



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION I
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KING OF PRUSSIA, PA 19406-1415

May 13, 2008

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 1 - NRC INTEGRATED INSPECTION REPORT
05000443/2008002

Dear Mr. St. Pierre:

On March 31, 2008, the U. S. Nuclear Regulatory Commission (NRC) completed its routine integrated quarterly inspection at the Seabrook Station. The enclosed report documents the results of this inspection as discussed on April 3, 2008, with you and other members of your staff. The report also includes documentation for inspection activities related to independent spent fuel storage installation dry run activities conducted at TriVis, Inc. in Pelham, Alabama. The results of this inspection were discussed with Mr. D. Berko and other members of your staff via telephone on January 17, 2008.

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

On the basis of the results of these inspections, 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. 05000443/2008002
w/ Attachment: Supplemental Information

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Mr. G. St. Pierre

3

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Sincerely,
Arthur Burritt, Chief /RA/
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U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-443

License No.: NPF-86

Report No.: 05000443/2008002

Licensee: FPL Energy Seabrook, LLC (FPLE)

Facility: Seabrook Station, Unit 1

Location: Seabrook, New Hampshire 03874

Dates: January 1, 2008, through March 31, 2008

Inspectors: William Raymond, Senior Resident Inspector
B. Smith, (Acting) Resident Inspector
P. Presby (Acting) Resident Inspector
R. Moore, Project Engineer
T. Moslak, Health Physicist
H. Gray, Senior Reactor Inspector

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

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SUMMARY OF FINDINGS

IR 05000443/2008002; 01/01/2008 - 03/31/2008; Seabrook Station, Unit 1; Routine Integrated Report.

The report covered a three-month period of inspection by resident inspectors and announced inspections by regional specialist inspectors. The report also includes documentation for inspection activities related to independent spent fuel storage installation dry run activities conducted at the TriVis, Inc. plant in Pelham, Alabama between December 17 and 21, 2007. The results of the inspection are documented in Section 4OA5. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Seabrook Unit 1 (Seabrook) operated at full power from the beginning of the period until January 19 when an electrical fault in the 345 kV switchyard resulted in a turbine trip and reactor trip. On February 1, following repairs to the "C" phase of 345 kV disconnect switch 1101, the plant was restored to full power operation. FPLE reduced plant load to 50% on February 3 to repair leakage in the control oil system for the A main feedwater pump. The plant was returned to 100 percent power on February 5 and remained at full power until FPLE began a controlled shutdown on March 31 to begin refueling outage OR12.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 - 1 sample)a. Inspection Scope

The inspectors completed one seasonal adverse weather preparation inspection sample. The inspectors reviewed the protection of risk significant systems from the effects of adverse weather during periods of winter storms and cold weather in January and February 2008. The inspectors reviewed corrective actions for identified problems, examined the extent of condition reviews, and conducted walkdowns. The inspection included walkdowns of plant areas including the 345 kV electrical system, emergency feedwater system, the service water system and portions of the condensate system.

The inspectors reviewed the updated final safety analysis report (UFSAR) regarding design features, and verified the adequacy of the station procedures relative to cold weather protection. The inspectors reviewed deficiencies related to adverse and cold weather and verified the issues were entered into the corrective action program. The references used for this review are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04 - 4 samples, 71111.04S - 1 sample).1 Partial System Walkdowna. Inspection Scope

The inspectors completed four partial system walkdown inspection samples. The inspectors performed walkdowns of the plant systems listed below. The inspectors verified that valves, switches, and breakers were correctly aligned in accordance with Seabrook procedures and that discrepancies that could affect operability were identified. The inspectors reviewed applicable piping and instrumentation drawings and operational

lineup procedures for each system. The references used for this review are listed in the Attachment.

- 'A' emergency diesel generator EDG during maintenance on 'B' EDG on January 9.
- The electrical distribution system following the 345 KV system electrical fault on January 21 to 25.
- 'B' RHR Train with of the normal offsite power sources out of service during plant operation in Mode 5 on January 27.
- The EFW system following testing of the motor-driven EFW pump FW-P-37B on May 18 to 19.

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown

a. Inspection Scope

The inspectors completed one complete system walkdown inspection sample on the service water system. The inspectors walked down the accessible portions of the system to verify the system's overall material condition; that valves were correctly positioned; that electrical power was available; that major system components were properly labeled; that hangers and supports were correctly installed and functional; and that ancillary equipment or debris did not interfere with system performance. The inspectors reviewed plant procedures, system drawings, the UFSAR, and the technical specifications (TS). Other references used for this review are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q - 6 samples)

.1 Quarterly Review of Fire Areas

a. Inspection Scope

The inspectors completed six quarterly fire protection inspection samples. The inspectors examined the areas of the plant listed below to assess: the control of transient combustibles and ignition sources; the operational status and material condition of the fire detection, fire suppression, and manual fire fighting equipment; the material condition of the passive fire protection features; and the compensatory measures for out-of-service or degraded fire protection equipment. The inspectors verified that the fire areas were maintained in accordance with applicable portions of Fire Protection Pre-Fire Strategies and Fire Hazard Analysis. The references used for this review are listed in the Attachment.

- 'A' emergency diesel generator EDG fuel oil day tank area.

- 'A' EDG fuel oil tank room.
- 'B' EDG fuel oil day tank area.
- 'B' EDG oil tank room.
- Charging pump cubicles.
- Primary component cooling water pump area.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06 - 1 sample)

a. Inspection Scope

The inspectors performed one flood protection inspection sample. The inspectors reviewed the flood protection measures designed to protect the primary auxiliary building 7 ft elevation and adjoining areas from a postulated line break. This review was performed to evaluate protection for safety-related systems from internal flooding conditions with a focus on the flood barriers for the charging pumps. The inspectors compared the as-found equipment and conditions with design basis documents to verify that they were consistent. The references used for this review are listed in the Attachment.

b. Findings

No findings of significance were identified

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

.1 Quarterly Resident Inspector Review

a. Inspection Scope

On March 10 the inspectors observed the conduct of licensed operators during a simulator training session. The inspectors reviewed the simulator's physical fidelity to verify similarities between the Seabrook control room and the simulator. The inspectors examined operators' ability to perform actions associated with high-risk activities, the Emergency Plan, previous lessons learned items, and the correct use and implementation of procedures. The inspectors observed the training evaluator's critique of operator performance and verified that deficiencies were adequately identified, discussed, and entered into the corrective action program, as needed. The references used for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified

1R12 Maintenance Effectiveness (71111.12Q - 2 samples)

a. Inspection Scope

The inspectors completed two maintenance effectiveness inspection samples. The inspectors reviewed FPLE's handling of four maintenance rule functional failures that affected the off-site power supply from the 345 kV switchyard and overall residual heat removal system performance. The inspectors assessed the effectiveness of maintenance based on a review of deficiencies identified in the corrective action program. Specifically, the inspectors assessed: the application for MR scoping and MR reliability/availability performance criteria; the corrective actions for deficient conditions; the extent-of-condition reviews for common cause issues; and the contribution of deficient work controls or work practices to any degraded conditions. The inspectors examined maintenance rule functional failure (MRFF) evaluations using the guidance in NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Rev. 2, and design basis information contained in the Seabrook UFSAR and TS. Other references used 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 - 6 samples)

a. Inspection Scope

The inspectors reviewed the scheduling and control of six emergent work activities. 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 using 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 maintenance items:

- 5B containment enclosure cooling fan repair (WO 08057230);
- 345 kV Bus 3 fault and disconnect 1101 repair (WO 0803589);
- 345 kV disconnect 6303 potential discharge (WO 0806453);
- 4 kV Bus 3 failure to fast transfer investigation (WO 0803586);
- 4 kV Bus 3 undervoltage transfer scheme permissive (WO 0803869); and
- 'A' main feedwater pump emergency lubricating pump oil leak (WO 0805308).

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15 - 4 samples)

a. Inspection Scope

The inspectors reviewed operability evaluations and/or condition reports 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, when 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 and interviewed personnel for the items listed below. Documents reviewed for this inspection are listed in the Attachment.

- CR08-0072 that evaluated the RHR heat exchanger valve RH-HCV-607
- CR08-00138 that evaluated the main steam pressure transmitter MS-PI-3052
- CR 08-00864 that evaluated the performance of the EFW system during the plant shutdown on January 19, 2008
- CR 08-03352 that evaluated welds on the Seabrook pressurizer based on indications identified on the decommissioned St. Lucie pressurizer. The inspectors reviewed FPLE actions to follow the industry operating experience. The inspectors also independently verified the FPLE actions described in its letter to the NRC dated February 21, 2007, and the NRC confirmatory action letter dated March 12, 2007. The review considered the present and historical measurements of reactor coolant system leak rates, containment radiation monitor trends, boric acid inspection results, containment walkdowns and the pressurizer inspection results when the plant was shutdown in January 2008, and the inspection of containment fan filters. The review included the assistance from NRC technical staff in Region I and NRR.

b. Findings

No findings of significance were identified.

1R18 Plant Modifications (71111.18 - 2 samples)

.1 Temporary Modification - 4 kV Bus Transfer Scheme

a. Inspection Scope

The inspectors completed one temporary modification inspection sample. The inspectors reviewed design change 08MMOD021, "4 kV bus 3 and 4 Time Delay Relay 62B Setpoint Change." This modification enhanced the permissive for the bus undervoltage transfer scheme by increasing the time delay from 1.2 seconds to 2.0 seconds. The inspectors reviewed the impact of the modification on plant systems and operation. The inspectors also interviewed engineers and plant staff. The inspectors reviewed the safety evaluation screening for the modification per the requirements of 10 CFR 50.59. The inspectors reviewed procedures and drawings to verify compliance with the design documents and reviewed post modification testing to verify that the 4 kV system met all design requirements. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

.2 Permanent Modification - RWST Level Measurement

a. Inspection Scope

The inspectors completed one permanent modification inspection sample. The inspectors reviewed the design changes associated with pressure and temperature compensation of level indication for the radioactive water storage tank (RWST) and the spray additive tank (SAT). Modification 07MSE059 installed a temperature compensation algorithm on the main plant computer system and Modification 07MSE144 installed tubing from the low pressure ports on the RWST and SAT level transmitters to the tank farm room. The inspectors reviewed the modifications made to the existing structures; interviewed engineers and project staff; walked down tubing installation and reviewed the safety evaluation screening for the modification that was completed per the requirements of 10 CFR 50.59. The inspectors also reviewed the post modification testing results to verify that the systems met design requirements. Documents reviewed during this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19 - 5 samples)

a. Inspection Scope

The inspectors completed five post-maintenance testing (PMT) inspection samples. The inspectors reviewed the PMT activities to ensure that the PMT was appropriate for the scope of the maintenance completed and in accordance with 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 inspectors reviewed the PMT for the following maintenance activities:

- 345kv bus 3 repair (WO 0803589);
- 4kv bus 3 transfer failure & repair (WO 0803586);
- 4kv bus 3 time delay setpoint change (WO 0803869);
- 'D' primary component cooling water (PCCW) pump (WO0721516); and
- 'B' EDG air valve V224B (WO 0739261).

b. Findings

No findings of significance were identified.

1R20 Outage Activities (71111.20 - 1 Sample)

.1 Forced Outage - 345 KV Switchyard and Feedwater System Repairs

a. Inspection Scope

The inspectors completed one outage activities inspection sample. The inspectors observed and reviewed the following activities during the Seabrook forced outage from January 19 to February 1, 2008: plant shutdown; plant startup; the approach to reactor criticality; placing the turbine generator on the grid and power ascension to rated thermal power. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

2. Review of Preparations for Refueling Outage OR12

a. Inspection Scope

The inspectors reviewed the outage risk assessment for the twelfth refueling outage scheduled for April 2008 provided in Engineering Evaluation EE-08-004. The inspectors reviewed the planned activities and evaluated FPLE's ability to assess and manage outage risk. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22 - 6 samples)

a. Inspection Scope

The inspectors completed six surveillance testing inspection samples. The inspectors observed portions of the surveillance testing activities listed below to verify that systems and components were capable of performing their intended safety function and to ensure compliance with TS and applicable surveillance and operating procedures. The inspectors attended selected pre-evolution briefings; performed system and control room walkdowns; observed operator and technician performance during the testing evolution; reviewed system parameters; and interviewed applicable system engineers and field operators. The inspectors compared recorded test data to procedure requirements and prior test results to identify adverse trends. The inspectors also reviewed deficiencies related to the surveillance testing program and verified that identified issues were entered into the corrective action program. Documents reviewed for this inspection are listed in the Attachment. The following surveillance procedures were reviewed:

- OX1401.04, "RCS Leak Rate Calculation," performed on January 28;
- IX1605.013, "VG-FV-1712 IST SOV Response Test," performed on January 17;
- IX1680.922, "Solid State Protection System (SSPS) Train B Actuation Logic Test," performed on February 5;
- RX1704, "Moderator Temperature Coefficient Surveillance," performed on February 15 and 16;
- OX1456.50, "Train B ESFAS Slave Relay K616 Quarterly Block/Go Test," performed on February 26; and

- OX1456.01, "Charging Pump B Quarterly Flow and Valve Stroke Test," performed on February 26.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06 - 2 samples)

1. Emergency Preparedness Drill

a. Inspection Scope

On February 13, 2008, the inspectors observed portions of combined function drill 08-01 to evaluate the conduct of the drill and adequacy of Seabrook's post-drill critique. The inspectors verified that event classifications and notifications were properly conducted in accordance with NEI 99-02, "Regulatory Assessment Indicator Guideline," Revision 5. The inspectors observed activities in emergency operations and technical support centers to ensure that priorities were appropriately identified and communicated. The inspectors also verified that identified problems were entered into the corrective action program through observation of the critique, interviews of applicable drill participants, and review of condition reports initiated. The references used for this review are listed in the Attachment.

b. Findings

No findings of significance were identified.

2. Licensed Operator Requalification Training

a. Inspection Scope

The inspectors reviewed operator emergency classifications and notifications completed during a simulator training session on March 10, 2008 (See Section 1R11). The inspectors evaluated the results against Seabrook's Emergency Response Manual 1.1, "Classification of Emergencies," Revision 43 and NEI 99-02, "Regulatory Assessment Indicator Guideline," Revision 5.

b. Findings

No findings of significance were identified.

2. **RADIATION SAFETY**

Cornerstone: Occupational Radiation Safety

2OS1 Access to Radiological Significant Areas (71121.01 - 11 samples)

a. Inspection Scope

During the period of January 14 to 17, 2008, the inspectors conducted the following activities to verify that FPLE was properly implementing physical, administrative, and engineering controls for access to locked high radiation, and other radiological controlled areas (RCA) during normal power operations, and that workers were adhering to the controls when working in these areas. Implementation of these controls was reviewed against the criteria contained in 10 CFR 20, TS, and FPLE procedures. This activity represents the completion of 11 samples relative to this inspection area. This partially completes the annual inspection requirement of 21 samples.

Plant Walkdown and RWP Reviews

- (1) The inspectors toured accessible radiological controlled areas and, with the assistance of a radiation protection technician, performed independent radiation surveys of selected areas and components, to confirm the accuracy of survey data, and the adequacy of postings. Surveys were conducted in the primary auxiliary building (PAB), waste processing building (WPB), residual heat removal vaults, and fuel storage building.
- (2) The inspectors identified plant areas where radiological significant work activities were in progress. These activities included moving a spent resin liner into a shipping cask located in the fuel storage building. The inspectors reviewed the applicable RWP for this activity, RWP 08-053-1, and the electronic dosimeter dose/dose rate alarm setpoints to verify that radiological controls were acceptable and that setpoints were consistent with plant policy.
- (3) There were no current radiation work permits for airborne radioactivity areas with the potential for individual worker internal exposures of > 50 mrem.
- (4) During 2007, there were no internal dose assessments for actual internal exposures that reached the reporting threshold of greater than 10 mrem committed effective dose equivalent (CEDE). The inspectors reviewed data for the five highest exposed individuals for 2007 and the dose/dose rate alarm reports for 2007 to verify that no exposure exceeded site administrative, regulatory, or performance indicator criteria. Additionally, the inspectors confirmed that no declared pregnant workers were employed during 2007.

Problem Identification and Resolution

- (5) A review of nuclear oversight assessment reports and daily quality summary reports verified that problems related to implementing radiological controls were entered into the corrective action program for resolution.
- (6) Thirteen condition reports, associated with radiation protection control access, initiated between January 2007 and January 2008, were reviewed and discussed with FPLE staff to verify that follow-up activities were conducted in an effective and timely manner, commensurate with their safety significance.

High Radiation Area and Very High Radiation Area Controls

- (7) Procedures for controlling access to high radiation areas (HRA) and very high radiation

areas (VHRA) were reviewed to verify the adequacy of administrative and physical controls. Included in the review was Health Physics Study/Technical Information Document (HPSTID) 97-001, "Interpretation of Floor Plugs as being Locked."

- (8) Keys to locked high radiation areas (LHRA), stored at the Control Point and in the Control Room, were inventoried and accessible LHRAs were verified to be properly secured and posted during plant tours.
- (9) With the assistance of a RadWaste Engineer, the inspectors walked down recent plant modifications designed for the long term storage of Class B and C waste. The inspectors confirmed that access to these materials was adequately controlled and that there was no reduction in radiological controls for handling and storing containerized radwaste.

Radiation Worker and Radiation Protection Technician Performance

- (10) The inspectors reviewed several radiological related condition reports where the cause of the event was due to radiation worker errors. The inspectors verified that if there was an observable pattern traceable to a similar cause for these events, FPLE had identified actions appropriate for resolving the issues.
- (11) Radiation protection technicians and radworkers were interviewed regarding their knowledge of plant radiological conditions and associated controls.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02 - 8 samples)

a. Inspection Scope

During the period of January 14 to 17, 2008, the inspectors conducted the following activities to verify that FPLE was properly implementing operational, engineering, and administrative controls to maintain personnel exposure as low as is reasonably achievable (ALARA) for past activities performed during the 2007. The inspectors also reviewed the dose controls for current activities and preparations for the spring 2008 refueling outage. Implementation of these controls was reviewed against the criteria contained in 10 CFR 20, applicable industry standards, and FPLE's procedures.

Radiological Work Planning

- (1) The inspectors reviewed pertinent information regarding cumulative exposure history, current exposure trends, and ongoing activities to assess past (2007) performance and dose challenges for 2008, including the spring refueling outage (OR12).
- (2) The inspectors reviewed the exposure data for tasks performed during 2007 and compared actual exposure with forecasted estimates. Included in this review were the installations of plant modifications to support the silica reduction project and actions taken to evaluate a steam generator man-way leakage.

- (3) The inspectors evaluated the departmental interfaces between radiation protection, operations, maintenance, and engineering to identify missing ALARA program elements and interface problems. The evaluation was accomplished by reviewing recent radiation safety committee meeting minutes, ALARA evaluations, nuclear assurance department quality summary reports, departmental dose summaries, and interviewing the ALARA coordinator.

The inspectors also reviewed the Radiation Protection Department Continuous Improvement Initiatives and the 5-year ALARA Plan (2007-2011) that identified areas for further radiological controls improvement.

Verification of Dose Estimates

- (4) The inspectors reviewed the assumptions and basis for the annual (2007) site collective exposure projections for routine power operations and plant modifications, and compared the estimated dose with the actual dose received by workers. The inspectors also reviewed the dose projections for the 2008 refueling outage to determine if there were significant deviations from the actual exposures received for various task in past outages.
- (5) The inspectors reviewed FPLE procedures for monitoring and re-evaluating dose estimates when the forecasted cumulative exposure for tasks differed from the actual dose received. The inspector reviewed the dose/dose rate alarm reports and exposure data for selected individuals who received the highest TEDE exposures for 2007 to confirm that no individual exposure exceeded the regulatory limit, or met the performance indicator reporting guideline.

Jobs-In-Progress

- (6) The inspectors reviewed RWP 08-053, the associated procedure HN0960.14, and the dose summary report for transferring a filled spent resin liner into a shipping cask that was performed on January 15, 2008.
- (7) The inspectors reviewed a recent ALARA evaluation (AE) for controlling low dose tasks. This AE addressed installing pipes and electrical supports to spent fuel cooling lines, modifying piping to the RWST, and installing a reverse osmosis system in support of the silica removal project.

Problem Identification and Resolution

- (8) The inspectors reviewed eight condition reports related to controlling individual personnel exposure and programmatic ALARA challenges to verify that problems with the ALARA program were resolved through FPLE's corrective action program.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151 - 4 samples)a. Inspection Scope

The inspectors sampled FPLE submittals for the Initiating Events and Barrier Integrity cornerstone performance indicators (PIs) listed below for the period from January 2007 through December 2007. To verify the accuracy of the PI data reported during that period, the inspectors used the PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Indicator Guideline," Rev. 5.

Initiating Events Cornerstone

- Unplanned Scrams per 7,000 Critical Hours
- Unplanned Scrams with Complications
- Unplanned Power Changes per 7,000 Critical Hours

The inspectors reviewed licensee event reports (LERs), operating logs, procedures, and interviewed applicable personnel to verify the accuracy and completeness of the data. The inspectors also reviewed the accuracy of the number of critical hours reported.

Barrier Integrity Cornerstone

- Reactor Coolant System Leakage

The inspectors reviewed RCS leak rate data as part of their daily monitoring of plant status. The inspectors reviewed the determination of an RCS leak rate on January 28, 2008, per procedure OX1401.02. The inspectors reviewed LERs, operating logs, procedures, and interviewed applicable personnel to verify the accuracy and completeness of the reported data.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152 - 1 sample).1 Routine Condition Report Screeninga. 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 corrective action program. This review was accomplished by accessing FPLE's computerized database.

b. Findings

No findings of significance were identified.

.2 Annual Sample: Station Dewatering Program

a. Inspection Scope

The inspectors reviewed FPLE's actions to address ground water intrusion into plant buildings to ensure they were appropriate. The inspectors walked down plant areas, interviewed the plant engineers, and reviewed actions to address issues in the corrective action program to verify that FPLE was properly identifying and evaluating the effects of ground water intrusion. The review was conducted due to observations of ground water intrusion evident during inspection tours in various plant areas.

b. Findings & Observations

No findings of significance were identified. The inspectors noted that FPLE had taken actions in the past to evaluate and mitigate ground water intrusion. The inspectors reviewed the ground water intrusion history, the actions to monitor plant systems and structures, the evaluations to address the impact on plant structures and systems, the past, current and planned actions to mitigate in-leakage, and the planned actions to address material conditions.

There was a good focus on the issue by engineering and projects personnel to evaluate the impacts on systems, structures and buildings. FPLE's evaluations have shown that ground water has not impacted the operability of plant structures or systems. There was a good practice in progress under the maintenance rule program to periodically inspect plant buildings. The coordination and sharing of information between engineering groups effectively monitored and tracked system conditions. There has been progress based on past plant modifications to minimize in-leakage by reducing the hydraulic pressure on the exterior of plant buildings. Further modifications are planned to reduce in-leakage. There has also been good coordination between engineering and chemistry to monitor and control the effluents from ground water in-leakage.

FPLE had addressed the impacts of ground water intrusion through its corrective action program. The inspectors noted that FPLE had initiated long term monitoring and mitigation plans for the ground water intrusion and that CR-04-02862 and 06-01938 formalized the corrective actions and will track their completion.

4OA3 Event Follow Up (71153 - 3 samples)

.1 345KV System Electrical Fault, Turbine Trip and Reactor Trip

a. Inspection Scope

On January 19, 2008, at 11:02 p.m., an electrical fault occurred on disconnect switch (DS) 1101 in the 345 kV switchyard. The electrical protection scheme operated to clear the fault, which opened 345 kV breakers 11 and 163, and the main generator output breaker. The electrical protection system action resulted in a full load reject followed by an automatic turbine trip and reactor trip. Seabrook electrical loads automatically transferred to the alternate off-site power source as expected, except that non-safety-related 4 kV Bus 3 and the four reactor coolant pumps did not transfer.

The operators implemented the emergency and abnormal operating procedures to stabilize the plant in hot shutdown and to reestablish forced reactor coolant system flow. The main condenser remained available for decay heat removal. The operators used the emergency feedwater (EFW) system to maintain steam generator inventory. The operators reestablished EFW following two isolations on high EFW flow after verifying that no faulted steam generator conditions were present. The operators placed the plant in cold shutdown on January 22, 2008, in accordance with the action statement of TS 3.8.1.1 due to the loss of one of the two offsite AC power sources. DS 1101 was repaired which included replacement of the failed epoxy operating rod inside the switch.

The inspectors observed the operator actions to maintain the plant stable in hot standby, reviewed the operator use of plant normal, abnormal and emergency operating procedures, reviewed post trip evaluations, and examined the corrective actions to address the electrical fault, plant system response and other deficiencies noted during the event. The inspectors verified that all actions were taken in accordance with Seabrook procedures.

The inspectors reviewed FPLEs post trip report and evaluation of the event included as part of CR 08-00894. The event evaluation considered the event cause and extent of condition, and evaluated the plant response, the operator response, the electrical system response, the loss of the reactor coolant pumps for about 1 hour, the operation of a power operated relief valve, and the emergency feedwater isolations on high flow. The inspectors reviewed the bases for FPLE's determination that safety systems functioned as designed, and the plant responded as designed. The inspectors reviewed FPLE's actions to enhance plant system performance. Documents reviewed for this inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

.2 (Closed) LER 05000443/2008001, Plant Trip due to 345KV Bus Fault

This LER was submitted in accordance with 10 CFR 50.73(a)(2)(iv)(A) to report the plant trip on January 19, 2008 (Event Notification EN #43921). NRC review of this event is described in Section 4OA3.1 above. 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. No findings of significance were identified. This LER is closed.

.3 A Main Feedwater Pump Control Oil System Leakage

a. Scope

On February 3, 2008, FPLE reduced Seabrook plant load to 50% power to repair leakage in the control oil system for the A main feedwater pump. Seabrook returned to 100% power on February 5, 2008. The inspectors reviewed applicable procedures, observed control room activities, conducted walkdowns, and interviewed key personnel. The inspectors evaluated the activities against TS requirements, Seabrook procedures,

and other applicable requirements. The references used for this review are listed in the Attachment.

b. Findings

No findings of significance were identified.

4OA5 Other Activities

.1 Independent Spent Fuel Storage Installation (60854.1 – 1 sample)

a. Inspection Scope

During the week of December 17 to 21, 2007, an inspection of portions of the ISFSI dry run work was conducted at TriVis, Inc. The inspectors reviewed welding, non-destructive testing (NDE), dewatering, drying, vacuum, helium gas input, and mechanical cutting of a mockup of the Transnuclear NUHOMS-HD 32PTH Type 1 System (CoC 72-1030). The inspection confirmed the adequacy of procedures, personnel training and qualification and equipment.

For the dry shielded canister (DSC) welding operations, the inspectors observed welding and nondestructive testing (NDE) of the inner top cover, vent & siphon port covers, and the outer top cover including the threaded access opening. A majority of the welding was done with the automatic welding system (AWS) using the gas shielded tungsten electrode (GTAW) process. The use of manual GTAW welding was also demonstrated. The application of visual examination (VT), dye penetrant testing (PT) and helium leak testing nondestructive examination (NDE) methods on the welds was also inspected. A comparison of the welding procedures and NDE procedures to their respective work practices was made. Additionally, the welding procedure documentation, welder performance qualification, and NDE procedures and NDE personnel qualifications were verified against their respective Code and procedural requirements.

For the DSC drying and backfilling operations, the inspectors reviewed the work control package, MMP-116-12, and observed the system valve position changes including communication and verification practices to execute the work control procedural steps. The mockup was drained and vacuum-dried to demonstrate the capability to satisfy NUHOMS CoC 72-1030, TS, and UFSAR Chapter 8 procedural steps.

Inspection was performed on the DSC unloading/lid cutting operations for a welded 32PTH DSC mockup. This included cutting into the outer top cover to access the vent and siphon ports, taking a gas sample, and the reflood process simulation. A tri-tool cutter and the keyway cutter were rigged and installed on the DSC, and the appropriate lid cuts were made and removed in sequence.

The inspectors verified that health physics (HP) practices and controls for expected radiation conditions were employed during the dry run demonstrations. Additionally, the inspectors observed the daily, special pre-job and post job briefings that were held as part of the work control and team building process.

As the ISFSI staff worked thru the process steps of the work packages and applied the

related procedures, opportunities for enhancement were identified and entered into the procedure revision process.

b. Findings

No findings of significance were identified.

.2 Inaccurate Information in Initial Operator License Application

a. Inspection Scope

On January 28, 2008, FPLE notified the NRC that they had determined that inaccurate information was provided to the NRC on an application for a senior reactor operator license submitted in June 2007. FPLE discovered this issue while conducting an internal audit, notified the NRC, and performed a root cause analysis. FPLE determined that the condition was limited to this single inaccurate application. The application was inaccurate because it did not identify a failure to fully meet experience requirements. Prerequisite experience requirements for a degreed plant staff engineer require that the applicant perform for a specified period of time in an accredited engineering position involved in daily activities at the plant. A review of work history revealed that the individual's prior job positions at the station did not fall within the accredited engineering population. The NRC, unaware of the inaccurate information, acted on this license application, examining the individual and granted a senior operating license in July 2007.

Following notification of the NRC on this issue in 2008, inspectors interviewed FPLE personnel, reviewed license program documentation and evaluated the performance and actual work experience of the senior reactor operator. The inspectors concluded there was no immediate safety concern associated with the performance or prior work experience of the senior reactor operator. FPLE entered this issue into the corrective action program as CR 08-01388. This issue is unresolved item pending further NRC review. **(URI 05000443 / 200800201: Inaccurate Information on Initial Operator License Application)**

4OA6 Meetings, including Exit

Exit Meeting Summary

The inspectors presented the independent spent fuel storage installation preliminary inspection results to Mr. Wyatt Jenkins and other personnel from TriVis, TransNuclear and FPLE on December 21, 2007. The formal exit meeting for this inspection was conducted by telephone with Mr. David Berko and other FPLE personnel on January 17, 2008.

The inspectors presented the routine quarterly integrated inspection results to Mr. Gene St. Pierre on April 3, 2008. FPLE acknowledged the findings presented. FPLE did not identify any of the information presented at the exit meeting as proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

FPLE personnel

J. Ball, Maintenance Rule Coordinator
R. Belanger, Design Engineer
D. Berko, Director Plant Support
B. Brown, Plant Engineer
K. Browne, Assistant Operations Manager
J. Burson, Operations Training Instructor
L. Carlsen, Operations Training Instructor
W. Cash, Chemistry Manager
R. Couture, Reactor Engineer
J. Crowley, I&C Superintendent
J. Desmond, Operations Training Instructor
D. Egonis, Plant Engineer
D. Flahardy, Radiation Protection Supervisor
P. Freeman, Engineering Director
M. Hansen, Maintenance Manager
G. Kim, Risk Analyst
E. Metcalf, Operations Manager
J. Kennish, Operations Training Instructor
M. Kiley, Plant Manager
M. Lipman, Plant Technician
D. Master, Plant Engineer
B. McAllister, SW System Engineer
N. McCafferty, Plant Engineering Manager
E. Metcalf, Operations Manager
M. O'Keefe, Regulatory Compliance Supervisor
K. Mahoney, Reactor Engineer
E. Metcalf, Operations Manager
R. Noble, Engineering Manager
J. Peschel, Regulatory Programs Manager
K. Randall, Reactor Engineer
M. Russell, Operations Clerk
D. Sherwin, Maintenance Manager
E. Spader, Training Supervisor
G. St. Pierre, Site Vice President
M. Taylor, Unit Supervisor
K. Thibodeau, Operations Training Instructor
R. Thurlow, Radiation Protection Manager
J. Tucker, Security Manager
J. Varga, Reactor Operator
S. Wellhofer, Site Nurse
R. White, Security Supervisor
K. Wright, Training Manager

Independent Spent Fuel Storage Inspection

Seabrook Personnel:

- # David Berko - Assistant Plant Manager,
- # Brantley Beurger - Dry Fuel Storage Project Manager
- # Brett Plummer - Nuclear Projects,
- *# Gregg Kann, FPLE DFS Project Engineer,
- # Jim Peschel - Reg Programs,
- *# Victoria Robertson, Senior Nuclear Analyst, Regulatory Compliance
- # Phil Woodhams - DFS Procedures

Florida Power and Light Co (FPLE) Personnel:

- *Glenn Adams, ISFSI Licensing,
- *Lucas Bozek, QA Engineer,
- #Don Cecchett - PSL Licensing Engineer, St. Lucie
- *Leonard Church, RSS Project Manager,
- #Alan Fata
- #Gary Hollinger
- *David Kern, Procedures,
- *Wyatt Jenkins, ISFSI Project Manager,
- Christopher Lloyd, Principal QA Engineer

TriVis, Transnuclear (TN) and Others:

- David Burdick, Chemistry, Sherwin Incorporated
- * Jimmy Chapman, Site Project Manager, TransNuclear (TN)
- Gary Elder, President, Leak Test Specialists Inc
- * John Kelley, Operation Manager, TriVis, Inc
- * Shawn Miller VP Nuclear Operations, TriVis, Inc
- * Marvin L. Stoltz, Director, Fuel Loading Services, TN

* Denotes attendance at the exit briefing held on December 21, 2007 at TriVis.

Denotes participation in the exit meeting via phone on January 17, 2008.

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened:

05000443/2008002-01 URI Inaccurate Information on Initial Operator License Application (Section 4OA5)

Opened and Closed

None

Closed:

05000443/2008001 LER Plant Trip due to 345KV Bus Fault (Section 4OA3.2)

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

UFSAR Section 9.4, Air Conditioning, Heating, Cooling And Ventilation Systems
OS1090.09, Station Cold Weather Operations, Revision 00, Change 11
ON1490.06, Freeze Protection Control Surveillance, Revision 4, Change 4
OS1200.03, Severe Weather Conditions, Revision 13
Condition Reports 2008-00593, 00631, 00633, 01330, 01340, 01697, 01702, 01703
Condition Reports 2007-16248, 15832

Section 1R04: Equipment Alignment

Action Tracking Number TS-08-0015
OX1446.01, AC Power Source Weekly Operability Surveillance, Revision 8
UFSAR Chapter 6, Section 6.8; Chapter 7, Section 7.3
UFSAR Section 9.2.1, Station Service Water System, Revision 12
Technical Specification 3.7.4, Service Water System
Drawings 1-SW-B20794 and B20795, Service Water System, Revision 32
Drawing 1-FW-B20688 Emergency Feedwater System Details
OX1426.18, Aligning DG1A For Auto Start, Revision 3
OX1436.02, Turbine Driven Emergency Feedwater Pump Quarterly and Monthly Valve
Alignment
OS1013.04, Residual Heat Removal Train B Startup and Operation, Rev 11, Chg 12
Drawings 1-RH-B20660, 20663

Section 1R05: Fire Protection

Fire Hazards Analysis
UFSAR Section 9.5.1 Fire Protection Systems
Fire Protection Pre-fire Strategies
Areas: DG-F-3C-A, DG-F-3E-A on 51' elevation
DG-F-1A-A on (-)16' elevation
DG-F-3D-A, DG-F-3F-A on 51' elevation
DG-F-1B-A on (-)16' elevation
PAB-F-1C-A, PAB-F-1D-A, PAB-F-1E-A on 7' elevation
PAB-F-2C-Z on 25' elevation

Section 1R06: Flood Protection Measures

Seabrook Station Moderate Energy Line Break Study, Section 12.1.3.4, Revision 8
MA 5.7, Station Barriers, Penetration Seals, and Fire Barrier Wrap, Revision 5
UFSAR Section 3.4.1.2, Plant Dewatering System, Revision 12
UFSAR Section 3.6(B), Postulated Piping Failures in Fluid Systems, Revision 12
DBD-PB-01, Plant Barriers, Revision 1
Seabrook Station Probabilistic Safety Study, Section 9
OS1202.02, Charging System Failure, Revision 10
OS1212.01, PCCW System Malfunction, Revision 10
Condition Reports for 2006-2008

Section 1R11: Licensed Operator Regualification

Simulator Demonstration Exam on 3/10/08

Operations Department Turnover
Shift Reactivity Plan
ER2.0B, Seabrook Station State Notification Fact sheet, Revision 30
E-0, Reactor Trip and Safety Injection, Revision 45
E-2, Faulted Steam Generator Isolation, Revision 24
ES-1.1, SI Termination, Revision 33
Technical Specification 3.8 and 3.3
OS1211.04, Power Range Instrument Failure, Revision 12

Section 1R12: Maintenance Rule Implementation

System Health Reports - Switchyard, RHR System
Seabrook System and Performance Reports
Plant Engineering Guidelines, Maintenance Rule Program Monitoring Activities
SM 7.10, Maintenance Rule Program, Revision 1
PEG-04, Building/Structures Surveillance Inspections, Revision 4
Switchyard System Condition Reports for 2006-2007
Switchyard System Work Orders for 2006-2008
Work Order 0543787
Engineering Evaluation No. 87-006, Corrosion of Concrete Reinforcing Steel due to
Groundwater Inleakage
Condition Reports 97-00199, 98-20445, 99-6903, 99-11987, 00-0420, 00-05008, 00-06608, 00-
10871, 01-06391, 01-10245, 01-10246, 01-10247, 01-10250, 01-10283, 01-10285, 04-
02862, 07-12061

Section 1R15: Operability Evaluations

Work Order 0800021
Condition Reports 08-00894, 08-03352, 08-03297
Technical Specifications 3.4.6.1, 3.4.3, 3.4.10
FPLE letter to NRC dated February 21, 2007
NRC Confirmatory Action Letter dated March 12, 2007
Event Evaluation for CR08-00894, Reactor Trip Following a Fault on 345KV Bus 3
IX1668.216, SI-L-956 Safety Injection Accumulator 9D Level Calibration, Revision 6
NAP-402, Conduct of Operations, Attachment F, RCS Leak Rate Monitoring, Revision 4
OS07-01-02, RCS Leakage Monitoring/Action Commitment, Revision 0
OX1456.81, Operability Testing of IST Valves, Revision 6

Section 1R18: Plant Modifications

OS1006.05, RWST and SFP Silica Cleanup Skid Operation, Rev 00, Chg. 03
07MSE059, Addition of Temperature Compensation to RWST Level Indication and Alarms, Rev.
00, 4/17/04
Calculation C-S-1-57057, RWST Level Loops Instrument Uncertainties, Setpoints and TS
Numerical Values, Rev 00, 1/09/08
07MSE144, "RWST & SAT Level Transmitter Low Pressure Port Vent Tubing Installation", Rev.
00, 4/17/04
CRs 00-03216, 07-04915, 08-01039
08MSE021, 4.16kV Bus-3 and Bus-4 62B Time Delay Relay Setpoint Change, Revision 0
50.59Screen 08-041 for 08MSE021
Drawings 310102 Sheets A38e, A38f, A48e, A48f

Procedure LS0550.09, Agastat Timing Relay Acceptance Testing and Maintenance Program, Revision 3

Section 1R19: Post Maintenance Testing

LS0563.11, Testing of Agastat 125 VDC (7000 Series) TDPU Timing Relays, Revision 1

Section 1R20: Refueling and Outage Activities

OS1000.07, Approach to Critical, Revision 6

Reactor Engineering Operating Recommendation 08-REOR-002, Guidance for January 08 Power Ascension

OS1000.06, Power Decrease, Revision 6

OS1000.04, Plant Cooldown from Hot Standby to Cold Shutdown, Revision 8

Control Room Narrative Logs

RS1735 Form A, Estimated Critical Position Data and Analysis, Revision 4

ON1031.02, Starting and Phasing the Turbine Generator, Revision 6

OS1007.01, Automatic and Manual Rod Control, Revision 7

OS1000.01, Heatup from Cold Shutdown to Hot Standby, Revision 13

OS1000.02, Plant Startup from Hot Standby to Minimum Load, Revision 8

OS1000.05, Power Increase, Revision 6

Condition Reports 200800894, 200801472

Post-Trip Risk Analysis for week starting January 20, 2008

Engineering Evaluation EE08-004, OR12 Shutdown Safety Evaluation (CR 08-00931)

Section 1R22: Surveillance Testing

IX1680.922, Solid State Protection System (SSPS) Train B Actuation Logic Test, Revision 10

OX1456.50, Train B ESFAS Slave Relay K616 Quarterly Block/Go Test, Rev. 07, Chg. 10

OX1456.01, Charging Pump A&B Quarterly Flow and Valve Stroke Test And 18 Month Remote Position Indication Verification Rev. 10, Chg. 24

OX1401.02, RCS Leakage Calculation, Revision 6

Work Order 0739086, Moderator Temperature Coefficient Surveillance (EOL)

RX1704, Moderator Temperature Coefficient Surveillance, Revision 8

EOC12-MCPS Data and MCR

Core Operating Limits Report for Cycle 12

Seabrook Station Cycle 12 Nuclear Design Report

Technical Specifications 3.1.1.3 and 4.1.1.3

Westinghouse Letter NF-NA-07-34, Clarification of EOL MTC Exemption Methodology

WCAP-13749-P-A, Safety Evaluation supporting the Conditional Exemption of the Most Negative Moderator Temperature Coefficient Measurement

Cycle 12 Startup Report

Condition Report 200802744

Technical Specification Table 4.3.1

License Amendment Request 08-01 dated 3/7/08

Technical Specification and Commitments Log Point 33, RCS Leak Rate

CS0910.08, Miscellaneous Primary Side Sampling, Revision 11

NAP-402, Conduct of Operations, Attachment F, RCS Leak Rate Monitoring, Revision 4

Work Orders 0804808, 0714536, 08000126, 08000127

Section 1EP6: Drill Evaluation

Combined Function Drill 08-01 Scenario 2/13/08

RADDOSE-V Version 1.0

Condition Reports 200802277, 200802282, 200802286, 200802311, 200802355, 200802392,
200802407, 200802408, 200802473, 200803439

ER2.0B, Seabrook Station State Notification Fact Sheet dated 3/10/08, Revision 30

Section 20S1: Access Control to Radiologically Significant Areas

Procedures

HD0955.01, Rev 23	Analysis of Smears and Air Samples
HD0958.02, Rev 22	Radiation and Contamination Survey Techniques
HD0958.03, Rev 23	Personnel Survey and Decontamination Techniques
HD0958.04, Rev 28	Posting of Radiological Controlled Areas
HN0958.13, Rev 27	Generation and Control of Radiation Work Permits
HD0958.17, Rev 12	Performance of Routine Radiological Surveys
HD0958.18, Rev 27	Issuance of Dosimetry on the Backshift
HD0958.19, Rev 28	Evaluation of Dosimetry Abnormalities
HN0958.25, Rev 26	High Radiation Area Controls
HD0958.27, REV 23	Dose Assessments for Personnel Contamination
HD0958.30, Rev 23	Inventory and Control of Locked or Very High Radiation Area Keys and Locksets
HD0955.31, Rev 03	Determination of Portable Instrument Response Check Data
HD0958.38, Rev 24	Evaluation of Isotopic Mix
HD0958.39, Rev 30	Multi-Badge Control and Exposure Tracking
HD0958.42, Rev 24	Determination and Control of Dose to an Embryo/Fetus
HD0958.43, Rev 23	Assessing TEDE ALARA for Radiological Respiratory Protection Requirements
HD0958.48, Rev 02	Radiation Protection Job Coverage Using Remote Monitoring
HD0958.49, Rev 01	Response Protocols for Whole Body Counting and Personnel Contamination Monitoring
HD0958.51, Rev 0	Health Physics Issuance of Stop Work Orders
HN0960.14, Rev 01	Requirements for Moving High Dose Rate Containers
HD0961.29, Rev 24	Internal Dosimetry Assessment
HD0992.02, Rev30	Issue and Control of Personnel Monitoring Devices
RP 2.1, Rev 18	General Radiation Worker Instruction and Responsibilities
RP 3.1, Rev 18	Radiological Qualification Requirements
RP 4.1, Rev 19	Requirements for Issuing Personnel Dosimetry
RP 5.1, Rev 16	Annual Occupational Exposure Control and Increased Radiation Exposure Approval
RP 9.1, Rev 21	RCA Access/Egress Requirements
RP 15.1, Rev 18	Job Pre-Planning and Review for Radiation Exposure Control
RP 15.2, Rev 09	ALARA Recommendations

Quality Assurance Reports:

Daily Quality Summary Reports for the period

Radiation Protection/ Process Control/ RadWaste Programs Audit (SBK-06-02)

Condition Reports:

Access Controls: 08-00414, 07-14250, 07-10471, 07-15791, 07-16404, 07-13111, 07-12916, 07-14024, 07-11622, 07-14682, 07-15360, 07-15175, 07-14955

ALARA: 07-07660, 07-12377, 07-14533, 08-00156, 07-16223, 07-16220, 07-16368, 08-00553

Chemistry: 08-00797

ALARA Evaluations: 07-006, spent fuel piping and refueling water storage tank piping modifications to support silica removal project

Radiation Safety Committee Meeting Minutes:

Meeting Nos. 07-05, 07-04, 07-03, 07-02, 07-01

Miscellaneous

Radiation Protection Department Continuous Improvement Initiative, December 2007

5-Year ALARA Plan 2007-2011

Weekly Work Schedule (01/13 - 19/08)

Dry Cask Installation Schedule

Refueling Outage OR-12 ALARA Projects and Dose Projections

Electronic Dosimetry Alarm Report

Section 40A1: Performance Indicator Verification

Documentation Supporting the Seabrook Station Performance Indicator Submittal

NEI 99-02, "Regulator Assessment Performance Indicator Guideline," Revision 4

Station Operating Logs for 2007

Technical Specification and Commitments Log Point 33, RCS Leak Rate

NAP-402, Conduct of Operations, Attachment F, RCS Leak Rate Monitoring, Revision 4

OX1401.02, RCS Leakage Calculation, Revision 6

Seabrook Station Licensee Event Reports

Seabrook Station Power history for Operating Cycle 12

Section 40A2: Identification and Resolution of Problems

UFSAR Section 3.4.1.2, Plant Dewatering System, Revision 12

UFSAR Sections 2.4.13, Ground Water, Revision 12

UFSAR Section 2.5.4.6, Groundwater Conditions, Revision 12

UFSAR Figure 2.5-48, Extent of Excavations

System Health Reports - RHR System

Drawing SKM-020501-1001, RHR Vault Dewatering Port, Revision 3

Drawing 9763-FSK-362, Dewatering – Vertical Pipe Locations, Revision 1

Groundwater In-Leakage Status by Area, February 2008

Dewatering Initiatives and Current Schedule, 3/6/08

Engineering Evaluation 87-006, Corrosion of Concrete Reinforcing Steel due to Groundwater Inleakage, 6/18/87

Altran Technical Report No. 03815-TR-001, Evaluation of Effects of Groundwater Intrusion, 9/26/03

MMR Report No. 62908, Analysis of Debris Particles from Seabrook Station Dewatering System, 6/28/07

MMR Report No. 63209, Analysis of Debris Particles from Seabrook Station Dewatering System, 8/24/07

MMR Report No. 65349, Analysis of Debris Particles from Seabrook Station Dewatering System, 12/14/07

MMR Report No. 62908, Analysis of Debris Particles from Seabrook Station Dewatering System, 6/28/07

MMR Report No. 65642, Analysis of Residue Collected from RHR Vault stairwells, 1/10/08
Condition Reports for 2005 - 2007

Condition Reports 200402862, 200715540

Section 4OA3: Event Follow-up

Event Evaluation for CR 08-00894, Reactor Trip Following Fault on 345 KV Bus 3 ON1231.01, Turbine Generator High Vibration, Revision x;
ON1031.02, Starting and Phasing the Turbine Generator, Revision x;
ON03-01-06, Post Maintenance Turbine Startup, Revision x; and
OS1000.08, Post Trip Review, Revision x.
System Description SD-81-33, SF6 Gas Insulating Switch Station
Drawing 310102, Sheets A32b, A38e,
SORC Meeting for CR 08-00894 Event Evaluation Report, 1/25/08
MCPS Alarm Typer Summary
E-0, Reactor Trip or Safety Injection, Revision 45
Drawing 310231 Sheet 6b, 13.8KV Switchgear Bus 1-ED-SWG-1
Control Room Narrative Logs

Section 4OA5: Other Activities

Condition Report 200801388
UFSAR Section 1.8, Conformance to Regulatory Guides, Revision 12
FPLE Letter to NRC dated February 22, 2008, Experience Assessment
Root Cause Analysis for CR 08-01388, LOIT Candidate Screening
Regulatory Guide 1.8, Qualification and Training of Personnel for Nuclear Power Plants,
Revision 3

References for the ISFSI Inspection

Work Control Procedures:

MMP-116.12, Rev E-2 Effective 1/11/2008. ISFSI DSC Sealing Operations
MMP-116.13, Rev E-1 Effective 1/02/2008. ISFSI DSC Lid Removal

Welding Procedures:

Welding Procedure Qualification Record No 1, TriVis Inc, 3/8/2006
Welding Procedure Specification SS-8-M-TN, Rev 4
Welding Procedure Specification SS-8-A-TN, Rev 1
QP-9.0, TriVis Welding Program, Rev 7
GWS-3, TriVis General Welding Standard, Revision 2
WAP-2, TriVis Welding Administrative Procedure, Control of Welder & Welding Operator
Qualification, Rev 2

Non-Destructive Testing Procedures:

TRANSNUCLEAR-HMSLD, Specific Procedure for HMSLD Leak Testing of Transnuclear
NUHOMS HD Horizontal Modular Storage System for Irradiated Nuclear Fuel Inner Top
Cover Plate and Vent and Siphon Port Cover Plates, RRL NDT Consulting, LLC, Rev 0
QP-9.202, Color Contrast Liquid Penetrant (PT) Examination Using the Solvent-Removable
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LIST OF ACRONYMS

ADAMS	Agency-wide Documents Access and Management System
CEDE	Committed Effective Dose Equivalent
CR	Condition Report
DCR	Design Change Request
DRPI	Digital Rod Position Indication
DS	Disconnect Switch
EDG	Emergency Diesel Generator
EFW	Emergency Feedwater
FPLE	Florida Power & Light Energy
HRA	High Radiation Areas
LHRA	Locked High Radiation Areas
MPCS	Main Plant Computer System
MRFF	Maintenance Rule Functional Failure
NCV	Non-Cited Violation
NRC	U.S. Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
PAB	Primary Auxiliary Building
PARS	Publicly Available Records
PRT	Pressurizer Relief Tank
psig	pounds per square inch gage
PZR	Pressurizer
RCA	Radiological Controlled Area
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RO	Reactor Operator
SDE	Shallow Dose Equivalent
SDP	Significance Determination Process
SG	Steam Generator
SRA	Senior Reactor Analyst
SSC	Structure, System, or Component
TEDE	Total Effective Dose Equivalent
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report
VHRA	Very High Radiation Areas