July 24, 2007

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 05000333/2007003

Dear Mr. Dietrich:

On June 30, 2007, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your James A. FitzPatrick Nuclear Power Plant. The enclosed integrated inspection report documents the inspection results which were discussed on July 10, 2007, with Mr. K. Mulligan 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, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the 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
Projects Branch 2
Division of Reactor Projects

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

Enclosure: Inspection Report 05000333/2007003
w/Attachment: Supplemental Information

cc w/encl:
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.:	50-333
License No.:	DPR-59
Report No.:	05000333/2007003
Licensee:	Entergy Nuclear Northeast (Entergy)
Facility:	James A. FitzPatrick Nuclear Power Plant
Location:	268 Lake Road Scriba, New York 13093
Dates:	April 1, 2007 through June 30, 2007
Inspectors:	G. Hunegs, Senior Resident Inspector D. Dempsey, Resident Inspector J. D'Antonio, Senior Operations Engineer D. Johnson, Reactor Inspector J. Noggle, Senior Health Physicist G. Ottenberg, Reactor Inspector
Approved by:	Eugene W. Cobey, Chief Projects Branch 2 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000333/2007-003; 04/01/2007 - 06/30/2007; James A. FitzPatrick Nuclear Power Plant; Routine Integrated Inspection Report.

The report covered a three-month period of inspection by resident inspectors and region-based inspectors. 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

No findings of significance were identified.

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

The James A. FitzPatrick Nuclear Power Plant began the inspection period operating at full power. On April 3, 2007, Entergy elected to reduce power to approximately 75 percent power to remove debris from the main condenser waterboxes. Entergy restored the plant to full power later the same day. On May 21, 2007, Entergy elected to downpower to approximately 50 percent power to remove the 'B' feedwater pump from service to replace a degraded pump seal. Following repairs, the plant was returned to full power on May 26, 2007, and continued to operate at or near full 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. Inspection Scope

The inspectors reviewed and verified completion of the operations department warm weather preparation checklist contained in procedure AP-12.04, "Seasonal Weather Preparations." The inspectors reviewed the operating status of the reactor and turbine building cooling systems, reviewed the procedural limits and actions associated with elevated lake temperature, and walked down accessible areas of the buildings to assess the effectiveness of the ventilation systems. Walkdowns were also conducted in the emergency diesel generator (EDG) and switchgear rooms. The walkdowns included discussions with operations and engineering personnel to ensure that they were aware of temperature restrictions and required actions. The documents reviewed are listed in the Attachment. The inspection satisfied one inspection sample for adverse weather systems.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04Q - 4 samples, 71111.04S - 1 sample)

.1 Partial System Walkdown (4 samples)

a. Inspection Scope

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 had identified and properly addressed equipment

discrepancies that could potentially impair the capability of the available train, as required by 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." The documents reviewed are listed in the Attachment.

The inspectors performed a partial walkdown on the following systems, which represented four inspection samples:

- Train 'B' core spray system when the 'A' core spray system was out of service for maintenance;
- Reactor core isolation cooling system when the high pressure coolant injection system was out of service for maintenance;
- Train 'B' residual heat removal (RHR) system when the 'A' RHR system was out of service for maintenance; and
- Train 'A' EDG when the 'B' EDG was out of service for maintenance.

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown (1 sample)

a. Inspection Scope

The inspectors performed a complete system alignment inspection of accessible portions of the 'B' train RHR/low pressure coolant injection system to identify any 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 open maintenance work orders associated with the system for any 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 to assess their collective impact on system operation. In addition, the inspectors reviewed the sample of CR database to verify that the equipment problems were being identified and appropriately resolved. The documents reviewed are listed in the Attachment. The inspection represented one inspection sample.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q - 9 samples, 71111.05A - 1 sample)

.1 Quarterly Inspection (9 samples)

a. Inspection Scope

The inspectors conducted a tour of the areas listed below to assess the material condition and operational status of fire protection features. The inspectors verified that: combustibles and ignition sources were controlled in accordance with Entergy's administrative procedures; fire detection and suppression equipment was available for use; passive fire barriers were maintained; and compensatory measures for out-of-service, degraded, or inoperable fire protection equipment were implemented in accordance with Entergy's fire plan. The inspectors used procedure ENN-DC-161, "Transient Combustible Program," in performing the inspection. The inspectors evaluated the fire protection program against the requirements of Licensee Condition 2.C.3. The documents reviewed are listed in the Attachment. This inspection represented nine inspection samples for fire protection tours and were conducted in the following areas:

- Fire Area/Zone III/BR-1, BR-2, elevation 272 and 282 foot;
- Fire Area/Zone IB/SH-1, elevation 272 foot;
- Fire Area/Zone IX/SG-1, elevation 272 foot;
- Fire Area/Zone VII/CS-1, elevation 272 foot;
- Fire Area/Zone II/CT-2, elevation 258 foot;
- Fire Area/Zone IC/CT-1, elevation 258 foot;
- Fire Area/Zone XVII/RB-1E, elevation 227 and 242 foot;
- Fire Area/Zone XVIII/RB-1W, elevation 227 and 242 foot; and
- Fire Area/Zone VII/RR-1, elevation 286 foot.

b. Findings

No findings of significance were identified.

.2 Annual Inspection (1 sample)

a. Inspection Scope

The inspectors observed a fire drill on June 12, 2007, including the post-drill critique, and reviewed the disposition of issues and deficiencies that were identified. The drill was observed to evaluate the capability of the fire brigade to fight fires. Specific attributes evaluated were: (1) control room response; (2) effectiveness of fire brigade leader communications, command and control, and utilization of pre-planned strategies; (3) proper wearing of turnout gear and self-contained breathing apparatus; (4) proper use and layout of fire hoses; (5) sufficient fire fighting equipment brought to the scene; (6) employment of appropriate fire fighting techniques; (6) search for victims and propagation of the fire into other plant areas; (7) smoke removal operations; and (8) proper storage of fire fighting equipment. The inspectors evaluated the fire brigade

capability to meet 10 CFR Part 50, Appendix R requirements. The documents reviewed are listed in the Attachment. This inspection represented one sample.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

.1 Internal Flooding (71111.06 - 1 sample)

a. Inspection Scope

The inspectors reviewed selected risk-important plant design features and Entergy's procedures intended to protect the EDG and emergency switchgear rooms and associated safety-related equipment from internal flooding events. The inspectors reviewed flood analysis and design documents, including the Individual Plant Examination and the UFSAR, engineering calculations, and abnormal operating procedures. The documents reviewed are listed in the Attachment. These activities represented one inspection sample.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07B - 3 samples)

.1 Biennial Review

a. Inspection Scope

The inspectors reviewed Entergy's programs for maintenance, testing, and monitoring of risk significant heat exchangers to verify whether potential deficiencies could mask degraded performance, and to assess the capability of the heat exchangers to perform their design functions. The inspectors assessed whether the FitzPatrick program conformed to Entergy's commitments to NRC Generic Letter 89 -13, "Service Water System Problems Affecting Safety-Related Equipment." In addition, the inspectors evaluated whether any potential common cause heat sink performance problems could affect multiple heat exchangers in mitigating systems or result in an initiating event. Based on risk significance and prior inspection history, the following heat exchangers were selected:

- 'A' residual heat removal heat exchanger (10E-2A);
- 'B' EDG jacket water cooler heat exchanger (93WE-1B); and
- 'B' electric bay unit cooler (67UC-16B).

The heat exchangers are cooled by the safety-related emergency service water and residual heat removal service water systems. The systems were designed to supply cooling water from the ultimate heat sink (Lake Ontario) to various heat loads to ensure a continuous flow of cooling water to systems and components necessary for plant safety both during normal operation and under abnormal conditions.

The inspectors reviewed system health reports, performance tests, design specifications and calculations, eddy current test results, and chemical control methods to ensure that the selected components conformed to Entergy's commitments to Generic Letter 89 -13, "Service Water System Problems Affecting Safety-Related Equipment." The inspectors compared the surveillance test and inspection results to the established acceptance criteria to verify that the results were acceptable and that the heat exchangers operated in accordance with design.

The inspectors walked down the selected heat exchangers, the intake structure, emergency service water system, and residual heat removal service water system to assess the material condition of these systems, structures, and components. The physical condition of the 'B' EDG jacket water cooling heat exchanger (93WE-B) was observed by the inspectors while it was opened for cleaning and eddy current testing. Finally, the inspectors discussed system health reports, methods of controlling biotic fouling, and the methods for ensuring cooler operability with each respective system or program engineer. The documents reviewed are listed in the Attachment. These observations represented three inspection samples.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11Q - 1 sample, 71111.11B - 1 sample)

.1 Resident Inspector Quarterly Review (1 sample)

a. Inspection Scope

On June 11, 2007, the inspectors observed licensed operator simulator training to assess operator performance during several 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 against the requirements of 10 CFR Part 55, "Operators' Licenses." The document reviewed is

listed in the Attachment. This observation of operator simulator training represented one inspection sample.

b. Findings

No findings of significance were identified.

.2 Biennial Review (1 sample)

a. Inspection Scope

On June 29, 2007, the inspectors conducted an in-office review of Entergy's biennial written and annual operating tests for 2007. The inspection assessed whether pass rates were consistent with the guidance of NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process." The inspectors verified that:

- Crew failure rate was less than 20 percent. (Crew failure rate was 14.3 percent);
- Individual failure rate on the dynamic simulator test was less than or equal to 20 percent. (Individual failure rate was 12.8 percent);
- Individual failure rate on the walk-through test was less than or equal to 20 percent. (Individual failure rate was 0 percent);
- Individual failure rate on the written test was less than or equal to 20 percent (Individual failure rate was 0 percent); and
- Overall pass rate among individuals for all portions of the exam was greater than or equal to 80 percent. (Overall pass rate was 87.2 percent).

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12Q - 2 samples)

a. Inspection Scope

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:

- 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 against the requirements of 10 CFR Part 50.65. The documents reviewed are listed in the Attachment. The following Maintenance Rule samples were reviewed and represent two inspection samples:

- Direct current emergency lighting system; and
- Standby liquid control system.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 - 6 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 Part 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 review of the following activities represented six inspection samples:

- Week of April 2, 2007, which included a plant downpower to facilitate condenser waterbox cleaning, 'A' core spray system preventive maintenance, and 115 kilovolt (kV) line 3 unavailability;
- Week of April 9, 2007, which included an equipment malfunction resulting in the tripping of one of two 'B' reactor protection system motor generator electrical protection assembly breakers;
- Week of April 16, 2007, which included failure of the 'A' reactor feedwater pump speed setter power supply;
- Week of April 30, 2007, which included high pressure coolant injection system maintenance from April 30 to May 4;
- Week of May 14, 2007, which included planned 'B' EDG maintenance; and
- Week of May 21, 2007, which included an off-gas recombiner trip and partial loss of main condenser vacuum.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 - 5 samples)

a. Inspection Scope

The inspectors reviewed operability determinations to assess the acceptability of the evaluations; when needed, the use and control of compensatory measures; 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 evaluations were reviewed and represented five inspection samples:

- CR 2007-01459 concerning excessive movement on the 'B' EDG actuator lower bearing insert;
- CR 2007-01658 concerning drywell equipment sump integrator degradation;
- CRs 2007-01596, 2007-01593, and 2007-01595 concerning safety-related unit coolers that did not achieve design maximum ultimate heat sink temperature during thermal performance testing;
- CR 2007-01809 concerning higher than normal drywell nitrogen makeup flow; and
- CR 2007-01863 concerning the operability of 115 kV line 3 with Nine Mile Point Nuclear Power Station Unit 1 shutdown.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed six 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: test acceptance criteria were clear, demonstrated operational readiness and were consistent with design basis documentation; test instrumentation had current calibrations and 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 against the requirements of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control." The following six post-maintenance test activities were reviewed and represented six inspection samples:

- Work order JAF-03-07188, involving repair of a water leak in service water pump 46P-1B motor oil reservoir during the week of June 16;
- Work order 00108214, involving replacement of a faulty logic card in 'B' reactor protection system motor-generator set electrical protection assembly 71 EPA-RPS1B1G during the week of April 16;
- Work order 51105259, involving planned maintenance on the 'B' EDG during the week of May 14;
- Work order 51104980, involving 'B' control room chiller condenser tube replacement during the week of June 4;
- Work order 51101225, involving 'A' train standby liquid control logic relay replacement during the week of June 23; and
- Work order JAF-05-35050, involving 'A' standby gas treatment control and alarm relay replacement during the week of June 23.

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 TS, UFSAR, Technical Requirements Manual, and Entergy procedure requirements. The inspectors verified: test acceptance criteria were clear, demonstrated operational readiness, and were consistent with design basis documents; test instrumentation had current calibrations and 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 inspectors evaluated the tests against the requirements in TS. The documents reviewed are listed in the Attachment. The following STs were reviewed and represented six inspection samples:

- ST-2AL, "Residual Heat Removal Loop A Quarterly Operability and In-Service Test (IST);"
- ISP-251A, "Reactor Core Isolation Cooling Steam Line High Flow Transmitter Calibration;"
- ST-8Q, "Testing of the Emergency Service Water System;"
- ST-4I, "High Pressure Coolant Injection Torus Suction Valves Leak Rate Test;"
- ST-2XB, "Residual Heat Removal Service Water Loop B Quarterly Operability Test;" and
- ISP-100B-RPS, "Reactor Protection System Instrument Functional Test/Calibration."

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23 - 1 sample)

a. Inspection Scope

The inspectors reviewed engineering change number 1750 concerning a temporary modification to control room chiller 70RWC-2B. The modification installed electrical jumpers to prevent short-cycling of the unit. The inspectors assessed the adequacy of the 10 CFR Part 50.59 evaluation for the temporary modification. The inspectors also 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. The inspectors also reviewed the results of ST-99G, "Temporary Modification Monthly Audit." The documents reviewed are listed in the Attachment. This review represented one inspection sample.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06 - 1 sample)

a. Inspection Scope

The inspectors observed simulator activities associated with licensed operator requalification training on June 11, 2007. The inspectors verified that emergency classification declarations and notification activities were properly completed. The inspectors evaluated the drill against the requirements of 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities." This observation represented one inspection sample.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (71122.01 -11 samples)

a. Inspection Scope

The inspectors reviewed the following documents to evaluate the effectiveness of Entergy's radioactive gaseous and liquid effluent control programs. The requirements for radioactive effluent controls are specified in the Technical Specifications (TS) and the Offsite Dose Calculation Manual (ODCM).

1) The inspectors reviewed the 2005 and 2006 Radiological Annual Effluent Release Reports, including projected public dose assessments. There were no anomalous results in these two reports. The current ODCM was reviewed, including technical justifications for any changes made because of the previous revision. Applicable sections of the UFSAR were reviewed that describe the gaseous radioactive waste and station ventilation systems. The inspectors also reviewed the latest quality assurance audits (QA-6-2005-JAF-1, ODCM, REMP, PCP, REC, SPDES and QA-6-2005-JAF-2, "Nuclear Effluents and Environmental Monitoring and Chemistry"). Additionally, Entergy's program for identifying, controlling and assessing potential contaminated spills and leakage was reviewed.

2) The inspectors observed the following plant equipment and work activities to evaluate the effectiveness of Entergy's radioactive gaseous and liquid effluent control programs:

- Walkdown to determine the availability of radioactive liquid/gaseous effluent radiation monitoring systems (RMS) and to determine the equipment material condition;
- Observation of sampling and laboratory measurement techniques;
- Walkdown to determine the operability of air cleaning systems and to determine the equipment material condition; and
- Observation of a gaseous effluent sample collection, counting and analysis.

3) One radioactive liquid waste release and one abnormal gaseous release calculation in 2006 were selected for review with respect to ODCM and procedural requirements.

4) The inspectors reviewed selected instances of unplanned effluent RMS unavailability that would require compensatory sampling and analysis for the period May 2005 through June 2007. During 2005 and 2006, there was one

unmonitored release that was reviewed in detail. This unmonitored release was a spill of trace radioactive material which was decontaminated on the roof of a plant building within the protected area.

5) The inspectors evaluated the groundwater monitoring program, which is under development. Currently, systems or structures containing radioactive liquid underground piping have been identified. A scoping hydrology study was completed in January 2007, with recommendations for establishing a groundwater monitoring program.

6) There were no changes to the ODCM since the last inspection of this program area.

7) Effluent release dose calculations were reviewed for each month from May 2005 through May 2007, with respect to TS/ODCM calculation methodology, and 10 CFR Part 50, Appendix I public dose requirements. The inspectors verified the methods used, and verified that no regulatory requirements were exceeded.

8) The inspectors reviewed the most recent air cleaning system filter surveillance test results required by TSs (visual inspection, pressure differential, in-leakage tests, laboratory charcoal efficiency test, and air flow capacity tests, as appropriate) for the following:

- Standby gas treatment system;
- Control room exhaust ventilation air supply;
- Technical support center ventilation air supply system; and
- Off-gas filtration system.

9) The inspectors reviewed the most recent calibration results for the gaseous and liquid effluent RMS radiation monitors and associated flow rate measurement devices, as required by the ODCM for the following:

- Liquid radwaste effluent (17RM-350);
- Service water effluent (17RM-351);
- Reactor building closed loop cooling monitor (17RM-352);
- Steam jet air ejector (17RM-150A/B);
- Reactor building exhaust (17RM-452A/B);
- Refueling floor exhaust (17RM-456A/B);
- Turbine building exhaust (17RM-431 and 432);
- Radwaste building exhaust (17RM-458A/B);
- Control room ventilation (17RM-459); and
- Plant stack (17RM-50A/B).

Effluent liquid and gas sample radiation measurement equipment calibrations were reviewed for currently in-use high purity germanium gamma spectrometers and a liquid beta scintillation counter. Selected counting equipment quality

control charts were reviewed that documented continued operability of this equipment.

10) Implementation of the measurement laboratory quality control program was reviewed, including effluent intra-laboratory and inter-laboratory comparisons.

11) The inspectors reviewed six CRs relative to the FitzPatrick effluents program between May 2005 and June 2007 (Section 4OA2).

b. Findings

No findings of significance were identified.

Cornerstone: Public Radiation Safety

2PS2 Radioactive Materials Processing and Transportation (71122.02 - 6 samples)

a. Inspection Scope

The inspectors conducted the following activities to verify that Entergy's radioactive material processing and transportation programs complied with the requirements of 10 CFR Parts 20, 61, and 71, and Department of Transportation (DOT) regulations 49 CFR Parts 170 -189.

1) The inspectors reviewed the solid radioactive waste system description in Section 11.1 - 11.3 of the UFSAR, the 2005 radiological effluent release report for information on the types and amounts of radioactive waste disposed, and the scope of Entergy's audit program to verify that they meet the requirements of 10 CFR Part 20.1101.

2) The inspectors walked down the liquid and solid radioactive waste processing systems to verify that current configurations and operations were consistent with the UFSAR and process control system descriptions; reviewed the status of radioactive waste process equipment that was not operational and/or was abandoned in place; and verified that changes were reviewed and documented in accordance with 10 CFR Part 50.59. The inspectors reviewed the current processes for transferring and dewatering radioactive waste resin and sludge discharges into shipping/disposal containers to determine that appropriate waste stream mixing and sampling procedures, and methodology for waste concentration averaging provided representative samples of the waste product for the purposes of waste classification as specified in 10 CFR Part 61.55 for waste disposal.

3) The inspectors reviewed the radio-chemical sample analysis results for each of the radioactive waste streams (powdered resin, bead resin, and waste sludge), reviewed the use of scaling factors and calculations with respect to these radioactive waste streams to account for difficult-to-measure radionuclides;

verified that Entergy's program assured compliance with 10 CFR Part 61.55 and 10 CFR Part 61.56 as required by Appendix G of 10 CFR Part 20; and reviewed Entergy's program to ensure that the waste stream composition data accounted for changing operational parameters and remained valid between the annual and biennial sample analysis updates.

4) The inspectors observed shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifests, shipping papers provided to the driver, and verification of shipment readiness; verified that Entergy was authorized to receive the shipment packages; and observed radiation workers during the preparation and shipment of bead resin shipment No. 07-1270 on April 11, 2007, to Studsvick Processing Facility, LLC. The inspectors determined that the shipper was knowledgeable of the shipping regulations and that shipping personnel demonstrated adequate skills to accomplish the package preparation requirements for public transport with respect to NRC Bulletin 79-19 and 49 CFR Part 172, Subpart H, and verified that Entergy's training program provided training to personnel responsible for the conduct of radioactive waste processing and radioactive material shipment preparation activities.

5) The inspectors sampled the following non-excepted package shipment records and reviewed these records for compliance with NRC and DOT requirements:

- 06-024, motor shipment to Schultz Electric Co. on May 8, 2006;
- 06-038, refueling equipment shipment to Global Nuclear Fuels on July 13, 2006;
- 06-077, laundry shipment to Unitech on October 21, 2006;
- 06-106, lead shielding shipment to Indian Point Energy Center on December 20, 2006;
- 07-024, test coupon shipment to General Electric Nuclear Energy on March 20, 2007;
- 06-1244, bead resin shipment to Studsvick Processing Facility on August 1, 2006;
- 07-1270, bead resin shipment to Studsvick Processing Facility on April 11, 2007; and
- 06-1246, dry active waste shipment to Duratek on August 11, 2006.

6) The inspectors reviewed Entergy's event reports, special reports, audits, state agency reports, and self-assessments related to the radioactive material and transportation programs performed since the last inspection and determined that identified problems were entered into the corrective action program for resolution. The inspectors also reviewed corrective action reports written against the radioactive material and transportation programs since the previous inspection.

b. Findings

No findings of significance were identified.

2PS3 Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program (71122.03 - 10 samples)

a. Inspection Scope

1) The inspectors reviewed the current Annual Radiological Environmental Operating Report, and Entergy assessment results, to verify that the REMP was implemented as required by TS and the ODCM. The review included changes to the ODCM with respect to environmental monitoring commitments in terms of sampling locations, monitoring and measurement frequencies, land use census, inter-laboratory comparison program, and analysis of data. The inspectors also reviewed the ODCM to identify environmental monitoring stations. In addition, the inspectors reviewed the following: Entergy self-assessments and audits, event reports, inter-laboratory comparison program results, the UFSAR for information regarding the environmental monitoring program and meteorological monitoring instrumentation, and the scope of the audit program to verify that it met the requirements of 10 CFR Part 20.1101.

2) The inspectors walked down 15 air particulate and iodine sampling stations, two storm drain outfalls, three water treatment stations, and 27 thermoluminescent dosimeter (TLD) monitoring locations. The inspectors determined that they were located as described in the ODCM and determined the equipment material conditions to be acceptable.

3) The inspectors observed the collection and preparation of a variety of environmental samples (listed above) and verified that environmental sampling was representative of the release pathways as specified in the ODCM and that sampling techniques were in accordance with procedures.

4) Based on direct observation and review of records, the inspectors verified that the meteorological instruments were operable, calibrated, and maintained in accordance with guidance contained in the UFSAR, NRC Safety Guide 23, and Entergy's procedures. The inspectors verified that the meteorological data readout and recording instruments in the control room and at the tower were operable.

5) The inspectors reviewed each event documented in the Annual Radiological Environmental Monitoring Report which involved a missed sample, inoperable sampler, lost TLD, or anomalous measurement for the cause and corrective actions. The inspectors conducted a review of Entergy's assessment of any positive sample results.

6) The inspectors reviewed any significant changes made by Entergy to the ODCM as the result of changes to the land census or sampler station modifications since the last inspection. The inspectors also reviewed technical justifications for any changed sampling locations and verified that Entergy performed the reviews required to ensure that the changes did not affect its ability to monitor the impacts of radioactive effluent releases on the environment.

7) The inspectors reviewed the calibration and maintenance records for air samplers. The inspectors reviewed the following: the results of Entergy's inter-laboratory comparison program to verify the adequacy of environmental sample analyses performed by Entergy, Entergy's quality control evaluation of the inter-laboratory comparison program and the corrective actions for any deficiencies, Entergy's determination of any bias to the data and the overall effect on the REMP, and quality assurance audit results of the program to determine whether Entergy met the TS/ODCM requirements. The inspectors verified that the appropriate detection sensitivities with respect to TS/ODCM are utilized for counting samples and reviewed the results of the quality control program including the inter-laboratory comparison program to verify the adequacy of the program.

8) The inspectors observed the radioactive material survey and release locations and inspected the methods used for control, survey, and release to include observing the performance of personnel surveying and releasing material for unrestricted use and verifying that the work is performed in accordance with plant procedures.

9) The inspectors verified that the radiation monitoring instrumentation used for the release of material from the radiological controlled area was appropriate for the radiation types present and was calibrated with appropriate radiation sources. The inspectors reviewed Entergy's equipment to ensure the radiation detection sensitivities were consistent with the NRC guidance contained in Circular 81-07 and Information Notice 85-92 for surface contamination and HPPOS-221 for volumetrically contaminated material.

10) The inspectors reviewed Entergy's audits and self-assessments related to the REMP since the last inspection to determine if identified problems were entered into the CAP, as appropriate. Selected corrective action reports were reviewed since the last inspection to determine if identified problems accurately characterized the causes and corrective actions were assigned to each commensurate with their safety significance. Any repetitive deficiencies were also assessed to ensure that Entergy's self-assessment activities were identifying and addressing these deficiencies. (Section 4AO2)

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

.1 Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As required 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 procedures, the inspectors selected items across the initiating events, mitigating systems, and barrier integrity cornerstones for additional follow-up and review. Additionally, NRC specialist inspectors reviewed two CRs associated with the radwaste transportation program that were initiated between January 2005 and April 2007, six CRs associated with the radioactive liquid and gaseous radioactive effluent control and radiological environmental monitoring programs that were initiated between May 2005 and June 2007, and 23 CRs related to the selected heat exchangers and service water system that were initiated between January 2003 and April 2007. The inspectors assessed Entergy's threshold for problem identification, the adequacy of the cause analyses, extent of condition review, operability determinations, and the timeliness of the specified corrective actions. The CRs reviewed are listed in the Attachment.

.2 Semi-Annual Review to Identify Trends (1 sample)

As required by Inspection Procedure 71152, "Identification and Resolution of Problems," the inspectors performed a review of Entergy's Corrective Action Program and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment and corrective maintenance issues but also considered the results of daily inspector corrective action program item screening discussed in Section 4OA2.1. The review also included issues documented in system health reports, corrective maintenance work requests, component status reports, site monthly meeting reports and maintenance rule assessments. The inspectors' review nominally considered the six-month period of January 2007 through June 2007, although some examples expanded beyond those dates when the scope of the trend warranted. The inspectors compared and contrasted their results with the results contained in Entergy's latest integrated quarterly assessment report. Corrective actions associated with a sample of the issues identified in the trend report were reviewed for adequacy. The inspectors also evaluated the trend report specified in ENN-LI-102, "Corrective Action Process," and 10 CFR Part 50, Appendix B. The documents reviewed are listed in the Attachment.

b. Assessment and Observations

No findings of significance were identified.

Equipment, human performance and program issues were identified at an appropriate threshold and were entered into the corrective action program.

.3 Annual Sample: Work Control, Scheduling and Risk Management (71152 - 1 sample)

a. Inspection Scope

The inspectors selected the following corrective action issue for detailed review. The report and supporting information were reviewed to ensure that a comprehensive evaluation was performed and appropriate corrective actions were specified. The inspectors evaluated the reports against the requirements of procedure ENN-LI-102, "Corrective Action Process," and 10 CFR Part 50, Appendix B.

- CR-2006-01808, which documented an increasing trend in the number of condition reports involving a work control, scheduling, and risk management theme.

b. Findings and Observations

No findings of significance were identified. The inspectors determined that the causal analysis, extent of condition review, and the timeliness of the specified recommendations and corrective actions were appropriate.

.4 Annual Sample: Adverse Trend in Procedure Usage (71152 - 1 sample)

a. Inspection Scope

The inspectors selected the following corrective action issue for detailed review. The report was reviewed to ensure that a comprehensive evaluation was performed and appropriate corrective actions were specified. The inspectors evaluated the reports against the requirements of procedure ENN-LI-102, "Corrective Action Process," and 10 CFR Part 50, Appendix B.

- CR-2006-03026, regarding an increasing trend in the number of condition reports involving failure to use/follow procedures.

b. Findings and Observations

No findings of significance were identified. The adequacy of causal analysis, extent of condition review, and the timeliness of the specified recommendations and corrective actions were determined to be reasonable.

4OA6 Meetings, Including Exit

On July 10, 2007, the inspectors presented the inspection results to Mr. Kevin J. Mulligan and other members of his staff. The inspectors asked Entergy whether any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Entergy Personnel

P. Dietrich, Site Vice President
C. Adner, Manager, Operations
N. Avrakotos, Manager, Emergency Preparedness
S. Bono, Director Engineering
J. Costedio, Manager, Regulatory Compliance
M. Durr, Manager, System Engineering
B. Finn, Director, Nuclear Safety Assurance
D. Johnson, Manager, Training
J. LaPlante, Manager, Security
K. Mulligan, General Manager, Plant Operations
J. Pechacek, Manager, Programs and Components Engineering
W. Rheaume, Director Nuclear Safety Assurance
J. Solowski, Radiation Protection

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Opened and Closed

None

Closed

None

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

OP-51A, "Reactor Building Ventilation and Cooling System," Revision 47
OP-52, "Turbine Building Ventilation," Revision 16
DBD-066, "Design Basis Document for the Reactor Building Heating, Ventilation and Air Conditioning (HVAC) Systems"
DBD-067, "Design Basis Document for the Turbine Building HVAC Systems."

Section 1R04: Equipment Alignment

OP-14, "Core Spray System," Revision 30
OP-19, "Reactor Core Isolation Cooling System," Revision 45
OP-22, "Diesel Generator Emergency Power," Revision 52
OP-13, "Residual Heat Removal System," Revision 93
OP-13A, "RHR-Low Pressure Coolant Injection System," Revision 14
ST-1S, "Shutdown Cooling Containment Isolation Valve Testing (IST)," Revision 16
ST-2AB, "RHR Keep-Full Pump Min Flow Check Valve Reverse Flow Test (IST)," Revision 5
ST-2AF, "RHR Loop B Automatic Control Bypass Switch Functional Test," Revision 1
ST-2AM, "RHR Loop B Quarterly Operability Test," Revision 23
ST-2F, "LPCI and LPCI MOV Power Supply Simulated Automatic Actuation Test," Revision 33
FM-20A, "Flow Diagram - Residual Heat Removal System 10," Revision 72
FM-20B, "Flow Diagram - Residual Heat Removal System 10," Revision 63
DBD-010, "Design Basis Document for Residual Heat Removal System," Revision 12

Section 1R05: Fire Protection

PFP-PWR04, Fire Area/Zone III/BR-1, BR-2
PFP-PWR34, Fire Area/Zone IB/SH-1
PFP-PWR22, Fire Area/Zone IX/SG-1
PFP-PWR11, Fire Area/Zone VII/CS-1
PFP-PWR01, Fire Area/Zone II/CT-2
PFP-PWR02, Fire Area/Zone IC/CT-1
PFP-PWR14, Fire Area/Zone XVII/RB-1E
PFP-PWR15, Fire Area/Zone XVIII/RB-1W
PFP-PWR12, Fire Area/Zone VII/RR-1
AP-14.02, Combustibles and Flammable Material Control, Revision 10
Fire Brigade Training Drill Number FBD-4-101

Section 1R06: Flood Protection Measures

Calculation 14620-US(N)-001-0, "Evaluation of Impact of Flooding Inside EDG Rooms on Safety Related Equipment," dated April 19, 1989
Calculation 14620-B-9017-1, "Potential Flooding Impact on EDG Room Sprinkler Actuation with Floor Drains Plugged and Two Equipment Drains Opened," Revision 2, dated June 5, 1989
Calculation 0090-0006-C-003, "Fire Suppression Effects Analysis," dated December 28, 1993

Section 1R07: Heat Sink Performance

Procedures

AP-09.02, "Zebra Mussel Control Program," Revision 7
AP-19.12, "Service Water Inspection Program," Revision 5
AP-19.14, "Eddy Current Testing of Heat Exchanger Tubes," Revision 9
MDSO-14, "Heat Exchanger Tube Plugging," Revision 7
MP-066.01, "Unit Cooler Maintenance," Revision 7
OP-4, "Circulating Water System," Revision 53
OP-7A, "Chlorine Injection System," Revision 21
OP-42A, "Service Water Chemical Cleaning System," Revision 4
OP-65A, "Normal Operation," Revision 6

Surveillances

ST-8Q, "Testing of the ESW System IST," Revision 35
ST-2YA, "RHR Heat Exchanger Performance Test," Revision 0
ST-8Q, "Testing of the ESW System IST," Revision 35
ST-8Q, "Testing of the ESW System IST," Revision 35
ST-8Q, "Testing of the ESW System IST," Revision 34
ST-2YA, "RHR Heat Exchanger Performance Test," Revision 0

Engineering Evaluations and Calculations

JAF-CALC-06-00004, "Evaluation of Wall Thinning of Tubes in 'B' EDG Jacket Water Cooler, 93WE-1B," Revision 0
JAF-CALC-EDG-02946, "Minimum Required Tube Wall Thickness of EDG Jacket Water Cooler Heat Exchangers," Revision 1
JAF-CALC-RHR-0193, "Instrument Indication Uncertainty for RHR Heat Exchanger Performance Test," Revision 1
JAF-CALC-RHR-02945, "Tube Minimum Required Wall Thickness of RHR Heat Exchangers," Revision 1
JAF-CALC-RHR-02953, "RHR Heat Exchanger K-Value with Reduced Tube Side Fouling Factor," Revision 0
JAF-CALC-RHR-02954, "Tube Minimum Required Wall Thickness of RHR Heat Exchangers," Revision 1
JAF-SE-96-048, "Revision to UFSAR to Raise Maximum Allowable Lake Temperature from 82° F to 85° F," Revision 2

JAF-CALC-SWS-00569, “Cooler Performance Methodology for Crescent, Electric Bay and Cable Tunnel Coolers,” Revision 4
JAF-CALC-SWS-03026, “Minimum ESW Flow Requirements for the EDG Jacket Water Coolers with Elevated Lake Temperatures Up To and Including 85° F,” Revision 0
JAF-CALC-TBC-04223, “Minimum Required Pipe Wall Thickness of Electric Bay Unit Coolers (67UC-16A/B),” Revision 3

Design Basis Documents and Generic Letter 89-13 Program Documents

JPN-90-015, “Response to NRC Generic Letter 89-13 Service Water System Problems Affecting Safety-Related Equipment,” dated February 13, 1990
JPN-91-015, “Updated Response to NRC Generic Letter 89-13 Service Water System Problems Affecting Safety-Related Equipment,” dated April 18, 1991
JPN-93-015, “Updated Response to NRC Generic Letter 89-13 Service Water System Problems Affecting Safety-Related Equipment,” dated March 16, 1993
JAF-RPT-MULTI-01267, “Generic Letter 89-13 Program Plan,” Revision 4
Design Basis Document (DBD-010), “RHR System,” Revision 9

System Health Reports

Emergency Service Water, 1st Quarter 2007
Emergency Service Water, 1st Quarter 2006
Normal Service Water, 4th Quarter 2006
Normal Service Water, 1st Quarter 2006

Miscellaneous

Eddy Current Testing Schedule, May 4, 2007
EPRI TR-100385, “Balance of Plant Heat Exchanger Condition Assessment Guidelines”
EPRI TR-108009, “Balance of Plant Heat Exchanger Condition Assessment and Inspection Guide”
NED-M-090-107, “James A. FitzPatrick Nuclear Power Plant Temporary Chlorine Water Treatment System for Service Water Systems Modification F1-90-038," Memorandum dated September 14, 1990
Record of Eddy Current Inspection of Diesel Generator Cooler, 93WE-1B, November 2005
Record of Eddy Current Inspection of Electric Bay Cooler ‘B’, February 1995
Refueling Outage 17 Intake Canal Cleaning Videos
RHR Heat Exchanger (10E-2A), Eddy Current Report, October 1998

Drawings

4.95-5, “‘A’ RHR Heat Exchanger (20E-2A) Tube Plugging Map”
4.95-53, “‘E’ Electric Bay Unit Cooler (67UC-16B) Tube Plugging Map,” Revision 2
4.95-61, “‘B’ EDG Jacket Water Cooler (93WE-1B) Tube Plugging Map,” Revision 4
FM-46A, “Flow Diagram Service Water System 46,” Revision 82
FM-46B, “Flow Diagram Emergency Service Water System 46 and 15,” Revision 49

Work Orders

JAF-04-37446, “2006 Intake Inspections,” Revision 0

Section 1R11: Licensed Operator Requalification Program

Evaluation 2006C, “Loss of MCC-163, HPCI Steam Line Rupture (Isolable), Loss of Condensate Pumps, ATWS, Degraded Injection, Emergency Depressurization”

Section 1R12: Maintenance Effectiveness

JAF-RPT-SLC-02282, “Maintenance Rule Basis Document for System 011 Standby Liquid Control System,” Revision 3
JENG-APL-07-002, “Standby Liquid Control Tank Level Indication (a)(1) Action Plan,” Revision 0
FE-65B, “Lighting Plans - Cable Tray and Relay Rooms,” Revision 16
FE-73B, “Lighting Plan - Administration Building - Sh. 2 - El. 286'-0",” Revision 16
FE-65A, “Lighting Plan - Control Room El. 300'-0",” Revision 18
ST-16J1, “Control Room and Relay Room Emergency Lighting Test,” Revision 10
MST-076.05, “Excide/Lightguard F-100 Emergency Light Surveillance Test,” Revision 28
MP-076.07, “6-Volt ‘Battery Pack’ Emergency Light Maintenance,” Revision 19
JAF-RPT-FPS-02699, “Emergency Battery Powered Lighting Preventive Maintenance,” Revision 3
JAF-RPT-MISC-02751, “Maintenance Rule Basis Document for Emergency Lighting,” Revision 2

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

OP-24A, “Off-Gas System,” Revision 43
AOP-31, “Loss of Condenser Vacuum,” Revision 17
SFTOP 07-0012, “Modified OFG Recombiner Warmup Lineup,” dated May 25, 2007
FM-38A, “Flow Diagram - Vacuum Priming and Air Removal System 38,” Revision 38
FM-16B, “Flow Diagram - Off Gas System 01-107,” Revision 47

Section 1R22: Surveillance Testing

JAF-CALC-HPCI-02616, “Temperature and Pressure Transient Analysis of Trapped Water Volume for Containment Penetration X-226, HPCI Pump Suction Line Between Isolation Valves 23MOV-58 and 23MOV-57 for Response to NRC Generic Letter 96-06,” dated January 15, 1997
JAF-CALC-HPCI-02968, “Leakage Rate for 23MOV-57/58 to Avert Pressure-Locking following a LOCA,” dated June 1, 1998

Section 1R23: Temporary Plant Modifications

1.79-380, “Wiring Diagram - Valves, Heaters, Etc. - 70RWC-2A & 2B,” Revision 4
1.79-42, “Wiring Diagram - Chiller 70RWC2A-2B,” Revision 6

ESK-6FAJ, “Elementary Diagram - 600V Ckts. HVAC Refrig. Chiller RWC-2B - Relay and Control Room,” Revision 7

Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

Annual Radiological Effluent Release Reports - 2005 and 2006
Annual Radiological Environmental Operating Reports - 2005 and 2006
Site Hydrogeologic Assessment of FitzPatrick, dated January 2007
EN-RP-113, “Response to Contaminated Spills/Leaks,” Revision 0
EN-CY-109, “Sampling and Analysis of Groundwater Monitoring Wells,” Revision 0
EN-CY-108, “Monitoring of Non-Radioactive Systems,” Revision 0
RP-RESP-03.02, “SGTS, CREVAS and TSCVASS Testing,” Revision 16
SP-03.07, “Liquid Process Radiation Monitors,” Revision 6
SP-03.08STK, “Stack Effluent Monitors,” Revision 1
SP-03.08RX, “Reactor Building Gaseous Effluent Monitors,” Revision 0
SP-03.08TB, “Turbine Building Gaseous Effluent Monitors,” Revision 0
SP-03.08RF, “Refuel Floor Gaseous Effluent Monitors,” Revision 0
SP-03.08RW, “Radwaste Building Gaseous Effluent Monitors,” Revision 0
ISP-27-3, “Main Stack Exhaust Process Radiation Monitor Instrument Channel Functional Test/Calibration,” Revision 18
ISP-18, “Reactor Building Exhaust Radiation Monitor Functional Test/Calibration,” Revision 40
ISP-25A/B, “Turbine Building Exhaust Radiation Monitor Channel Instrument Functional Test/Calibration,” Revision 2
ISP-17, “Refueling Area Exhaust Radiation Monitor Functional Test/Calibration,” Revision 43
ISP-26A/B, “Radwaste Building Exhaust Radiation Monitor Channel Functional Test/Calibration,” Revision 0
ISP-27-1, “Radwaste Discharge Process Radiation Monitor Instrument Channel Functional Test/Calibration,” Revision 15
ISP-27-2, “Service Water Process Radiation Monitor Instrument Functional Test/Channel Calibration,” Revision 20
IMP-17.11, “Reactor Building Closed Loop Cooling Process Radiation Monitor Instrument Channel Calibration,” Revision 5
IMP-01-107.7, “Stack Exhaust Flow Indication Calibration,” Revision 1
IMP-66.3, “Reactor Building Ventilation Exhaust Flow Indication Instrumentation Calibration,” Revision 6
IMP-67, “Turbine Building Ventilation Exhaust Flow Indication Calibration,” Revision 2
IMP-64.2, “Radwaste Building Ventilation Exhaust Flow Indication Calibration,” Revision 2

Section 2PS2: Radioactive Materials Processing and Shipping

“Radiation Protection Program Self-Assessment: Radwaste Program RP.7,” dated May 4, 2005
“Radiation Protection Program Self-Assessment: Control of Radioactive Material and Radioactive Material Shipments,” dated February 10, 2005
QA-15-2005-JAF-1, “QA Assessment of the Radiation Waste Shipment QA Program,” dated January 2006
NUPIC Audits: Duratek - Barnwell, September 2005; Studsvik, dated November 2006

AP-06.01, “Process Control Program,” Revision 5
EN-RW-105, “Process Control Program,” Revision 0
RP-OPS-05.04, “Radioactive Waste Data Base Control Program,” Revision 6
EN-RW-102, “Radioactive Shipping Procedure,” Revision 4

Section 2PS3: Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program

IMP-01-125.3, “Standby Gas Treatment Purge Flow Instrumentation Calibration,” Revision 1
ISP-19-5A/B, “Offgas Radiation Monitor A/B Instrument Calibration,” Revision 0
ISP-26-1, “Post-Accident Radwaste Building High Range Radiation Monitor Functional Test/Calibration,” Revision 17
ISP-25-1, “Post-Accident Turbine Building High Range Radiation Monitor Functional Test/Calibration,” Revision 16
ISP-19-02, “Post-Accident Offgas (Stack) High Range Radiation Monitor Functional Test/Calibration,” Revision 13
SP-03.08HR, “High Range Effluent Monitors,” Revision 0
SP-03.01, “Main Steam Line and Steam Jet Air Ejector Radiation Monitor Calibration,” Revision 12
IMP-MET-201, “Dew Point Calibration,” Revision 1
S-IMP-MET-301, “Barometric Pressure Calibration,” Revision 3
S-IMP-MET-401, “Precipitation Gauge Calibration,” Revision 2
S-IMP-MET-601, “Main Meteorological Tower 30 Foot Wind Speed and Direction Calibration,” Revision 1
S-IMP-MET-602, “Main Meteorological Tower 100 Foot Wind Speed and Direction Calibration,” Revision 4
S-IMP-MET-603, “Main Meteorological Tower 200 Foot Wind Speed and Direction Calibration,” Revision 1
S-IMP-MET-611, “Backup Tower Wind Speed and Direction Calibration,” Revision 2
S-IMP-MET-621, “Inland Meteorological Tower Wind Speed and Direction Calibration,” Revision 1
S-IMP-MET-701, “Temperature and Delta Temperature Instrument Calibration,” Revision 1
Joint Frequency Distribution 2005 (Nine Mile Point, LLC)
Joint Frequency Tables and Recovery Rates for 2006 (ABS Consulting)
Monthly Meteorological Reports: April 2007, March 2007

Section 4OA2: Identification and Resolution of Problems

Condition Reports

2003-02104	2005-00635	2006-01457
2003-02269	2005-01899	2006-01459
2003-00496	2005-01901	2006-04351
2003-00497	2005-03272	2006-05047
2003-04701	2005-04351	2007-00741
2003-05763	2005-04405	2007-01424
2004-01256	2005-04859	2007-01592
2004-03262	2006-01211	2007-01593

2007-01596	2007-02194	2007-01718
2000-06351	2007-02214	2007-01711
2003-01787	2007-02268	2007-01710
2006-04629	2007-02128	2007-01700
2006-04633	2007-02066	2007-01665
2006-04635	2007-01972	2007-01690
2006-04789	2007-01953	2007-01393
2005-00729	2007-01951	2007-01427
2005-00730	2007-01910	2007-01592
2005-01884	2007-01925	2007-00571
2006-05106	2007-01944	2007-01422
2006-04506	2007-02156	2007-01323
2006-04527	2007-01859	2007-00906
2006-03283	2007-01838	2007-02260
2006-01237	2007-01170	2007-02038
2007-01888	2007-01827	

LIST OF ACRONYMS

ADAMS	Agency Documents Access Management System
CFR	Code of Federal Regulations
CR	condition report
DOT	U.S. Department of Transportation
EDG	emergency diesel generator
HVAC	heating, ventilation and air conditioning
HX	heat exchanger
IST	inservice test
kV	kilovolt
NRC	Nuclear Regulatory Commission
ODCM	offsite dose calculation manual
OP	operating procedure
PARS	publicly available records
REMP	radiological environmental monitoring program
RHR	residual heat removal
RMS	radiation monitoring systems
SSC	structures, systems, or components
ST	surveillance test
TLD	thermoluminescent dosimeter
TS	technical specification
UFSAR	Updated Final Safety Evaluation Report