



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

August 6, 2007

Mr. Gene 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, UNIT NO. 1 - NRC INTEGRATED INSPECTION
REPORT 05000443/2007003

Dear Mr. St. Pierre,

On June 30, 2007, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at the Seabrook Nuclear Power Station Unit No. 1. The enclosed integrated inspection report documents the inspection results discussed on July 12, 2007, with Mr. D. Berko and other members of your staff.

This 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 and its enclosure, and your response (if any), will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of 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/

Arthur Burritt, Chief
Projects Branch 3
Division of Reactor Projects

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

Enclosure: Inspection Report No. 05000443/2007003
w/ Attachment: Supplemental Information

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Mr. Gene St. Pierre

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U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-443

License No.: NPF-86

Report No.: 05000443/2007003

Licensee: Florida Power & Light Energy Seabrook, LLC (FPL)

Facility: Seabrook Station, Unit No. 1

Location: Seabrook, New Hampshire 03874

Dates: April 1, 2007 through June 30, 2007

Inspectors: William Raymond, Senior Resident Inspector
Glenn Dentel, Senior Resident Inspector
Steve Shaffer, Resident Inspector
Eugene Huang, Reactor Engineer
Gil Johnson, Reactor Engineer
Suresh Chaudhary, Senior Reactor Engineer

Approved by: Arthur Burritt, Chief
Projects Branch 3
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000443/2007003; 04/01/2007-06/30/2007; Seabrook Station, Unit No. 1; Routine Integrated Report.

The report covered a three-month period of inspection by resident and region-based inspectors. No findings of significance were identified. 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

None.

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Seabrook Station, Unit No. 1 (Seabrook) began the inspection period at eight percent power with the turbine generator off line for repairs to the main generator neutral bus. On April 2, 2007, operators placed the turbine back on line and returned the plant to full power operation on April 3, 2007, where it remained the rest of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Preparation (71111.01)

a. Inspection Scope (1 sample)

The inspectors verified seasonal weather readiness for Seabrook in accordance with procedures ON1490.09, "Summer Readiness Surveillance" and ON1490.10, "Operational Status Check of Station Ventilation/Cooling Systems." The inspectors walked down equipment in the essential switchgear rooms and battery rooms and the emergency feedwater (EFW) pumps to verify hot weather protection. Between June 26 and 27, 2007, the inspectors toured plant areas and monitored room temperatures to verify the adequacy of hot weather protection measures when ambient temperatures increased above 90°F. The inspectors also reviewed Seabrook's actions per ON1046.70, "Generator Step Up Transformer Auxiliaries Operation," for hot weather impacts on the generator step up transformers. The inspectors also reviewed deficiencies identified during the implementation of hot weather protection procedures and verified these deficiencies were entered into the corrective action program (CAP). Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Partial System Walkdown (71111.04Q)

a. Inspection Scope (3 samples)

The inspectors performed a partial system walkdown to verify a train was properly restored to service following maintenance to evaluate the operability of one train while the opposite train was inoperable or out of service for maintenance and testing. The inspectors compared system lineups to system operating procedures, system drawings, and the applicable chapters in the updated final safety analysis report (UFSAR). The inspectors also verified the operability of critical system components by observing component material condition during the system walkdown. Documents reviewed during

this inspection are listed in the Attachment. The inspectors performed a partial walkdown of the following systems:

- On April 5, 2007, the A safety injection train in preparation for a surveillance on the B safety injection train;
- On June 18 and 19, 2007, the A emergency diesel generator (EDG) while the B EDG was removed from service for maintenance; and
- On April 17, 2007, the B EFW prior to the A EFW being removed from service for surveillance testing.

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown (71111.04S)

a. Inspection Scope (1 sample)

The inspectors performed a complete system alignment inspection of the EFW system to identify discrepancies between the existing equipment lineup and the specified lineup. During the inspection, system drawings and operating procedures were used to verify proper equipment alignment and operational status. The inspectors verified that system valves were correctly positioned and did not exhibit leakage that would impact valve function; that electrical power was available and properly aligned; that system components were properly labeled; and that ancillary equipment or debris did not interfere with system performance. In addition, the inspectors reviewed the CR database to verify that equipment alignment problems were being identified and appropriately resolved. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05AQ)

.1 Quarterly Inspection

a. Inspection Scope (9 Samples)

The inspectors toured nine areas important to reactor safety to evaluate Seabrook's control of transient combustibles and ignition sources; and the material condition, operational status, and operational lineup of fire protection systems including detection, suppression and fire barriers. The inspectors used the fire hazards analysis and pre-fire plans to perform the inspection. Documents reviewed are listed in the Attachment. The areas inspected included:

- A and B EDG building, 21 ft elevation;
- Control room, control building, 75 ft elevation;

- Service water pump house, 21 ft elevation;
- Circulating water pump house, 21 ft elevation;
- B residual heat removal (RHR) vault, -61 ft elevation;
- B RHR vault, -50 ft elevation;
- B RHR vault, -31 ft elevation;
- B RHR vault, -16 ft elevation; and
- B RHR vault, -9 ft elevation.

b. Findings

No findings of significance were identified.

.2 Annual Inspection

a. Inspection Scope (1 Sample)

The inspectors completed one annual fire drill observation inspection sample. The inspectors observed an unannounced fire brigade drill on April 20, 2007, in the control building air filter located adjacent to the control room. The inspectors observed brigade performance during the drill to evaluate the following: donning and use of protective equipment; fire brigade leader command and control; fire brigade response time; radio communications; and use of pre-fire plans. The inspectors attended the post-drill critique and reviewed the disposition of issues and deficiencies identified during the drill. The inspectors also verified that all fire fighting equipment used during the drill was returned to a condition of readiness. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. Inspection Scope (1 Sample)

The inspectors reviewed one internal flood protection inspection sample. The inspectors evaluated Seabrook's protection of safety-related systems from internal flooding conditions. The inspectors reviewed drains and seals credited for internal flooding events and conducted a walkdown of the control building essential switchgear rooms. The inspectors reviewed Seabrook's UFSAR and other design basis documents. The inspectors verified as-found equipment conditions remained consistent with design basis documentation and risk analysis assumptions. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11Q)

a. Inspection Scope (1 Sample)

The inspectors completed one quarterly licensed operator requalification training program inspection sample. The inspectors observed the conduct of licensed operators during a simulator training session on June 21, 2007. The inspectors reviewed simulator fidelity and examined operators ability to perform high-risk activities, implement procedures, and incorporate previous lessons learned. The inspectors observed the evaluator's critique of operator performance and verified that deficiencies were adequately identified, discussed and entered into the CAP.

b. Findings

No findings of significance were identified

1R12 Maintenance Effectiveness (71111.12Q)

a. Inspection Scope (3 Samples)

The inspectors completed three annual maintenance rule samples that reviewed three systems. The systems evaluated for maintenance rule implementation were the control building air handling system, the supplemental emergency power system, and the EFW system. The inspectors interviewed engineers, reviewed specific maintenance rule criteria, and examined CRs and associated corrective actions.

The inspectors also reviewed the Seabrook UFSAR and system health reports for the above systems. Corrective actions and maintenance rule functional failure evaluations were assessed against 10 CFR 50.65 requirements and against the guidance in Nuclear Management and Resources Council (NUMARC) 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2. The inspectors reviewed the Seabrook action plans for restoring the control building air handling system and supplemental emergency power systems to a(2) status. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope (6 Samples)

The inspectors reviewed the scheduling and control of three planned maintenance activities and three emergent work troubleshooting activities to evaluate the effect 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 compensatory measures were evaluated against Seabrook procedures, Maintenance Manual 4.14, "Troubleshooting," Revision 0 and Work Management Manual 10.1, "On-Line Maintenance," Revision 3. Specific risk assessments were conducted using Seabrook's "Safety Monitor." The inspectors reviewed the following items.

- On April 13 through 26, 2007, response to a leak on feedwater heater 22A. The inspectors followed Seabrook's assessment, contingencies and repairs efforts, reviewed work order (WO) 0712051 and temporary modification 07TMOD007.
- On April 24, 2007, planned surveillance testing on the B EDG and maintenance on the B RHR system.
- On April 26, 2007, troubleshooting in response to an invalid locked-in turbine trip alarm. The inspectors reviewed WO 0711444 and the MA 4.14 troubleshooting plan.
- On May 22, 2007, planned work on the C accumulator.
- On May 16, 2007, planned surveillance testing of the A EFW pump and ongoing switchyard work.
- On June 28, 2007, emergent work on the B EDG emergency power sequencer per WO 0720304 and as described in CR 07-08668.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope (6 Samples)

The inspectors reviewed operability evaluations and/or CRs to verify that identified conditions did not adversely affect safety system operability or plant safety. The evaluations were reviewed using criteria specified in NRC Regulatory Issue Summary 2005-20, "Revision to Guidance formerly contained in NRC Generic Letter 91-18, Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability" and Inspection Manual Part 9900, "Operability Determinations and Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety." In addition, where a component was determined to be inoperable, the inspectors verified that technical specifications (TS) limiting conditions for operation (LCO) implications were properly addressed. The inspectors performed field walkdowns, interviewed personnel, and reviewed the following items.

- CR 07-02784 that evaluated the jacket water coolant leak on the A EDG.

- CR 07-05240 that evaluated the operability of equipment worked on using a degraded crimping tool.
- CR 07-06828 that evaluated the operability of the reactor coolant system (RCS) leakage detection system related to the current seismic qualification.
- CR 07-07148 that evaluated the operability of the control room ventilation system with door C312 in a degraded condition.
- CR 07-02525 that evaluated the operability of a containment isolation valve during testing of motor control center breakers.
- CR 07-08277 that evaluated the operability of the condensate storage tank with respect to the six foot maintenance legs installed under the floating cover.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope (7 samples)

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

- On April 18, 2007, IS0603.005, "Equipment Qualification for ASCO Solenoid Valves," Revision 5, following replacement of the solenoid valve for the C Atmospheric Steam Dump Valve.
- On April 23, 2007, OX1406.02, "Containment Spray Pump and Valve Quarterly Operability, 18 Month Position Indication and Comprehensive Pump Testing," Revision 9, following valve maintenance and a lube oil change.
- On May 15, 2007, the inspectors reviewed WO 0630338 to verify that testing was completed in accordance with the WO and OX1416.04, "Service Water Quarterly Pump and Discharge Valve Test and Comprehensive Pump Test," Revision 9.
- On June 7, 2007, the inspectors reviewed WO 0630360 to verify that testing was completed in accordance with the WO and OX1416.03, "Monthly Cooling Tower Fan Operability Test," Revision 7.
- On June 18 through June 21, 2007, Seabrook performed a maintenance outage on the B EDG. The inspectors reviewed the post maintenance tests for 25 work WOs. The WOs included preventive maintenance activities, corrective maintenance activities, and design modifications. The inspectors reviewed each WO and interviewed the system engineer and the electrical engineers.
- On June 22, 2007, the inspectors reviewed emergent maintenance activities per WO 0719546 to remove the maintenance legs from the floating cover in the condensate storage tank. The inspectors reviewed the measures established by Seabrook to ensure the legs were correctly removed and that no condition adverse to tank operation was created upon completion of the activity.

Enclosure

- On June 22 and 25, 2007, inspectors reviewed the work performed during replacement of the digital reference unit on B EDG by WO 0630169. The inspectors reviewed the PMT performed on the B EDG as specified in OS07-01-04, "DG 1B Operation in Support of Digital Reference Unit, EGB, and Voltage Regulator Post Maintenance Testing," Rev 0. The inspectors interviewed system engineering personnel to further clarify how the PMT ensured the new digital reference unit was installed and functioning properly.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope (6 Samples)

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 TS and surveillance procedures.

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

- On April 7, 2007, OX1416.01, "Monthly Service Water Valve Verification," Revision 7;
- On April 17, 2007, IS1665.941, "High Energy Line Break Train A Thermocouple Calibration," Revision 3;
- On April 23, 2007, OX1410.02, "Quarterly Rod Operability Surveillance," Revision 7;
- On May 2, 2007, IX1640.240, "FW-L-554 Steam Generator D Narrow Range Level Protection Channel I Calibration," Revision 5;
- On May 16, 2007, OX1436.02, "Turbine Driven Emergency Feedwater Pump Quarterly and Monthly Valve Alignment," Revision 9; and
- On June 26, 2007, IX1668.344, "Containment Pressure Protection Channel Test," Revision 5.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope (1 sample)

The inspectors reviewed temporary modification 07TMOD007 and associated implementing documents to verify Seabrook's design basis and affected system operability were maintained. Temporary modification 07TMOD007 involved repair of a leak on the 22A feedwater heater. The leak was repaired by wire wrap and sealant injection into the strong back behind the leaking diaphragm seal. The inspectors completed field walkdowns and interviewed engineers, the injection team members and operators.

The inspectors verified that the temporary modification 07TMOD007 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 completed correctly. The inspectors also examined the combined effect of the modification with the other outstanding temporary modifications.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope (1 sample)

The inspectors reviewed operator emergency classification and notification completed during requalification training on June 21, 2007 (See Section 1R11). The inspectors evaluated the results against Seabrook's Emergency Response Manual 1.1, "Classification of Emergencies" and Nuclear Energy Institute (NEI) 99-02.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

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

a. Inspection Scope (10 samples)

During the period from June 4 through 21, 2007, the inspectors conducted the following activities to verify that Seabrook implemented their REMP in compliance with the TS 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. The inspectors verified radiological surveys and controls were adequate to prevent inadvertent release of radioactive material into the public domain. Implementation of these controls was reviewed against the criteria contained in 10 CFR Parts 20 and 50, Seabrook's TS, and relevant plant procedures.

REMP Inspections

- The inspectors evaluated the material condition and functionality of eight air particulate/iodine sampling stations located at ODCM map locations: AP/CF-01, 02, 03, 04, 05, 07, 08 and 09.
- The inspectors evaluated the material condition of 12 environmental dosimeters located at ODCM map locations: TL-01, 02, 03, 14, 15, 16, 17, 18, 19, 20, 30 and 35.
- The inspectors toured four milk collection stations at ODCM map locations: TM-09, 15, 20 and 24.
- The inspectors reviewed the calibration's records for the environmental air particulate/iodine samplers.
- The inspectors reviewed Seabrook's procedures for collecting air and milk samples.
- The inspectors reviewed the results of the annual (2006) land use census to determine if the 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 the meteorological instruments were operable, calibrated, and properly maintained. The inspectors compared local instrument readings of wind speed and direction with the indications provided in the control room.
- The inspectors reviewed the event documentation for lost environmental dosimeters, inoperable samplers and missed samples for causes and adequate corrective actions.

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

The inspectors observed a health physics technician performing a free release survey on equipment being released from the RCA. The inspectors observed the frisking and surveying of the equipment to be released. The inspectors also verified the survey instrument was calibrated, source checked, and appropriate for the type of survey being performed. The inspectors also reviewed Seabrook's procedure for releasing equipment from the RCA.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope (2 samples)

The inspectors sampled Seabrook submittals for the performance indicators (PIs) listed below for the period from April 2006 through May 2007. To verify the accuracy of the PI data reported during that period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Indicator Guideline," Rev. 5 were used to verify the basis in reporting for each data element.

Barrier Integrity Cornerstone

- RCS Activity
- RCS Leakage

The inspectors reviewed the RCS leak rate data as part of daily monitoring of plant status. The inspectors reviewed the determination of an RCS leak rate on June 14, 2007, per OX1401.02, "RCS Steady State Leak Rate Calculation," Revision 6 during a low level condition on the reactor coolant drain tank. The inspectors reviewed the results of an RCS sample for iodine analysis performed on May 21, 2007, per chemistry procedure CS 0910.01, "Primary System Sampling at SS-CP-166A." The inspectors also compared the analysis results of the sample performed by the chemistry department per procedure, CX 0901.02, "Determination of Dose Equivalent I-131," to the TS limits and previously reported RCS activity performance indicator data.

The inspectors reviewed plant records such as LERs, operating logs, procedures, and interviewed applicable Seabrook personnel to verify the accuracy and completeness of Seabrook's PI data.

4OA2 Identification and Resolution of Problems (71152)

.1 Review of Items Entered into the CAP

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 Seabrook's CAP. In accordance with the baseline inspection modules, the inspectors also selected CAP items across the initiating events, mitigating systems, barrier integrity, emergency preparedness, and public radiation safety cornerstones for additional follow-up and review. This review was accomplished by accessing Seabrook's computerized database.

b. Findings

No findings of significance were identified.

.2 Semi-Annual Review to Identify Trends

a. Inspection Scope (1 sample)

As required by Inspection Procedure 71152, "Problem Identification and Resolution," the inspectors performed a review of Seabrook's CAP and associated documents to identify trends that may indicate existence of safety significant issues. The inspectors' review was focused on repetitive equipment and corrective maintenance issues, but also considered the results of daily CAP item screening. The inspectors compared and contrasted their results with the results contained in the Seabrook fourth quarter 2006 and the first and second quarter 2007 CAP Quarterly Trend Reports.

b. Findings

No findings of significance were identified. The inspectors did not identify any appreciable trends that Seabrook had not already identified.

.3 Annual Sample: Operator Workarounds

a. Inspection Scope (1 sample)

The inspectors completed an in-depth review of operator workarounds at the Seabrook Station. The inspectors reviewed Seabrook's current listing of operator workarounds and operator burdens to determine whether the cumulative impact of the workarounds adversely impacted operator ability to implement emergency procedures or respond to plant transients. The inspectors examined NAP-402, "Conduct of Operations," Attachment K, "Operator Workarounds and Burdens," Revision 3, to verify that this procedure provided the necessary guidance to adequately address the cumulative affect the workarounds had on operation, reliability, and availability of systems. Items were

verified to be properly tracked and scheduled for resolution based on the priority and impact on the plant. The inspectors reviewed current shift-turnover information and toured the plant with various Operations department personnel to identify equipment issues requiring intervention, particularly during transient plant responses that may not be tracked as a workaround or burden. The inspectors reviewed selected CRs and self-assessment nos. 06-0145 and 06-0198 as well as the listing of closed workarounds and burdens. The inspectors reviewed Seabrook's actions to address deficiencies in the CAP, including the issues described in CRs 07-08760 and 07-08761.

b. Assessment and Observations

No findings of significance were identified.

.5 Annual Sample: Primary and Secondary Relief valve Failures

a. Inspection Scope (1 sample)

This inspectors reviewed the primary relief valve testing history to verify that the testing and frequency of testing were in accordance with the American Society of Mechanical Engineers Code for the Operation and Maintenance of Nuclear Power Plants. The inspectors reviewed program health reports and CRs and interviewed the relief valve engineer. The inspectors also verified that the required additional valve testing was conducted for each valve that failed the as-found set-pressure test and that Seabrook evaluated the failures and initiated appropriate corrective action to address generic concerns. Documents reviewed are listed in the Attachment.

b. Assessment and Observations

No findings of significance were identified. The inspectors noted that relief valve serial number N56904-00-0047, installed as RC-V-24, failed when set-pressure tested the last two times it had been in service. The valve failed the as-found set-pressure test when removed from service in refueling outage OR07. The valve was reset and re-installed in OR09 and failed again when tested in OR10. No corrective action was taken to determine if this valve was defective. Seabrook initiated WO 0714782 to disassemble and rebuild valve serial number N56904-00-0047 in order to address this issue. The inspectors determined that three of the eight relief valve failures in OR11 were on a 1-1/2-DB-10F style valve. There was no documentation of a review of the failures of this style valve. Seabrook initiated CR 07-06223 to address this issue. Additionally, the inspectors noted that four of the eight relief valve set-pressure failures in OR11 were more than 10% from their set-pressure. FPL evaluated the potential impact that the as-found lift pressure of the relief valves would have on their respective systems and concluded that there was no safety concern. However, FPL did not identify and

evaluate the cause of the relief valve set-pressure test failures to determine if the valves were appropriate for their application. Seabrook initiated CR 07-06226 to address this issue and to develop a process to ensure consistent evaluation of relief valve set-pressure test failures.

4OA3 Event Followup (71153)

.1 (Closed) LER 05000443/2007001, Noncompliance with the Requirements of TS 3.6.3 (1 sample)

On February 14, 2007, Seabrook identified a failure to comply with the actions of the TS LCO 3.6.3, Containment Isolation Valves. Specifically, preventive maintenance activities resulted in opening the breaker that provided power to a containment isolation valve. With the valve de-energized the automatic isolation function was inoperable and operators did not complete the TS action to ensure that the containment penetration was isolated by another closed and deactivated valve. The inspectors reviewed the root cause and corrective actions in CR 07-02525 (See Section 1R15). Although extensive corrective actions were required, the inspectors determined the risk significance of the issue was minor because: the inside containment isolation remained operable and capable of isolating the line, and the inoperable valve was either closed or functionally available to close at all times. The failure to comply with TS LCO 3.6.3 constituted a violation of minor significance that was not subject to enforcement action in accordance with Section IV of the NRC's enforcement policy. The inspectors reviewed the accuracy of the LER 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. This LER is closed.

4OA6 Meetings, including Exit

The inspectors presented the inspection results to Mr. D. Berko and other members of Seabrook management on July 12, 2007. Seabrook acknowledged that no proprietary information was involved.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

R. Arn, EDG System Engineer
J. Dolan, Senior Nuclear Analyst
P. Brangiel, I&C System engineer
T. Duval, Control Room Operator
C. Egeland, I&C Technician
P. Freeman, Engineering Director
E. Gregg, I&C Technician
M. Kiley, Station Director
M. Makowicz, Plant Engineering Manager
M. McCarthy, Nuclear Systems Operator
M. O'Keefe, Regulatory Compliance Supervisor
E. Metcalf, Operations Manager
S. Samstag, Operations Work Control Supervisor
D. Sherwin, Maintenance Manager
G. St. Pierre, Site Vice President
J. Tucker, Security Manager
T. Couture, Relief Valve Engineer

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed:

05000443/2007001 LER Noncompliance with the Requirements of TS 3.6.3.
(Section 4OA3.1)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

ON1046.70, "Generator Step Up Transformer Auxiliaries Operation," Revision 0
ON1490.09, "Summer Readiness Surveillance," Revision 1, Change 01,
ON1490.10, "Operational Status Check of Station Ventilation/Cooling Systems," Revision 1.
Station Operating Journal (operator logs), and
Updated Final Safety Analysis Report Sections 2.3 and 9.4
Condition Reports 07-08491, 07-08665, 07-08648, 07-08615

Section 1R04: Equipment Alignment

OS1005.05, "Safety Injection System Operation," Revision 10
OX1426.18, "Aligning DG 1A Controls For Auto Start," Revision 3
OS1026.05, "Operating the DG 1A Fuel Oil System," Revision 11
OS1026.06, "Operating the DG 1A Air Intake, Exhaust and Vacuum System," Revision 8
Drawings 1-SI-B20446, B20447

WO0641660

UFSAR Sect 6.8

UFSAR Section 9.2.6

OX1436.03, "Electric EFW Pump Quarterly 18 month/30 days Cold Shutdown and Comprehensive Pump Tests and Monthly Valve Verification Surveillance," Revision 9
OX1436.02, "Turbine Driven Emergency Feedwater Pump Quarterly and Monthly Valve Alignment," Revision 9

OS1036.01, "Aligning the Emergency Feedwater System for Automatic Operation," Revision 8

OS1023.65, "Emergency Feedwater Building Ventilation System Operation," Revision 9

PID 1-FW-B20688, "Emergency Feedwater System Details," Revision 18

PID 1-MS-B20582, "Main Steam System Emergency feedwater Pump Supply Detail," Revision 19

Condition Reports 07-04990, 06-13781, 06-11038, 05-08907, 07-08277

Section 1R05: Fire Protection

Prefire Strategies for Zones CB-F-3A-A, DG-F-2A-A, DG-F-2B-A

Section 1R06: Flood Protection Measures

Seabrook Station Moderate Energy Line Break Study, Revision 5

Drawing CB-F-1B-A, Control Building Switchgear Rooms Elevation 21'-6"

Section 1R11: Licensed Operator Regualification

Simulator Demonstration Examination !16, Revision 9

Form ER 2.0B, Seabrook Station State Notification Fact Sheet, Revision 30

Form NT-5701, Simulator Evaluation Sheets, Revision 23

Procedure NT-5701, Seabrook Nuclear Training Group Department Instruction, Revision 23

Emergency Response Manual ER 1.1, Classification of Emergencies, Revision 43

Section 1R12: Maintenance Rule Implementation

Seabrook Station Program Health Report 4/12/07

System Health Report Control Building Air Handling

System Health Report Supplemental Emergency Power System

System Health report Emergency Feedwater System

Condition Report 07-04218, 07-03117, 07-02249, 07-01764, 07-01442, 07-01239, 07-00865, 07-00236, 06-15356, 06-13781, 06-11038, 06-07021, 06-00058, 05-15137, 05-14503, 05-08709, 05-00183, 05-00082, 04-01607

Work Order 0500935, 0626940, 0543701, 0541249, 0545123, 0526286, 0537948,

Section 1R19: Post Maintenance Testing

WOs 0630338, 0603063, 0603060, 0603065, 0603059, 0630347, 0616908, 0628537, 0603691, 0603681, 0603697, 0603698, 0603699, 0603700, 0630465, 0624193, 0626602, 0618987, 0545439, 0608444, 0618988, 0619059, 0619060, 0621423, 0635905, 0700325, 0628534, 0628542, 0643448, 0702203, 0709504, 0719546

OX1416.04, "Service Water Quarterly Pump and Discharge Valve Test and Comprehensive Pump Test." Revision 9.

OX1416.10, "Service Water Quarterly Valve Test." Revision 4.

Condition Reports 200705090 and 200708277

Section 1R22: Surveillance Testing

OX1436.02, "Turbine Driven Emergency Feedwater Pump Quarterly And Monthly Valve Alignment," Revision 9
 WO 0637040, WO 0624556, WO 0609199, WO 0637594, WO 0637546
 Work Order 0644843
 Procedure IX1668.344, Rev 5, "SI-P-934 Containment Pressure Protection Channel IV Operational Test"
 TS Table 4.3-2 (Item 1.c)
 TS Table 1.1
 TS Definition "Analog Channel Operational Test"
 UFSAR Sections 6.2.1, 6.2.4, 7.3.1, 7.3.2

Section 1R23: Temporary Modifications

Maintenance Manual, MA 4.3A, "Temporary Modifications and Temporary Alterations," Rev. 16
 Temporary Modification package 07TMOD007
 WO 0712051

Section 4OA1: Performance Indicator Verification

Operations Technical Specifications and Commitment Log, Mode 1, Revision 109
 ODI.63, "Operations Department Instruction KPI Maintenance Instruction," Revision 7
 ODI. 63A Form 7.1, Performance Indicator Approval Form, Revision 9
 Station Operations Log
 OX1401.02, RCS Steady State Leak Rate Calculation, Revision 6
 Condition Report 200708030
 Technical Specifications 3.4.6.1, 4.6.2 and 4.4.6.2.1
 Operations Action Tracking number ITS-07-0016 dated 6/14/2007
 Memorandum LIC-07014, Documentation Supporting the Seabrook Station NRC 1st Quarter 2007 Performance Indicator Submittal, dated 4/17/07

Section 4OA2: Identification and Resolution of Problems

NAP-402, "Conduct of Operations", Attachment K, Rev 3
 ODI.63, Rev 10, "Operations Department KPI Maintenance Instruction"
 CRs 07-07076, 07-04973, 07-04895, 07-03897, 07-03548, 07-03392, 07-02762, 07-01889, 07-00203, 06-14696, 06-11195, 06-10944, 06-10942, 06-09598, 06-08392, 06-06558, 06-04796, 06-03306, 06-03061, 06-02241, 06-01682, 06-01679, 06-00672, 06-00384, 06-00135 and 06-00104, 01-11133, 01-11140, 02-04768, 03-00908, 03-11143, 06-15209, 07-01111, 07-02990, 07-07219, 04-03521, 05-04555, 05-04686, 05-04812, 05-05743, 05-07105, 05-07476, 06-03964, 06-09835, 06-11658, 06-12060, 06-12537, 06-12572, 06-12616, 06-12704, 06-12880, 06-14647, 06-15178, 06-15268, 07-06223*, 07-06226*

* Indicates this was generated as a result of this inspection.

Procedures

ES1850.011, Relief/Safety Valve Testing Program, Revision 1

Work Orders

0404794	0444047	0613741	0714782
0444045	0526395	0613742	

Miscellaneous

Program Health Report Relief Valve Program Second Quarter 2005
Program Health Report Inservice Test Program First Quarter 2007
Relief Valve Test History Spreadsheets

LIST OF ACRONYMS

ADAMS	Agency-wide Documents Access and Management System
CR	Condition Report
DRU	Digital Reference Unit
EDG	Emergency Diesel Generator
EFW	Emergency Feedwater
FLP	Florida Power & Light Energy
I&C	Instrumentation & Control
LER	Licensee Event Report
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
NUMARC	Nuclear Management & Resources Council
ODCM	Offsite Dose Calculation Manual
PI	Performance Indicators
PMT	Post Maintenance Testing
RCA	Radiologically Controlled Area
RCS	Reactor Coolant System
REMP	Radiological Environmental Monitoring Program
RHR	Residual Heat Removal
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report
WO	Work Order