January 27, 2006

Mr. G. St. Pierre
Site Vice President
FPL Energy Seabrook, LLC
Seabrook Station
c/o Mr. James M. Peschel
P.O. Box 300
Seabrook, NH 03874

SUBJECT: SEABROOK STATION - NRC INTEGRATED INSPECTION REPORT 05000443/2005011

Dear Mr. St. Pierre:

On December 31, 2005, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Seabrook Nuclear Power Station. The enclosed inspection report documents the inspection results which were discussed on January 18, 2006, with Mr. M. Kiley and other members of your staff.

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

This report documents two NRC-identified findings of very low safety significance (Green). These findings were determined to involve violations of NRC requirements. However, because of their very low safety significance and because they are entered into your corrective action program, the NRC is treating these findings as non-cited violations (NCVs), in accordance with Section VI.A of the NRC Enforcement Policy.

If you contest any NCV in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at Seabrook.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document

Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm.html

Sincerely,

/RA/

Paul G. Krohn, Chief
Projects Branch 6
Division of Reactor Projects

Docket No. 50-443
License No: NPF-86

Enclosure: Inspection Report No. 05000443/2005011
w/ Attachment: Supplemental Information

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

REGION I

Docket No.:	05000443
License No.:	NPF-86
Report No.:	05000443/2005011
Licensee:	Florida Power & Light Energy Seabrook, LLC (FPL)
Facility:	Seabrook Station, Unit 1
Location:	Post Office Box 300 Seabrook, New Hampshire 03874
Dates:	October 1, 2005 to December 31, 2005
Inspectors:	Glenn Dentel, Senior Resident Inspector Steve Shaffer, Resident Inspector Thomas Moslak, Health Physicist John G. Caruso, Senior Operations Engineer David Silk, Senior Reactor Engineer Peter Presby, Operations Engineer
Approved by:	Paul G. Krohn, Chief Projects Branch 6 Division of Reactor Projects

Enclosure

TABLE OF CONTENTS

SUMMARY OF FINDINGS

IR 05000443/2005-011; 10/1/2005 - 12/31/2005; Seabrook Station, Unit 1; Maintenance Effectiveness and Emergency Action Level and Emergency Plan Changes.

The report covered a 13-week period of inspection by resident inspectors and announced inspections by a regional health physics inspector, operation inspectors, and an emergency preparedness inspector. Two Green findings, all of which were NCVs, were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). 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: Barrier Integrity

- **Green**. The inspectors identified a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." In May 2005, Seabrook experienced a failure of the "A" control room exhaust fan damper solenoid valve. Corrective actions completed in 2002 and 2003 to previous solenoid failures including the "B" control room exhaust fan damper solenoid valve in 2001 were ineffective in preventing the May 2005 failure. Seabrook has since taken corrective action to fully evaluate the extent-of-condition and to replace or evaluate susceptible solenoid valves. This finding was associated with the cross cutting area of problem identification and resolution in that Seabrook did not implement effective corrective actions to previous failures and did not properly identify the cause of the 2005 failure.

  The finding is more than minor because it affected the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers are maintained including the radiological barrier function of the control room. The failure of the "A" train control room exhaust fan damper solenoid valve to close during testing impacted one of two dampers which isolates the control room. The finding is determined to be of very low safety significance (Green) since the redundant train provides the same function to isolate the control room and manual actions were also available to mitigate any control room conditions. (Section 1R12)

Cornerstone: Emergency Preparedness (EP)

- **Green**. The inspectors identified a non-cited violation associated with 10 CFR 50.54(q). For a general emergency (GE) initiated by certain postulated events, Seabrook developed a procedure that directed that a notification be made to the

offsite agencies from the control room without a protective action recommendation (PAR). Seabrook has implemented corrective actions and revised this procedure, as well as, instituted a process to review non-EP procedure changes to assess their impact upon the emergency plan.

The finding is more than minor because it is associated with the EP cornerstone attributes of procedure quality and offsite EP. It impacted the cornerstone objective of ensuring that Seabrook is capable of implementing adequate measures to protect the public in that PARs would not have been readily provided to offsite agencies for an GE initiated by some postulated events. This issue was determined not to impact a planning standard function because Seabrook's emergency plan and implementing procedures adequately addressed PARs for all events. Additionally, this issue had been discussed with the appropriate offsite agencies prior to implementation of the revised procedure. Therefore, this finding is determined to be of very low safety significance (Green). (Section 1EP4)

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

The plant began the inspection period at full rated thermal power and operated at or near full power for the entire report period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 - Two Samples)

a. Inspection Scope

The inspectors reviewed Seabrook's preparation for adverse weather relative to the protection of safety-related structures, systems, and components from cold weather and winter storms. The inspectors also conducted detailed reviews of heat trace panels and the snow removal program for site perimeter systems to ensure continued operability during adverse weather. The following documents were reviewed to determine the adequacy of Seabrook's preparation for and ability to respond to cold weather and winter storms:

- ON1059.01, "Heat Trace Operation," Revision 4;
- ON1490.06, "Winter Readiness Surveillance," Revision 2;
- OS1090.09, "Station Cold Weather Operations," Revision 0; and
- Selected sections of the Updated Final Safety Analysis Report.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

Partial System Walkdowns. (71111.04Q - Three Samples)

The inspectors performed the following partial system walkdowns:

- On November 15 and 16, 2005, the inspectors performed a walkdown of the "A" safety injection train while the "B" safety injection train was out-of-service for maintenance.

- On November 16, 2005, the inspectors performed a walkdown of the "A" train safety-related station batteries.

- On December 20 and 21, 2005, the inspectors performed a walkdown of the "A" primary component cooling water train while the "A" charging system was out-of-service for maintenance. The primary component cooling water and charging systems support cooling of the reactor coolant pump seals.

The inspectors conducted a walkdown of each system to verify that the critical portions of selected systems, such as valve positions, switches, and breakers, were correctly aligned in accordance with Seabrook's procedures and to identify any discrepancies that may have affected operability. The inspectors reviewed applicable piping and instrumentation drawings and operational lineup procedures to support the walkdowns and verify proper system alignment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope (71111.05Q - Five Samples)

The inspectors examined several areas of the plant to assess: 1) the control of transient combustibles and ignition sources; 2) the operational status and material condition of the fire detection, fire suppression, and manual fire fighting equipment; 3) the material condition of the passive fire protection features such as fire doors, fire dampers, and fire penetration seals; and 4) the compensatory measures for out-of-service or degraded fire protection equipment. The following areas were inspected:

- Train "B" Residual Heat Removal Equipment Vault, all elevations;
- Cooling Tower Switchgear Rooms, 22'0" elevation;
- Cooling Tower Pump Rooms, 46'0" elevation;
- Fire Pump House; and
- Non-Essential Switchgear Room, 21'6" and 37'6" elevations.

The inspectors verified that the fire areas were in accordance with applicable portions of Fire Protection Pre-Fire Strategies and Fire Hazard Analysis.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

.1 Quarterly Resident Inspector Review (71111.11Q - One Sample)

a. Inspection Scope

The inspectors observed the conduct of licensed operators during a simulator training session on October 13, 2005. The inspectors reviewed the physical fidelity of the simulator in order to verify its likeness to the Seabrook control room. The inspectors examined the operators' ability to perform actions associated with high-risk activities, the Emergency Plan, and the correct use and implementation of procedures. The inspectors observed the training evaluator's critique of the operators' performance and verified that deficiencies were adequately identified and discussed.

b. Findings

No findings of significance were identified.

.2 Bienniel Licensed Operator Requalification Program Inspection (71111.11B - Two Samples)

a. Inspection Scope

The following inspection activities were performed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Inspection Procedure Attachment 71111.11, "Licensed Operator Requalification Program," and NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process (SDP)," 10 CFR 55.46 Simulator Rule (sampling basis) as acceptance criteria.

The inspectors reviewed documentation of operating history since the last requalification program inspection. The inspectors also discussed facility operating events with the resident staff. Documents reviewed included NRC inspection reports, Plant Performance Insights, licensee event reports (LERs), and licensee condition reports (CRs), that involved human performance issues for licensed operators to ensure that operational events were not indicative of possible training deficiencies.

The inspectors reviewed three examination sets (i.e., weeks 4, 5, and 6) for both the comprehensive Reactor Operator (RO) and Senior Reactor Operator (SRO) biennial written exams, as well as scenarios and job performance measures (JPMs) administered during this current examination cycle to ensure the quality of these examinations met or exceeded the criteria established in the Examination Standards and 10 CFR 55.59.

During the onsite weeks of this inspection, the inspectors observed the administration of operating examinations to operating crews "C" and "D." The operating examinations

consisted of two or three simulator scenarios for each crew and one set of five JPMs administered to each individual.

Conformance with Simulator Requirements Specified in 10 CFR 55.46

For the site specific simulator, the inspectors observed simulator performance during the conduct of the examinations, and discrepancy reports to verify compliance with the requirements of 10 CFR 55.46.

The inspectors reviewed simulator maintenance, testing and control procedures and discussed simulator maintenance, testing, configuration control and machine operation with members of the simulator maintenance staff. The inspectors also reviewed a sample of simulator tests including transients, core performance, computer real time, steady state, and scenario-based tests and verified that a sample of completed simulator deficiency item condition reports from the past two-year period effectively addressed the described issue.

Conformance with Operator License Conditions

The inspectors verified conformance with operator license conditions by reviewing the remediation training records for three individuals and two crews during the past two-year training cycle. The inspectors also reviewed a sample of licensed operator reactivation records and a random sample watch-standing documentation for time on a shift to verify currency and conformance with the requirements of 10 CFR 55.

Licensee's Feedback System

The inspectors interviewed instructors, training and operations management personnel, and six operators (i.e., five ROs and one SRO) for feedback regarding the implementation of the licensed operator requalification program to ensure the requalification program was meeting their needs and responsive to their noted deficiencies and recommended changes.

On December 22, 2005, the inspectors conducted an in-office review of licensee requalification examination results. These results included the annual operating tests administered this year. 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 on the dynamic simulator was less than 20%. (Failure rate was 0.0%.)

- Individual failure rate on the dynamic simulator test was less than or equal to 20%. (Failure rate was 0.0%.)

- Individual failure rate on the walkthrough test (JPMs) was less than or equal to 20%. (Failure rate was 0.0%.)

- Individual failure rate on the comprehensive biennial written examination was less than or equal to 20%. (Failure rate was 2.0%.)

- More than 75% of the individuals passed all portions of the examination (98.0% of the individuals passed all portions of the exam).

b. Findings and Observations

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope (71111.12Q - One Sample)

The inspectors completed one specific issue review.

The inspectors reviewed the application of the maintenance rule for a failure of a control room exhaust fan damper to close on May 10, 2005. The inspectors reviewed the apparent cause analysis, extent-of-condition, and corrective actions documented in CR 05-06479. The inspectors reviewed the maintenance rule functional failure evaluation against the guidance in NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2. The inspectors also reviewed past corrective actions taken for previous solenoid failures documented in CR 01-13183, CR 01-13203 and CR 02-12902.

b. Findings

Introduction. Seabrook experienced a failure of a control room exhaust fan damper solenoid valve due to ineffective corrective actions to previous solenoid valve failures. This self-revealing issue will be considered a NRC-identified finding due to inspector value added in the cause analysis evaluation. This finding was determined to be of very low safety significance (Green) and was characterized as an NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action."

Description. On May 10, 2005, the "A" train control room exhaust fan damper failed to close during a surveillance test. The immediate cause of the failure was determined to be a sticking actuator solenoid valve which prevented the damper from closing. The solenoid valve was replaced and the damper was returned to service. The solenoid valve had been in service for greater than 15 years with no documented preventive maintenance completed on the valve.

Seabrook, industry operating experience, and industry guidance (EPRI, "Solenoid Valve Maintenance Guide") identifies normally energized solenoids' experience failure due to

degradation of internal components. Seabrook experienced a failure of "B" train control room exhaust fan damper in December 2001. Following this failure and other solenoid valve failures, Seabrook established preventive maintenance for safety-related normally energized solenoid valves. Seabrook identified 40 solenoid valves for additional preventive maintenance (periodic replacement). Seabrook failed to identify five other safety-related normally energized valves that did not have any preventive maintenance including the "A" train control room exhaust fan damper solenoid valve.

The failure to conduct an adequate extent-of-condition review and corrective actions resulting in the failure of the "A" train control room exhaust fan damper solenoid valve was a performance deficiency. The inspectors also noted that Seabrook determined that the cause of the 2005 failure was a sticking solenoid valve but did not identify the corrective action breakdown as a cause. The sticking solenoid valve was the immediate cause; however, the apparent or root cause of the problem was the inadequate corrective action to previous failures. Seabrook addressed this concern by issuing CR 06-00345 to further evaluate personnel and process causes. This finding will be considered NRC-identified based on the inspectors identifying the deficient cause analysis and adding value to the issue.

Analysis. The finding was more than minor because it affected the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers are maintained including the radiological barrier function of the control room. The attributes to maintain this function include the dampers in the control room ventilation system. The failure of the "A" train control room exhaust fan damper solenoid valve to close during testing impacted one of two dampers which isolates the control room.

Using Appendix A, Phase 1 of IMC 0609, "Determining the Significance of Reactor Inspection Findings for At-Power Stations," dated November 22, 2005, the finding was determined to require a Phase 3 evaluation since the damper provides both a radiological barrier and a smoke barrier function. Based on Senior Reactor Analyst review, the finding was determined to be of very low safety significance (Green) since: 1) the redundant train provides the same function to isolate the control room and was operable; 2) the smoke barrier function was a manual operator action to actuate the control room recirculation mode; 3) operators following identification of the failed damper could have manually operated the damper in the field; and 4) other actions to mitigate control room conditions including Self-Contained Breathing Apparatus and remote shutdown stations were available.

This finding was associated with the cross cutting area of problem identification and resolution in that Seabrook did not implement effective corrective actions to previous failures experienced in 2001 and did not properly identify the cause of the 2005 failure. These issues were entered into the corrective action program as CRs 05-06479 and 06-00345.

Enforcement. 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action" requires that for significant conditions adverse to quality, the cause of the condition must be

determined and corrective actions taken to prevent repetition.

Contrary to the above, Seabrook did not implement corrective action to prevent repetition of failures of safety-related solenoid valves. On December 11, 2001, Seabrook experienced a failure of the "B" train control room exhaust fan damper solenoid valve. Seabrook determined preventive maintenance was needed on normally energized solenoid valves to prevent aging related failures. However, Seabrook did not identify several solenoid valves for preventive maintenance including the "A" control room exhaust fan damper solenoid valve. On May 10, 2005, this solenoid valve experienced a similar failure to the "B" train solenoid valve failure. The solenoid valve was replaced and additional actions were taken to identify other energized solenoid valves that did not have preventive maintenance programs. Because this finding was of very low safety significance and has been entered into the Seabrook's corrective action program (CRs 05-06479 and 06-00345), this finding is being treated as an NCV consistent with Section VI.A.1 of the Enforcement Policy **(NCV 05000443/2005011-01, Inadequate Corrective Actions Result in Repeat Failure of a Solenoid Valve).**

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

.1 (Open) Unresolved Item (URI) 50-443/2005-011-02, Loss of Inverter 1F and Notice of Enforcement Discretion

a. Inspection Scope

At 3:23 a.m. on November 29, 2005, Seabrook experienced a loss of inverter 1F (one of six components that supplies safety-related instrument power). Seabrook troubleshooting efforts, vendor manual information, and input from the vendor technical representatives resulted in identifying several possible causes with the gate driver boards as the most likely cause of the inverter failure. The time to complete the repairs would have required exceeding the Technical Specification allowed outage time of 24 hours. Seabrook requested and was granted a Notice of Enforcement Discretion from the NRC for an additional 18 hour period to complete repairs to the inverter. The decision to grant a Notice of Enforcement Discretion was discussed in detail in a December 5, 2005, letter from the NRC to Seabrook. The decision was made to avoid an unnecessary transient as a result of compliance with license condition and, thus, minimized potential safety consequences and operational risks. The decision was evaluated against NRC Inspection Manual, Part 9900: Technical Guidance, "Operation - Notices of Enforcement Discretion." At 3:22 p.m. on November 30, 2005, Seabrook completed repairs to the inverter and exited from the Technical Specification limiting condition of operation and the Notice of Enforcement Discretion (NOED).

The inspectors reviewed the troubleshooting activities associated with the inverter. The inspectors conducted interviews with operators, risk analysts, maintenance technicians, and engineers to assess the adequacy of the troubleshooting plan and maintenance

technicians' actions to correct the condition. The inspectors also interviewed operators to verify that the compensatory measures verbally discussed in Seabrook's Notice of Enforcement Discretion request were implemented.

b. Findings

Although the event constituted a violation of the Technical Specifications (TS), the actual cause of the loss of the inverter had not been determined by the end of this reporting period. This item remains unresolved pending additional testing of the gate driver board and logic cards **(URI 50-443/20005011-02, Loss of Inverter 1F and Notice of Enforcement Discretion)**. The inspectors will evaluate the test results, examine the cause analysis and determine if any performance deficiencies existed.

.2 (Open) URI 50-443/2005-011-03, Voltage Excursion on the "B" Emergency Diesel Generator (EDG)

a. Inspection Scope

On December 7, 2005, Seabrook experienced a voltage excursion on the "B" EDG during a routine surveillance. The voltage excursion was similar to a problem that occurred on April 24, 2005, on the "B" EDG. In April, Seabrook diagnosed the most likely cause of the problem as being in the "B" rectifier chassis. The second most likely cause of the problem was the gate firing circuit board. Seabrook placed the redundant "A" rectifier chassis in service. In August, the "B" rectifier chassis was replaced and sent out for testing to determine the failure mechanism. No testing had been completed prior to the failure in December 2005. Following the December 2005 voltage excursion, Seabrook replaced the gate firing circuit board and sent out the board for failure mechanism analysis. The inspectors reviewed Seabrook's troubleshooting and repair activities. The inspectors interviewed the engineers to assess the adequacy of troubleshooting efforts.

b. Findings

The April 24, 2005, voltage excursion event is documented in Inspection Report 05000443/2005005 Section 4OA2.6. As stated in the previous report, the inspectors identified several weaknesses in addressing the second highest probable cause, the gate firing circuit board. This item remains unresolved until further licensee failure analysis testing on the "B" rectifier chassis and the gate firing circuit board have been completed **(URI 50-443/2005011-03, Voltage Excursion on the "B" EDG)**. The inspectors will review the test results and determine if any performance deficiencies existed.

.3 Miscellaneous Maintenance Risk Assessments and Emergent Work Evaluation Samples

a. Inspection Scope

The inspectors reviewed the scheduling and control for two planned maintenance activities and one emergent work troubleshooting activity in order to verify that Seabrook had properly evaluated the effect of the activity on plant risk. The inspectors conducted interviews with operators, risk analysts, maintenance technicians, and engineers to assess their knowledge of the risk associated with the work, and to ensure that other equipment was properly protected. The inspectors evaluated the compensatory measures against Seabrook procedures, Maintenance Manual 4.14, "Troubleshooting," and Work Management Manual 10.1, "On-Line Maintenance." Specific risk assessments were conducted using Seabrook's "Safety Monitor." The inspectors reviewed the following items.

- During the period of October 25 through October 28, 2005, the inspectors reviewed the troubleshooting efforts following discovery of an increasing level trend in the "B" containment sump. The inspectors interviewed engineers and licensed operators. The inspectors observed the troubleshooting activities and reviewed the MA 4.14 troubleshooting form.

- On November 8, 2005, the inspectors reviewed the plant risk configuration for planned maintenance impacting the availability of the "B" atmospheric dump valve and one of two steam admission valves to the turbine driven emergency feedwater pump, low reactor trip risk evolutions, and low risk switchyard activities. The inspectors reviewed the sequence of the activities and operators' ability to evaluate plant risk.

- On November 28 and 29, 2005, the inspectors reviewed the plant risk configuration for planned maintenance activities including "A" enclosure air handling fan repairs, various low reactor trip risk evolutions, switchyard breaker preventive maintenance, and a "B" motor-driven emergency feedwater surveillance.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance Related to Non-Routine Plant Evolutions and Events (71111.14 - Two Samples)

a. Inspection Scope

On November 21, 2005, the inspectors observed the troubleshooting and repair of a fuse holder and lug connection associated with reactor coolant pump undervoltage and underfrequency protection channels. The connection had caused several spurious

alarms in the control room. The inspectors interviewed the instrument & controls supervisors and technicians and the engineer involved in the troubleshooting and repair efforts. The inspectors reviewed work order (WO) 0542775 and operators' response to the alarms.

On November 28, 2005, the inspectors observed operator performance while an additional pressurizer heater was energized during an infrared thermography inspection of the reactor coolant pressurizer fuse panel cabinets (WO 0521825). The inspectors attended the pre-job briefing, interviewed operators and engineers, and observed operators and the work activity. The inspectors examined operator performance against Seabrook procedure, OS1000.10, "Operation at Power," Revision 4 which provides guidance on energizing pressurizer heaters and opening pressurizer spray valves.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 - Two Samples)

a. Inspection Scope

The inspectors reviewed operability evaluations and/or condition reports in order to verify that the identified conditions did not adversely affect safety system operability or plant safety. The evaluations were reviewed using criteria specified in Generic Letter 91-18, "Resolution of Degraded and Nonconforming Conditions," Inspection Manual Part 9900, "Operable/Operability - Ensuring the Function Capability of a System or Component." In addition, where a component was determined to be inoperable, the inspectors verified the TS limiting condition for operation implications were properly addressed. The inspectors performed field walkdowns, interviewed personnel, and reviewed the following items:

- CR 05-12968 and CR 05-13321 evaluated the decreasing viscosity of the "A" supplemental emergency power system engine lubricating oil. The lubricating oil viscosity was determined to be decreasing due to in-leakage from the fuel oil system. The inspectors interviewed the system engineer and engineering supervisor, reviewed the troubleshooting plan, and examined the results of increased oil sampling to verify system availability.

- CR 05-14275, which evaluated the increase in pump shaft vibration for the "C" service water pump. The shaft vibration increased from 12.6 mils to 20 mils. The inspectors interviewed system engineers and operators, evaluated past vibration data, and examined other indicators of performance to verify pump operability.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19 - Four Samples)

a. Inspection Scope

The inspectors reviewed post-maintenance testing (PMT) activities to ensure: 1) the PMT was appropriate for the scope of the maintenance work completed and in accordance with MA 3.5, "Post Maintenance Testing"; 2) the acceptance criteria were clear and demonstrated operability of the component; and 3) the PMT was performed in accordance with procedures. The following PMTs were reviewed:

- On October 1, 2005, Seabrook completed WO's 0343230, 0408478, 0443642, and 0513061 for replacement and maintenance of the "A" Emergency Diesel Generator (EDG) jacket water temperature control system. The inspectors reviewed each work order and interviewed the maintenance technicians and operators.

- On September 30 and October 1, 2005, Seabrook completed an 18-month overhaul of the "A" EDG. The inspectors reviewed the PMTs for 16 of the work orders. The work orders included preventive maintenance activities, corrective maintenance activities, and design modifications. The inspectors reviewed each work order and interviewed maintenance technicians and operators.

- On November 16, 2005, the inspectors observed maintenance evolutions and reviewed the post-maintenance activities for WO 0501487 following actuator diaphragm replacement on valve SI-V-134. The inspectors also interviewed the valve maintenance technicians and maintenance supervision.

- On November 30, 2005, the inspectors observed maintenance evolutions and reviewed the post-maintenance activities for WO 0543575 following replacement of several boards in the "F" vital instrument bus inverter. The inspectors interviewed system engineers and maintenance electricians, reviewed troubleshooting plans, and examined historical performance of the inverter. This maintenance activity was also discussed in Section 1R13.1.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 - Four Samples)

a. Inspection Scope

The inspectors observed portions of surveillance testing activities of safety-related systems to verify that the system and components were capable of performing their intended safety function, to verify operational readiness, and to ensure compliance with required Technical Specifications and surveillance procedures.

The inspectors attended some of the pre-evolution briefings, performed system and control room walkdowns, observed operators and technicians perform test evolutions, reviewed system parameters, and interviewed system engineers and field operators. The test data recorded was compared to procedural and technical specification requirements, and to prior tests to identify any adverse trends. The following surveillance procedures were reviewed:

- On October 17, 2005, the appropriate sections of OX1456.81, "Operability Testing of IST Valves," Revision 5 as described in WO 0341781 for RC-FV-2830, reactor coolant sample system containment isolation valve;
- On October 26, 2005, OX1413.01, "A Train Residual Heat Removal (RHR) Quarterly Flow and Valve Stroke Test and 18 Month Valve Stroke Observation," Revision 10;
- On November 14, 2005, IX1640.317, "Protection Cabinet 4 Steam Generator Steamline Pressure Operation Test, " Revision 6; and
- On November 17, 2005, LX0566.02, "Weekly Technical Specification Battery Surveillance," Revision 1.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23 - One Sample)

a. Inspection Scope

The inspectors reviewed temporary modification 05-018 and associated implementing documents to verify Seabrook's design basis and system operability were maintained. The temporary modification was associated with digital rod position indication computer alarms. Operators were periodically receiving Digital Rod Position Indication (DRPI) non-urgent alarms due to a problem with communication cables or communication boards. Corrective maintenance is planned for the next refueling outage. The modifications were associated with the alarm circuitry. One alarm was modified to reduce a burden on the operators and a second alarm was created to ensure an operator would become aware if further DRPI system degradation occurred.

The inspectors interviewed engineers and operators, examined computer alarm records,

and reviewed the following documents:

- Maintenance Manual, MA 4.3A, “Temporary Modifications and Temporary Alterations,” Revision 17;
- WO 0527429, Troubleshooting Plan for DRPI Non-urgent Alarms; and
- Plant Engineering Action Plan Register - Unexpected DRPI Non-urgent Alarms.

The inspectors verified that the temporary modification was completed in accordance with NRC requirements and plant procedures. The procedural requirements included modifications to plant drawings, tagging of plant equipment affected by the temporary modification, and procedural changes. The inspectors verified 10 CFR 50.59 reviews and 10 CFR 50.65(a)(4) risk evaluations were complete and accurate. The inspectors also examined the combined effect of the modification with other outstanding temporary modifications.

b. Findings

No findings of significance were identified.

EMERGENCY PREPAREDNESS (EP)

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

a. Inspection Scope (71114.04 - One Sample)

As a part of the evaluation of Seabrook’s implementation of Regulatory Issue Summary (RIS) 2004-15, “Emergency Preparedness Issues: Post-9/11,” the NRC reviewed selected procedures and interviewed the responsible Seabrook personnel. The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 4. The applicable requirements in 10 CFR 50.54(q) and the emergency plan were used as reference criteria.

b. Findings

Introduction. The inspectors identified a non-cited violation of very low safety significance (Green) associated with 10 CFR 50.54(q) for Seabrook implementing a procedure that did not include provisions for issuing PARs from the control room for GEs resulting from certain postulated events.

Description. On September 28, 2005, the inspectors identified that a Seabrook procedure did not include provisions for issuing PARs from the control room for GEs initiated by certain postulated events. This procedure was intended to be "all inclusive" for operator actions, including an emergency plan required action. Seabrook reviewed this procedure change prior to implementation with offsite agencies.

Seabrook documented this issue in CR 05-11807. Corrective actions included revising

the procedure to include provisions to provide PARs at GEs for these postulated events. Additionally, changes were made to administrative procedures to ensure that non-emergency plan implementing procedures were included in the process for reviewing changes for applicability under 10 CFR 50.54 (q).

The performance deficiency was the development of a procedure that did not include provisions for issuing a PAR from the control room for GEs initiated during certain postulated events. This is contrary to the emergency plan.

Analysis. This issue is greater than minor because it is associated with the EP cornerstone attributes of procedure quality and offsite EP. It impacted the cornerstone objective of ensuring that the licensee is capable of implementing adequate measures to protect the public in that PARs would not have been readily available to offsite agencies for GEs initiated by certain postulated events.

This issue was evaluated using IMC 0609, Appendix B (Emergency Preparedness Significance Determination Process), Sheet 1, Failure to Comply. Title 10 to CFR 50.54(q) states, in part, that a licensee "shall follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47(b) . . . " A procedure that does not include provisions for issuing a PAR from the control room for a GE could result in the licensee failing to follow its emergency plan. This issue was determined not to impact a planning standard function because Seabrook's emergency plan and implementing procedures adequately addressed PARs for all events. Additionally, this issue had been discussed with the appropriate offsite agencies prior to implementation of the revised procedure. Therefore, this finding was determined to be of very low safety significance (Green).

Enforcement. Title 10 to CFR 50.54(q) states in part that a licensee "shall follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47(b) and the requirements of Appendix E." Additionally, 10 CFR 50.47(b)(10) states, in part, that "Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place . . . " Seabrook Station Radiological Emergency Plan, Section 9.2.4, General Emergency Response, directs offsite emergency organizations to be notified in accordance with ER 1.2, "Emergency Plan Activation." Attachment 1.2D of ER 1.2, General Emergency Checklist - Short Term Emergency Director, step seven directs that a PAR be included on the notification form to the offsite agencies.

Contrary to the above, a licensee procedure (an "all inclusive" procedure, including an emergency plan required action) did not include provisions for issuing a PAR from the control room following a GE classification initiated for certain postulated events. This violation occurred as a result of Seabrook attempting to implement the guidance of RIS 2004-15 and had been in place since April 27, 2005. The violation was identified by the NRC on September 28, 2005, as a result of NRC inspection activities. Once informed by the NRC of this issue, Seabrook took prompt corrective action to address the issue. The affected procedure was revised on October 18, 2005, and appropriately

implemented in an exercise on October 31, 2005. Because the finding was determined to be of very low safety significance and was entered into the corrective action program via corrective action report 05-11808, this violation is being treated as a Non-Cited Violation, consistent with Section VI.A.1 of the NRC Enforcement Policy.
(NCV 050000443/2005011-04, Failure to Include Procedural Guidance for Issuing a PAR from the Control Room following Certain Postulated Events).

2. RADIATION SAFETY

Public Radiation Safety [PS]

2PS3 Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program (71122.03 - Ten Samples)

a. Inspection Scope

During the period November 28 through December 1, 2005, the inspectors conducted the following activities to verify that Seabrook implemented the REMP consistent with the Technical Specifications and the Off-site Dose Calculation Manual (ODCM) to validate that radioactive effluent releases met the design objectives of Appendix I to 10 CFR 50. Additionally, the inspectors verified that radiological surveys and controls were adequate to prevent the inadvertent release of radioactive material into the public domain. Implementation of these controls was reviewed against the criteria contained in 10 CFR 20 and 50, relevant Technical Specifications, and Seabrook's procedures.

REMP Inspections

- The inspectors evaluated the material condition of seven air particulate/iodine sampling stations located at ODCM map locations AP/CF-01, 02, 03, 04, 05, 08, and 09
- The inspectors evaluated the material condition of ten environmental dosimeters located at ODCM map locations TL-2, 6, 13, 14, 15, 16, 21, 31, 35, and 36.
- The inspectors toured a milk collection station at ODCM map location TM-15.
- The inspectors reviewed the calibration records and maintenance records for the environmental air particulate/iodine samplers.
- The inspectors reviewed Seabrook's and contractors' procedures implemented for collecting air, water, and biota samples.
- The inspectors reviewed the results of the vendor's inter-laboratory comparison program to verify the accuracy of Seabrook's environmental sample analyses.

- The inspectors reviewed the results of the annual (2005) land use census to determine if changes in sampling locations were warranted.

- The inspectors reviewed the technical justification for current changes made to the ODCM to determine if there was any reduction in ODCM scope.

- The inspectors verified that the meteorological instruments were operable, calibrated, and properly maintained. The inspectors compared local readouts of wind speed, wind direction, and delta temperature at the primary metric system with the indications provided in the control room for the primary and backup systems.

- The inspectors toured the tritium monitoring locations with a Chemistry Supervisor and reviewed the results of Seabrook's on-site tritium monitoring program to determine what trends were evident in the data.

Unrestricted Release of Material from the Radiologically Controlled Area (RCA)

The inspectors observed a technician performing source and system operability checks on the Small Article Monitors (SAM) located at the RCA control point. The inspectors confirmed that the SAMs had the appropriate detection sensitivity and alarmed at a conservative set-point. SAM calibration records and associated procedures were reviewed to assure that the instruments were properly maintained and operated.

The inspectors reviewed the most current Part 61 sampling data of isotopic distribution, and Seabrook's application of this data in determining that the radiation monitoring instruments, calibration sources, and alarm set-points were appropriate for the identified radiation types.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

.1 Occupational Exposure Control Effectiveness (71151- One Sample)

a. Inspection Scope

The inspectors reviewed implementation of Seabrook's Occupational Exposure Control Effectiveness Performance Indicator Program. Specifically, the inspectors reviewed condition reports, and associated documents, for occurrences involving locked high radiation areas, very high radiation areas, and unplanned exposures against the criteria specified in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance

Indicator Guideline", Revision 2, to verify that all occurrences that met the NEI criteria were identified and reported as performance indicators.

b. Findings

No findings of significance were identified.

.2 RETS/ODCM Radiological Effluent Occurrences (71151 - One Sample)

a. Inspection Scope

The inspectors reviewed relevant effluent release reports for the period January 1, 2004 through October 31, 2005, for issues related to the public radiation safety performance indicator, which measures radiological effluent release occurrences that exceed 1.5 mrem/quarter whole body or 5.0 mrem/quarter organ dose for liquid effluents; 5 mrads/quarter gamma air dose, 10 mrad/quarter beta air dose, and 7.5 mrads/quarter for an organ dose for gaseous effluents.

The inspectors reviewed the following documents to ensure Seabrook met all requirements of the performance indicator from the first quarter 2004 to the third quarter 2005:

- monthly projected dose assessment results due to radioactive liquid and gaseous effluent releases;
- quarterly projected dose assessment results due to radioactive liquid and gaseous effluent releases; and
- dose assessment procedures.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Condition Report Screening

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 items entered into the Seabrook's corrective action program. This review was accomplished by accessing Seabrook's computerized database.

b. Findings

No findings of significance were identified.

.2 Problem Identification and Resolution Trend Review

a. Inspection Scope

The inspectors reviewed Seabrook's corrective action program to identify trends that may indicate existence of more safety significant issues. The inspectors reviewed the corrective action database through the review of individual components to identify equipment degradation trends. Additionally, the inspectors reviewed Seabrook's programs for identifying trends through their performance improvement group, individual departments, and the condition report oversight group.

b. Findings

No findings of significance were identified.

.3 REMP and Radioactive Material Control Program

a. Inspection Scope

The inspectors reviewed condition reports, a Nuclear Oversight Department assessment of the contractor's environmental laboratory (05-0031), and a Quality Assurance Audit Report (SBK-05-03) to evaluate Seabrook's threshold for identifying, evaluating, and resolving problems in implementing the REMP and radioactive materials control programs. This review was conducted against the criteria contained in 10 CFR 20, Technical Specifications, and Seabrook's procedures.

b. Findings

No findings of significance were identified.

4OA3 Event FollowUp (71153 - Three Samples)

.1 (Closed) LER 50-443/05-005, Reactor Trip due to Lo-Lo steam generator level while in Mode 6

On April 13, 2005, during the plant's tenth refueling outage, a reactor trip was actuated by the reactor protection system (RPS) due to low water level in the "B" steam generator (SG). The "B" SG was in wet lay-up for the outage. A valve alignment was performed incorrectly which led to the transfer of inventory from "B" SG to the "D" SG. The inventory transfer resulted in the low water level in the "B" SG. The plant was in Mode 6 Refueling. Therefore, the RPS actuation did not affect the plant at the time. The inspectors reviewed the accuracy of the licensee event report and verified compliance

with the reportability requirements in 10 CFR 50.73 and NUREG 1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73," Revision 2. No findings of significance were identified and no violation of NRC requirements occurred. Seabrook documented the issue in CR 05-04725. This LER is closed.

.2 (Closed) LER 50-443/05-006, Manual Reactor Trip due to Main Turbine High Vibration

On May 1, 2005, during the initial start-up of the main turbine following the tenth refueling outage the control room operators manually tripped the reactor from 17 percent power due to high turbine vibrations. The inspectors previously reviewed the event and documented the assessment in NRC Inspection Report 50-443/2005-005 Section 4OA3.

The inspectors reviewed the licensee event report, CR 05-06069, and corrective actions to evaluate the accuracy of the licensee event report and to verify compliance with the reportability requirements in 10 CFR 50.73 and NUREG 1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73," Revision 2. The inspectors also evaluated the adequacy of the planned corrective actions. The inspectors also reviewed related turbine generator procedures: ON03-01-06, "Post Maintenance Turbine Startup," Revision 0; ON1031.02, "Starting and Phasing the Turbine Generator," Revision 5; and ON1231.02, "Turbine Trip Below P-9," Revision 8. The inspectors did not identify any violations of regulatory requirements or findings of significance in the review of this event.

.3 (Closed) LER 50-443/05-007, TS allowed outage times exceeded due to failed emergency power sequencer (EPS) card

On June 20, 2005, Seabrook's "B" containment building spray (CBS) pump failed to start during a slave relay test to start the pump. A failure of the EPS card led to the failure of the "B" CBS to start. The failure of the EPS card was previously reviewed and documented in NRC Inspection Report 50-443/2005-005 as a non-cited violation of very low safety significance (Green). The inspectors reviewed the accuracy of the licensee event report and verified compliance with the reportability requirements in 10 CFR 50.73 and NUREG 1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73," Revision 2. No additional findings of significance were identified. Seabrook documented the issue in CR 05-07984. This LER is closed.

4OA4 Cross Cutting Aspects of Findings

Cross-Reference to Problem Identification and Resolution Findings

Section 1R12 describes a finding which resulted in the failure of a control room exhaust fan damper solenoid valve. This finding was associated with the cross cutting area of problem identification and resolution in that Seabrook did not implement effective corrective actions to previous failures experienced in 2001 and did not properly identify the cause for the 2005 failure.

4OA5 Other Activities

(Update) URI 05-443/2005-03-05, "Simulator Testing"

The inspectors discussed the scenario-based testing methodology in use at Seabrook with members of the instructional and simulator staffs. The inspectors reviewed a sample of the methodology documented for requalification scenarios. The inspectors also confirmed that problems are being identified and documented from conduct of scenario-based testing. This item will be revisited following issuance of further guidance from the Nuclear Reactor Regulation program office.

4OA6 Meetings, including Exit

Final Exit Meeting Summary

The inspectors presented the inspection results to Mr. M. Kiley on January 18, 2006, following the conclusion of the period. The licensee acknowledged the findings presented. The licensee did not indicate that any of the information presented at the exit meeting was proprietary.

Interim Exit Meeting

The inspectors presented operator licensing inspection results to members of licensee management at the conclusion of the inspections at interim exits conducted on December 8, 2005 and again on December 14, 2005, at the site. In addition, on December 28, 2005, the licensee was contacted via telecom and a final summary exit was conducted.

Site Management Visit

On November 29, 2005, Mr. Samuel Collins, Regional Administrator, Region I and Eric Leeds, Director, Division of Preparedness and Response, Office of Nuclear Security and Incident Response visited the site and met with Mr. Gene St. Pierre and other members of licensee management, and with Massachusetts, Vermont, and New Hampshire state emergency management agency representatives.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Burson, Licensed Requal Instructor
T. Cassidy, Training Support Supervisor (Simulator)
P. Freeman, Engineering Director
P. Harvey, Chemistry Manager
L. Hubbard, Simulator Support Instructor (Test Operator)
M. Kiley, Plant Manager
J. Lee, Simulator Software Engineer
R. Logue, Radiation Instrument Technician
M. Makowicz, Plant Engineering Manager
M. O'Keefe, Regulatory Compliance Supervisor
D. Perkins, Health Physics Analyst
S. Perkins-Grew, EP Manager
D. Rittu, Operations Manager
V. Robertson, Senior Nuclear Analyst
D. Robinson, Chemistry Technical Supervisor
D. Roy, Nuclear Training Manager
M. Scannell, Radiation Protection Supervisor
D. Sherwin, Maintenance Manager
E. Spader, Licensed Requal Training Supervisor
G. St. Pierre, Site Vice President
S. Tan, Simulator Software Engineer
R. Thurlow, Radiation Protection Manager
K. Wright, Initial License Training Supervisor

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened:

05000443/2005011-02	URI	Loss of Inverter 1F and Notice of Enforcement Discretion (Section 1R13.1)
05000443/2005011-03	URI	Voltage Excursion on the "B" EDG (Section 1R13.2)

Closed:

05000443/2005005	LER	Reactor Trip due to Lo-Lo steam generator level while in Mode 6 (Section 4OA3.1)
05000443/2005006	LER	Manual Reactor Trip due to Main Turbine High Vibration

(Section 4OA3.2)

05000443/2005007	LER	TS allowed outage times exceeded due to failed emergency power sequencer (EPS) card (Section 4OA3.3)

Opened and Closed

05000443/2005011-01	NCV	Inadequate Corrective Actions Result in Repeat Failure of a Solenoid Valve (Section 1R12.1)
05000443/2005011-04	NCV	Failure to include Procedural Guidance for Issuing a PAR from the Control Room following Certain Postulated Events. (Section 1EP4)

Discussed

05000443/2005003-05	URI	Simulator Testing (Section 4OA5)

LIST OF DOCUMENTS REVIEWED

Section 1R11: Licensed Operator Requalification Program

Requalification Program Procedures:

Seabrook Nuclear Training Group Procedure NT-3734, "Simulator Change Control," Revision 16;
Seabrook Nuclear Training Group Procedure NT-3710, "Simulator Scenario Testing," Revision 6;
Seabrook Nuclear Training Group Procedure NT-5701, “Requalification Program Simulator Examinations,”;
Seabrook Nuclear Training Group Procedure NT-5702, “Administration of Requalification Program Annual Examinations,” Revision 8;
Seabrook Nuclear Training Group Procedure NT-7010, “Examination Administration and Integrity,” Revision 2;
Seabrook Nuclear Training Group Procedure NT-7012, “Licensed Operator Examination Development and Administration Safeguards and Controls,” Revision 3;
Seabrook Nuclear Training Group Procedure NT-5010, “Examination Development,” Revision 6;
Seabrook Nuclear Training Group Procedure NT-5720, ”Job Performance Measures,” Revision 11;

Simulator Test Documentation

2005 Simulator Steady State Comparison Tests (100%, 80%, 53%, 49%)
2004 and 2005 Turbine Trip at Less Than P-9 Stpt Simulator Transient Test
2005 Max Size Unisolable Main Streamline Break Simulator Transient Test

2004 and 2005 Slow Primary Depressurization Simulator Transient Test
NT-3736, "Simulator Core Performance Test" - 2005 for Cycle 11 Clean Core
NT-3735, "Simulator Computer Tests" - 2005
Scenario-Based Test Documentation for Licensed Operator Requalification Training Phases 05-01 and 05-04
Simulator Upgrade Phase 2 Site Acceptance Test Package, dated 12/06/02

Simulator Miscellaneous

STG Memo #8615, "Minutes of Simulator Review Committee Meeting 05-03," 8/15/05
Simulator Review Committee 05-04 (12/08/05) Meeting Agenda

Condition Reports

CR 05-14209, Related to Simulator Modeling of Reactor Coolant Pump Cooling Water Isolation Valve Response to Loss of Instrument Bus Power

Biennial Written Examinations 2005

Examinations for Weeks #4, 5, and 6

Reviewed Scenarios and JPMs - 2005 Annual Operating Exams

Examinations for Weeks #4, 5, and 6

Section 1EP4: Emergency Action Level (EAL) Revision Review

Procedures:

SDI-0064, Operations Department Response to Airborne Threats;
SDI-0003, Operations Response to a Security Threat, Revision 6, Changes 00 & 05;
Regulatory Issue Summary 2004-15, Emergency Preparedness Issues: Post-9/11;
Seabrook Station Radiological Emergency Plan, Revision 48;
ER 1.2, Emergency Plan Activation, Revision 46.

Section 2PS3: Radiological Environmental Monitoring Program

Procedures:

Off-Site Dose Calculation Manual, Change No. 26, 27, 28;
HD0955.42, "Operation of the Nuclear Enterprises Small Articles Monitor," Revision 3;
HD0958.32, "Release of Materials from Radiological Controls," Revision 15;
HD0956.01, "Radiological Environmental Sampling of Air Particulates and Radioiodine," Revision 00;
Seabrook Environmental Studies Quality Program and Standard Operating Procedures (Normandeau Associates Inc.);

IN0654.55, Revision 01, Met System Checks/Data Collection.

Reports:

Seabrook Isotopic Mixture Report No. 04-01
Seabrook 2004 Radioactive Effluents Report
Seabrook 2004 Annual Radiological Environmental Monitoring Program Report
Seabrook 2005 Land Use Census

Health Physics Study/Technical Information Document (HPSTID):

HPSTID 04-004, REMP Airborne Sample Collection Frequency Change from Weekly to Biweekly
HPSTID 04-002, Food Product Sampling (REMP)

Nuclear Oversight Reports:

Quality Report No. 05-0031, Environmental Laboratory Assessment
Audit Report No. SBK-05-03, Functional Area Audit of Chemistry/REMP/ODCM

Condition Reports:

05-08451, 05-08453, 05-08454, 05-08455, 05-08456, 05-08459, 05-10580, 05-01796, 04-01024, 04-03415

LIST OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
CBS	Containment Building Spray
CFR	Code of Federal Regulation
CR	Condition Report
DRPI	Digital Rod Position Indication
EAL	Emergency Action Level
EDG	Emergency Diesel Generator
EP	Emergency Preparedness
EPRI	Electric Power Research Institute
EPS	Emergency Power Sequencer
FPL	Florida Power & Light
GE	General Emergency
HPSTID	Health Physics Study Technical Information Document
IMC	Inspection Manual Chapter
JPM	Job Performance Measures
LER	Licensee Event Report
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NOED	Notice of Enforcement Discretion

NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
ODCM	Off-site Dose Calculation Manual
PAR	Protective Action Recommendation
PARS	Publicly Available Records
PMT	Post-Maintenance Testing
RCA	Radiologically Controlled Area
REMP	Radiological Environmental Monitoring Program
RETS	Radiological Effluent Technical Specification
RHR	Residual Heat Removal
RIS	Regulatory Issue Summary
RO	Reactor Operator
RPS	Reactor Protection System
SAM	Small Article Monitor
SDP	Significance Determination Process
SG	Steam Generator
SRO	Senior Reactor Operator
TS	Technical Specifications
URI	Unresolved Item
WO	Work Order