-DC-161, “Transient Combustible Program.”

Analysis. The performance deficiency involved failure to comply with procedure requirements concerning storage of transient combustible material. The finding was more than minor because the quantity of combustible material incorrectly stored exceeded the limits of the screenwell smoke and hot gas analysis (See example 4.k in NRC Inspection Manual Chapter 0612, Appendix E). This issue was also associated with the protection against external factors attribute of the mitigating systems cornerstone and negatively affected the objective of maintaining the reliability of the mitigating systems located in the screenwell house, the ESW and RHR service water pumps. This finding had a human performance cross-cutting aspect because it involved personnel not following procedure instructions.

The inspectors evaluated the finding in accordance with NRC Inspection Manual Chapter 0609, “Significance Determination Process,” Appendices A and F. The finding was determined to be of very low risk significance because it did not result in an impairment or degradation of pumps necessary for safe shutdown or of fire protection features or defense in depth elements in the screenwell house, the resin is packaged in in water, and no ignition sources were present.

Enforcement. TS 5.4.1.d requires that procedures be implemented to cover the fire protection program. Entergy procedure ENN-DC-161 limits the amount and location of resin that can be stored in the screenwell house without a TCE. Contrary to this requirement between August 19 and 20, 2004, Operations did not maintain the screenwell house combustible material limits or request fire protection personnel perform a TCE. However, because the violation was of very low safety significance (Green) and Entergy entered the deficiency into its corrective action program as condition report CR-2004-03386, this finding is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy. (**NCV 50-333/2004004-01**)

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope (7111106 - 2 Samples)

The inspectors completed the following internal flood protection inspection samples. Documents reviewed for this inspection are listed in the attachment.

- The inspectors reviewed FitzPatrick's Individual Plant Examination (IPE) and the UFSAR concerning postulated flooding events in the crescent rooms. The inspectors verified the validity of assumptions made in the IPE regarding water flow between the emergency core cooling system pump rooms (crescent rooms) during a flooding scenario including floor and equipment drain system configuration; floor and equipment drain system maintenance and testing; the availability of crescent room water level indications including control room alarms; and the expected operator response to control room alarms.

- The inspectors reviewed the IPE and the UFSAR concerning postulated flooding events in the relay room and battery rooms. The inspectors verified the validity of assumptions made in the IPE regarding drainage in the battery rooms and operator actions necessary to mitigate the impact of flooding in the relay room caused by a fire protection water header rupture.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

Quarterly. (7111111Q - 1 Sample) On September 9, 2004, the inspectors observed licensed operator requalification training to assess operator performance during a scenario that involved the loss of a single 4160 Vac vital bus, a feedwater line break outside primary containment, and a loss of all injection sources. The inspectors evaluated the performance of risk significant operator actions, including the use of Emergency Operating Procedure (EOP)-2, "Reactor Pressure Vessel Control," with emphasis on the use of the alternate level control, emergency depressurization and steam cooling legs. 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; oversight and direction provided by the control room supervisor and shift manager; and training instructor evaluation of operator performance. The inspectors also reviewed simulator fidelity.

b. Findings

No findings of significance were identified.

1R12 Maintenance Implementation (71111.12)

a. Inspection Scope

Quarterly. (7111112Q - 1 Sample) The inspectors reviewed performance-based problems for the decay heat removal system to assess the effectiveness of the maintenance program. The review focused on: proper maintenance rule scoping in accordance with 10 CFR 50.65; characterization of reliability issues; changing system and component unavailability; 10 CFR 50.65 (a)(1) and (a)(2) classifications; identifying and addressing common cause failures; trending key parameters; appropriateness of performance criteria for structures systems and components (SSCs) classified (a)(2); and the adequacy of goals and corrective actions for SSCs classified (a)(1). The inspectors reviewed the decay heat removal system health report, maintenance backlog, and maintenance rule basis document. Documents reviewed for this inspection are listed in the attachment.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope (7111113 - 5 Samples)

The inspectors reviewed risk assessments associated with five different work weeks during the inspection period. The inspectors verified that risk assessments were performed in accordance with AP-10.10, “On-line Risk Assessment;” risk of scheduled work was managed through the use of compensatory actions and schedule adherence; and applicable contingency plans were properly identified in the integrated work schedule. Documents reviewed for this inspection are listed in the attachment.

The following work weeks were reviewed:

- Week of July 11, 2004, that included trouble shooting and repair of the B and D EDGs following the failure of surveillance test (ST)-9QB;
- Week of August 2, 2004, that included an unplanned reactor shutdown to repair an unisolable EHC hydraulic oil leak on the supply line to turbine control valve 94TCV-3;
- Week of August 22, 2004, that included planned maintenance on A RHR train components and reactor and containment cooling instrumentation functional testing;
- Week of August 8, 2004, that included planned maintenance on B RHR train components and D EDG fuel oil transfer pump; and
- Week of August 30, 2004, that included planned maintenance on the B division 600 Vac safety-related switchgear room and scaffold erection next to the HPCI pump skid.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions (71111.14)

a. Inspection Scope (7111114 - 1 Sample)
On August 3 and 4, 2004, the inspectors observed the site response to a five gallon per hour EHC hydraulic oil leak on the supply line to turbine control valve 94TCV-3. The leak was identified by the turbine building watch during rounds, and operators took immediate action to identify the source of the leak and assess its potential impact. The inspectors observed operator actions and reviewed operator logs, plant computer data and strip charts to verify that the plant and operators responded appropriately.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope (7111115 - 5 Samples)

The inspectors reviewed operability determinations to assess the acceptability of the evaluations, the use and control of compensatory measures if needed, and compliance with TS. The inspectors review included a verification that the operability determinations were made as specified by ENN-OP-104, "Operability Determinations." The technical adequacy of the determinations was reviewed and compared to the TS, UFSAR, and associated design basis documents. The following five evaluations were reviewed:

- CR-2004-03386 concerning excess resin stored in the screenwell house;
- CR-2004-03330 concerning a General Electric (GE) 10 CFR 21 notification involving potential reactor vessel water level measurement problems that could result in failure of the Level-3 reactor trip function;
- CR-2004-03421 concerning a GE 10 CFR 21 notification involving a potential non-conservative safety limit minimum critical power ratio calculation;
- CR-2004-03355 concerning several missing unistrut clip supports for the scam pilot air header located directly above the control rod hydraulic control units; and
- JAF-RPT-03-00056 regarding operational leakage action levels for target rock two-stage safety relief valves.

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope (7111116 - 1 Sample)

The inspectors evaluated individual and cumulative effects of identified operator workarounds on the functionality of the plants mitigating systems. The workarounds were reviewed to determine if the functional capability of the system or human reliability in responding to an initiating event was affected; the effect on the operator's ability to implement abnormal or emergency procedures; and if operator workaround problems were captured in Entergy's corrective action program. The inspectors also reviewed Entergy's assessment of the cumulative effects of the identified workarounds in accordance with ST-99H, "Operator Workarounds Assessment."

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19)

a. Inspection Scope (7111119 - 6 Samples)

The inspectors reviewed post maintenance test procedures and associated testing activities for selected risk significant mitigating systems to access 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; that test instrumentation had current calibrations and the range and accuracy for the application; and that tests were performed, as written, with applicable prerequisites satisfied. Upon completion, the inspectors verified that equipment was returned to the status specified to perform its safety function. Documents reviewed during this inspection are listed in the attachment. The following six post maintenance test activities were reviewed.

- WR JAF-04-24392 that involved the inspection and repair of the lubricator assembly for the A EDG air start motors 93AOM-2A and 93AOM-4A. The retest was performed through performance of surveillance test (ST)-9BA, "EDG A and C Full Load Test and ESW Pump Operability Test."
- WR JAF-04-23883 that involved preventive maintenance on the motor-operator of shutdown cooling isolation valve 10MOV-15D. The retest was performed using ST-2AM, "RHR Loop B Quarterly Operability Test," ST-41F, "Remote Valve Position Indication Verification," and ST-2AC, "RHR Pump Suction Valve and Torus Cooling Valve Interlock Test."
- WR JAF-04-20838 that involved replacement of B containment analyzer torus sample valve 27SOV-119F2. The retest consisted of electrical checks under WR JAF-04-24094 and a local leak rate test per ST-39B-X216, "Type C Leak Rate Test of H2-O2 Monitor B Torus Sample Line Valves."
- WRs JAF-03-27377, JF-020287200, and JF-010337200 that involved electrical preventive maintenance, oil change, and oil leak repair of the A RHR pump. The

retest consisted of a leak check under WR JAF-04-20126 and performance of ST-2AL, “RHR Loop A Quarterly Operability Test.”

- WR JF-030168500 that involved performance of preventative maintenance on the B EDG air start compressors. Functional testing was performed using maintenance procedure (MP)-101.20, ”Periodic Maintenance of Various Air Compressors.”
- WR JAF-04-23118 that involved replacement of the intercooler and aftercooler for the B service air compressor. The retest included running the compressor and leak testing in accordance with the WR JAF-04-23118 and OP-39, “Breathing, Instrument, and Service Air System.”

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities (71111.20)

a. Inspection Scope (7111120 - 1 Sample)

Forced Outage 163. The inspectors observed and reviewed the following activities during FitzPatrick forced outage 163 from August 4 to August 5, 2004. Documents reviewed for this inspection are listed in the attachment.

- The inspectors reviewed outage schedules and procedures and verified that technical specification required safety system availability was maintained, shutdown risk was considered, and that contingency plans existed to restore key safety functions such as electrical power and containment integrity.

- The inspectors observed portions of the plant shutdown and cooldown and verified the TS cooldown rate limits were not exceeded.

- The inspectors observed portions of the reactor startup following the outage, and verified through plant walkdowns, control room observations, and surveillance test reviews that safety-related equipment specified for mode change was operable.

RFO 16. RFO 16 started on September 24, 2004. The inspectors observed and reviewed the following items to verify that TS and operability requirements were met and that risk, industry experience, and previous site specific problems were considered. Documents reviewed for this inspection are listed in the attachment.

- The inspectors reviewed outage schedules and procedures to verify that TS specified safety system availability was maintained and shutdown risk was minimized. The inspectors verified that when specified by NUMARC-91-06, “Guidelines for Industry Actions to Assess Shutdown Management,” and Entergy procedure AP-10.09, “Outage Risk Assessment,” contingency plans existed for restoring key safety functions.

- The inspectors observed portions of the plant shutdown and cooldown on September 25, 2004. The inspectors verified that plant cooldown rates as recorded in ST-26J, "Heatup and Cooldown Temperature Checks," did not exceed TS limits.

- When the drywell was opened for general access on September 29, 2004, the inspectors performed an "as-found" walkdown to identify evidence of RCS leakage and verify the condition of drywell structures, piping, and supports.

- The inspectors verified that Entergy maintained and adequately protected electrical power supplies to safety-related equipment and that TS requirements were met. The inspectors reviewed the engineering evaluation for engineering request (ER) JAF-04-13240 that qualified the 345 kV backfeed as an alternate offsite power source to satisfy the TS requirements for removing all 115 kV offsite power from service.

- The inspectors periodically verified proper alignment and operation of decay heat removal and injection systems. The verification included reactor cavity and fuel pool makeup paths and water sources, administrative control of all drain down paths, and electrical power availability.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope (7111122 - 6 Samples)

The inspectors witnessed performance of STs and/or reviewed test data of selected risk-significant structures, systems and components (SSCs) to assess whether the SSCs satisfied TS, 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 documentation; that test instrumentation had current calibrations and the range and accuracy for the application; and that tests were performed, as written, with applicable prerequisites satisfied. Upon completion the inspectors verified that equipment was returned to the status specified to perform its safety function. Documents reviewed for this inspection are listed in the attachment. The following six surveillance tests were witnessed or reviewed:

- ST-9QB, "EDG Full Load Test (8 hour run);"
- ST-24D, "RCIC Automatic Isolation Logic System Functional and Simulated Automatic Actuation Test;"
- ST-9E, "Loss of Coolant Accident Bypass of EDG Shutdown Logic Functional Test;"
- ST-2XB, "RHR Service Water Loop B Quarterly Operability Test (IST);"
- RP-RESP-03.01, "Drywell Continuous Atmospheric Monitoring System and ISP-16, "Drywell Floor Drain Sump Flow Loop Functional Test/Calibration;" and

- ST-4N, “HPCI Quick-Start, Inservice, and Transient Monitoring Test (IST).”

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope (7111123 - 2 Samples)

The inspectors reviewed the temporary modifications (TMs) listed below. The inspectors assessed the adequacy of the 10 CFR 50.59 evaluation; that the installation was consistent with the modification documentation; that drawings and procedures were updated as applicable; and the adequacy of post-installation testing. Documents reviewed for this inspection are listed in the attachment. The following TMs were reviewed:

- TM 04-015 that failed open screenwell ventilation exhaust damper 73MOD-117B to maintain normal operation of safety-related fan 73FN-2B; and
- TM 04-016 that installed an electrical jumper to maintain torus cooling isolation valve 10MOV-39B operable during overhaul of shutdown cooling suction isolation valve 10MOV-15D.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System Testing (71114.02)

a. Inspection Scope (7111402 - 1 Sample)

An onsite review of Entergy’s alert and notification system (ANS) was performed to ensure prompt notification of the public for taking protective actions. FitzPatrick and Nine Mile Point (NMP) share a common ANS. NMP responsibilities were inspected the week of July 19 and were documented in Inspection Report 05000220/2004004 and 05000410/2004004. During the inspection at FitzPatrick, the inspectors reviewed the siren maintenance contract for which Entergy was responsible.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation (71114.03)

a. Inspection Scope (7111403 - 1 Sample)

An onsite review of FitzPatrick's emergency response organization (ERO) augmentation staffing requirements and the process for notifying the ERO was performed to ensure the readiness of key staff for responding to an event and timely facility activation. The inspectors reviewed ERO response activities in 2002 through 2004 and the associated CRs. The methods of ensuring that Entergy met on-shift staffing for licensed operators and the shift technical advisor position during all operating modes were also reviewed. Documents reviewed for this inspection are listed in the attachment.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope (7111404 - 2 Samples)

The inspectors sampled Entergy's assessments of potential decreases in emergency preparedness (EP) plan effectiveness caused by changes to EP documents. A regional in-office review was also performed of submitted revisions to several implementing procedures. A thorough review was performed of plan aspects related to the risk significant planning standards (RSPS), such as classifications, notifications and protective action recommendations. A cursory review was performed for non-RSPS portions. The inspectors also sampled Entergy's capability to classify events related to radiation monitor alarms and earthquakes. Documents reviewed for this inspection are listed in the attachment.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. Inspection Scope (7111405 - 1 Sample)

The inspectors reviewed EP CRs initiated during drills, tests, self-assessments, and actual events including the August 14, 2003, blackout to verify appropriate issue classification and resolution. The CRs reviewed are listed in the report attachment under section 4OA2. The inspector also reviewed calendar year 2003 and 2004 audit reports and self assessments to assess Entergy's ability to identify issues, assess repetitive issues, the effectiveness of corrective actions, and implement program improvements. The reports reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope (7111406 - 1 Sample)

The inspectors observed simulator, technical support center and emergency operations facility activities associated with FitzPatrick's emergency planning drill on August 26, 2004. The inspectors verified that emergency classification declarations and notification activities were properly completed.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01)

a. Inspection Scope (7112101 - 8 Samples)

From August 30 to September 3, 2004, the inspectors performed the following activities to verify that Entergy was properly implementing physical, engineering, and administrative controls for access to high radiation and other radiologically controlled areas, and that workers were adhering to those controls. Implementation of the access control program was reviewed against the criteria contained in 10 CFR 20, TS, and Entergy's procedures.

- The inspectors observed work activities associated with the removal of control rod blade guides from the spent fuel pool. This included observation of the pre-job radiological briefing, a review of the radiation work permit (RWP) and as low as reasonably achievable (ALARA) planning requirements, observation of radiation protection (RP) technician access control of potential high radiation sources being removed from the pool, and review of radiological surveys taken to support the work.

- The inspectors walked down the plant and verified that there were no posted airborne radioactivity areas or potential internal exposure accessible work areas greater than 50 mrem committed effective dose equivalent.

- Controls for the under water storage of highly activated reactor components in the spent fuel pool were verified by visual observations.

- The 2003 Annual RP Program Report, dated May 10, 2004, was reviewed.

- 36 CRs covering April to August 2004 were reviewed (see Section 4OA2) to ensure that the RP audit was identifying repetitive deficiencies in the RP program.

- During the previous four quarters, there were no performance indicator (PI) incidents pertaining to the occupational radiation safety cornerstone.

- Procedures for controlling access to high radiation areas, high radiation areas greater than one rem/hr, and very high radiation areas were reviewed including: RP-OPS-02.02, "Radiation Work Permit," and RP-OPS-02.03, "High Radiation Area Access and Key Control for Radiological Areas."

- Utilizing the latest high radiation area key list, the inspectors walked down all accessible power block areas and verified the postings, barricades, and locked status of all the plant high radiation areas. In addition, all high radiation area keys were inventoried.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02)

a. Inspection Scope (7112102 - 3 Samples)

From August 30 to September 3, 2004, the inspectors performed the following activities to verify that Entergy was properly maintaining individual and collective radiation exposures ALARA. Implementation of the ALARA program was reviewed against the criteria contained in 10 CFR 20.1101(b) and Entergy's procedures.

Methods used to estimate, re-estimate, and track work activity exposures as specified by procedure RP-OPS-02.02, "Radiation Work Permit," were reviewed.

ALARA work planning and exposure estimates were reviewed for the upcoming RFO. The five highest exposure outage tasks were identified and the applicable ALARA reviews were reviewed for the following:

- Replace 20 control rod drives, 18.355 person-rem estimate;
- In-service inspection, 16.768 person-rem estimate;
- Motor-operated valve work, 10.637 person-rem estimate;
- Replace safety relief valves, 9.401 person-rem estimate; and
- Reactor disassembly/reassembly, 7.6 person-rem estimate.

Source-term data was reviewed to determine historical trends from 1988 to October 2002. In addition, interviews were performed with the ALARA supervisor and the chemistry superintendent relative to reactor water chemistry and source-term controls to reduce occupational exposure.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope (71151 - 5 Samples)

The inspectors reviewed Performance Indicator (PI) data for the below listed cornerstones and used NEI 99-02, Revision 2, "Regulatory Assessment Performance Indicator Guidance," to verify individual PI accuracy and completeness.

Mitigating Systems Cornerstone

The inspectors reviewed data and plant records from July 2003 to June 2004 for the mitigating systems cornerstone PIs listed below. The records reviewed included PI data summary reports, licensee event reports, operator narrative logs, and maintenance rule records. The inspectors verified the accuracy of the number of hours required reported, and interviewed the system engineers and operators responsible for data collection and evaluation.

- Safety system unavailability, Emergency AC Power
- Safety system functional failures

Emergency Preparedness Cornerstone

The inspectors reviewed Entergy's process for identifying the data for the emergency preparedness PIs listed below. The review assessed data submitted to the NRC from April 2003 to June 2004. The inspectors reviewed Entergy's 2003 and 2004 drill and exercise reports, training records and ANS testing data to verify completeness and accuracy.

- Drill and exercise performance
- ERO drill participation
- ANS

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

1. Annual Sample Review (71152 - 1 Sample)

a. Inspection Scope

The inspectors selected CR-2003-05078 for detailed review. Over a ten-month period in 2002 and 2003, FitzPatrick's drill and exercise performance indicator dropped from 100% to 96.8%. Entergy initiated an apparent cause evaluation (ACE) and implemented corrective actions to address this trend. The inspectors reviewed the ACE, the extent of condition, the proposed corrective actions, and the effectiveness of those corrective actions associated with this issue. The report was reviewed to ensure that an appropriate evaluation was performed and appropriate corrective actions were specified. The inspectors evaluated the report against the requirements of procedure ENN-LI-102, "Corrective Action Process," and 10 CFR 50, Appendix B.

b. Findings and Observations

No findings of significance were identified.

2. Routine PI&R Program Review

a. Inspection Scope

As specified by Inspection Procedure 71152, "Identification and Resolution of Problems," and in order to help 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 modules, the inspectors selected 63 corrective action program 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, extent of condition review, and operability determinations, and the timeliness of the specified corrective actions. The CRs reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

4OA4 Cross Cutting Aspects of Findings

The finding described in Section 1R05 regarding the failure to comply with procedure requirements concerning storage of transient combustible material included a human performance aspect. Entergy stored approximately 1600 pounds (dry weight) of resin on the screenwell house 272 ft elevation immediately adjacent to a building structural

column without completing the TCE specified by administrative procedure ENN-DC-161, "Transient Combustible Program."

4OA6 Meetings, Including Exit

The inspectors presented the inspection results to Entergy management on October 5, 2004. Entergy acknowledged that no proprietary information was involved.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Entergy personnel

T. Sullivan, Site Vice President
K. Mulligan, General Manager, Plant Operations
B. Maguire, Director, Nuclear Safety
P. Berry, Manager, Training
J. LaPlante, Manager, Security
A. Halliday, Manager, Regulatory Compliance
D. Johnson, Manager, Operations
O. Limpias, Director, Engineering
N. Avrakatos, Emergency Preparedness Coordinator
W. Rheaume, Manager, CA&A
K. Pushee, Manager, Radiation Protection
S. Bono, Manager, System Engineering
V. Bhardwaj, Manager, Programs and Components Engineering
K. Tom, Manager, Design Engineering
T. Spencer, Manager, Plant Maintenance
D. Wallace, Quality Assurance Manager
B. Drain, Manager, Project Management
C. Boucher, Chemistry Superintendent

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000333/2004004-01	NCV	Transient combustible control requirements for the screenwell not met (Section 1R05)

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment

FM-21A, “Flow Digram Standby Liquid Control System”
ST-6M, “Standby Liquid Control Recirculation and Injection Test”
OP-17, “Standby Liquid Control System”
ST-6HA, “Standby Liquid Control A Side Quarterly Operability Test”
ST-6HB, “Standby Liquid Control B Side Quarterly Operability Test”
ST-6A, “Standby Liquid Control Recirculation Test”
ST-6B, “Standby Liquid Control Recirculation Test”
SP-01.04, “Standby Liquid Control Sampling and Analysis”

NRC Information Notice 2002-05, “Foreign Material in Standby Liquid Control Storage Tanks”
Surveillance Test/IST Data, January 2003 - August 2004
System Health Report - Standby Liquid Control, 4th Quarter 2003
OP-21, “Emergency Service Water;”
OP-22, “Diesel Generator Emergency Power”
DBD-046, Design basis document (DBD) for the normal, emergency and residual heat removal service water systems
OP-15, “High Pressure Coolant Injection”
OP-13, “Residual Heat Removal System”
DBD-010, DBD for the residual heat removal system
DBD-023, DBD for the high pressure coolant injection system

Section 1R05: Fire Protection

JAF Fire Hazards Analysis
FPP-1.11, “Pre-Fire Plans”
FPP-3.45, “Fire Header and Nozzle Inspections”
FPP-1.8, “Compensatory Fire Watch”
FPP-3.2, “Monthly Fire Equipment Check”
ST-76A, “Fire Protection System Monthly Checks”
ST-76I, “Portable Fire Extinguisher Inspection Procedure”

Section 1R06: Flood Protection Measures

ST-50, “Floor Drain Flow Test”
NRC Information Notice 83-44 JAF response
JENG-04-0086, April 8, 2004 JAF Expert Panel Meeting Minutes
JENG-04-0049, March 2, 2004 JAF Expert Panel Meeting Minutes
Work Order JF-031010100, Repair/replace level switch 20LS-355B
Drawing FB-4A, Reactor Building Floor Drainage Elv. 227’-6” and 256’-6”
Drawing FV-12A, Reactor Building Drain Sump Liners Sheet I
Drawing FM-17A, Flow Diagram Radwaste, System 20
Drawing FB-19B, Heater Bay Floor Drainage Plan Elv. 272’-0” and 292’-0”

Section 1R12: Maintenance Implementation

ENN-DC-171, “Maintenance Rule Monitoring”
JAF-RPT-DHR-02657, “Maintenance Rule Basis Document for DHR System”
JENG-APL-03-017 “DHR System Maintenance Rule (a)(1) Action Plan”
System Health Report - Decay Heat Removal System, 4th Quarter 2003

Section 1R13: Maintenance Risk Assessments and Emergent Work Evaluation

JAF-RPT-MULTI-02107, “James A. FitzPatrick Individual Plant Examination

Section 1R19: Post Maintenance Testing

AP 5.07, “Maintenance Testing and Post-Work Testing
JAF Vendor Manual No. Q008-0001, Quincy Compressor Division, Quincy QR-25 Series
JAF Vendor Manual No. I075-0120, Ingersoll-Rand Sierra, Operation and Maintenance Manual

Section 1R20: Refueling and Outage Activities

OP-65, “Startup and Shutdown Procedure”
OP-45A, “Backfeeding Normal Station Service Transformer From the 345 kV System”
OP-65B, “Shutdown Operation”
OP-30B, “Decay Heat Removal System”
OP-30A, “Refueling Water Level Control”

Section 1R22: Surveillance Testing

Woodward Governor Company Manual 37708J, EG-B10C Governor/Actuator

Section 1R23: Temporary Modifications

Work Order JAF-04-24082, Damper gearbox shaft spacer was found broken
ENN-DC-136, “”Temporary Alteration Control”
ER-04-24374, Fail open 73MOD-117B
DBD-073, Design basis document for screenwell house ventilation

Section 1EP3: ERO Augmentation Testing

IAP-1, “Emergency Plan Implementation Checklist,” Revision 32
EAP-1.1, “Offsite Notifications,” Revision 53
EAP-17, “Emergency Organization Staffing,” Revision 110
ODSO-4, “Shift Turnover and Log Keeping,” Revision 91
AP-12.03, “Conduct of Operations”

Section 1EP4: Emergency Action Level Revision Review

FitzPatrick Emergency Plan;” Section 2, Revision 20; Section 4, Revision 20; Section 6, Revision 26; Section 7, Revision 26; Section 8, Revision 26; Appendix A, Revision 19; Appendix D, Revision 7; Appendix E, Revision 7; Appendix H, Revision 27; Appendix J, Revision 10; Appendix N, Revision 14.
EAP-1.1, “Offsite Notifications,” Revision 53
EAP-8, “Personnel Accountability,” Revision 65 & 66
EAP-10, “Protected Area Evacuation,” Revision 18
EAP-17, “Emergency Organization Staffing,” Revision 110 & 111
EAP-19, “Emergency Use of Potassium Iodine,” Revision 24
EAP-43, “Emergency Facilities Long Term Staffing,” Revision 64 & 65
EAP-44, “Core Damage Estimation,” Revision 6

SAP-1, “Maintaining Emergency Preparedness,” Revision 18
SAP-2 , “Emergency Equipment Inventory,” Revision 39
Emergency Action Level 5.1 Series, “Effluent Monitors”
Emergency Action Levels 8.4.1 and 8.4.4, “Seismic Activity”

Section 1EP5: Correction of Emergency Preparedness Weaknesses and Deficiencies

EN-LI-104, “Self Assessment and Benchmark Process,” Revision 0
JEP-03-019, “Emergency Plan Exercise Report Executive Summary” (June 3, 2003)
A03-08J, “Emergency Preparedness Program Audit”
QA-7-2004-JAF-1, “Emergency Preparedness Program Audit”
JAFLO-2003-00198 CA-00001, “Forced Outage 162 Critique” (August 14-18, 2003)
Snapshot Assessment, “ Implementation of NYS KI Policy at IPEC and JAF - Final” (9/12/03)
Snapshot Assessment, “Joint News Center Activation and Operation” (5/1/03)
Snapshot Assessment, “Operational Support Center Activation and Operation” (9/25/03)
Snapshot Assessment, “ Adequacy of Available Number of SCBAs to Support the JAF Fire Protection Program & the Emergency Plan” (6/14/04)
Snapshot Assessment, “Dose Assessment Capability” (12/5/03)
Snapshot Assessment / Benchmark, “Status of Oswego County Tone Alert Radio Distribution As Related to ANO Preliminary White Finding” (10/29/03)
Snapshot Assessment, “Emergency Sirens Availability” (7/22/03)
Snapshot Assessment, “JAF Emergency Planning Department Performance Indicator Self-Assessment” (8/11/04)

Section 4OA1Performance Indicator (PI) Verification

EN-EP-201, “Emergency Planning Performance Indicators,” Revision 1
ENN-LI-114, “Performance Indicator Process,” Revision 1

Section 4OA2: Identification and Resolution of Problems

Condition Reports

CR-2004-02956	CR-2003-03990	CR-2004-03158
CR-2004-1061	CR-2003-03984	CR-2003-02643
CR-2004-1155	CR-2003-04462	CR-2003-02651
CR-2004-1156	CR-2003-04541	CR-2003-02652
CR-2004-1304	CR-2003-03951	CR-2003-02668
CR-2004-1324	CR-2004-0981	CR-2003-02759
CR-2004-1396	CR-2004-2364	CR-2003-02762
CR-2004-1652	CR-2004-2405	CR-2003-02763
CR-2004-1857	CR-2004-2432	CR-2003-04182
CR-2004-1858	CR-2004-2772	CR-2003-02765
CR-2004-1859	CR-2004-2827	CR-2003-02767
CR-2004-1860	CR-2004-2881	CR-2003-02768
CR-2004-1862	CR-2004-2991	CR-2003-02769

CR-2004-2179	CR-2004-3070	CR-2003-02770
CR-2004-2230	CR-2004-0908	CR-2003-02773
CR-2004-2252	CR-2004-2453	CR-2003-02774
CR-2004-2265	CR-2004-2452	CR-2003-03943
CR-2004-2359	CR-2004-0072	CR-2003-02776
CR-2004-0074	CR-2004-0077	CR-2003-02777
CR-2004-0075	CR-2004-0265	CR-2004-0836
CR-2004-03455	CR-2003-01843	CR-2004-0841

LIST OF ACRONYMS

ALARA	as low as reasonably achievable
ANS	alert and notification system
AP	administrative procedure
CR	condition report
DBD	design basis document
EDG	emergency diesel generator
EOP	emergency operating procedure
EP	emergency preparedness
ERO	emergency response organization
ESW	emergency service water
GE	General Electric
HPCI	high pressure coolant injection
IPE	individual plant examination
NCV	non-cited violation
NMP	Nine Mile Point
NRC	Nuclear Regulatory Commission
OP	operating procedure
PARS	publicly available records
PI	performance indicator
RCIC	reactor core isolation cooling
RFO	refueling outage
RHR	residual heat removal
RP	radiation protection
RSPS	risk significant planning standard
SDP	significance determination process
SSCs	structures, systems, and components
TCE	transient combustible evaluation
TS	technical specification
TM	temporary modification
UFSAR	updated final safety evaluation report
WR	work request