



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
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July 25, 2008

Mr. Kevin Bronson
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

SUBJECT: PILGRIM NUCLEAR POWER STATION NRC INTEGRATED INSPECTION
REPORT 05000293/2008003

Dear Mr. Bronson:

On June 30, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Pilgrim Nuclear Power Station (PNPS). The enclosed report documents the results, which were discussed on July 10, 2008, with you and members of your staff.

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

Based on the results of this inspection, no findings of significance were identified. However, two licensee-identified violations, which were determined to be of very low safety significance, are listed in this report. The NRC is treating these violations as non-cited violations (NCVs), consistent with Section VI.A.1 of the NRC's Enforcement Policy because of the very low safety significance of the violations and because they are entered into your corrective action program. If you contest these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Pilgrim Nuclear Power Station.

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

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Sincerely,
/RA/

Barry Norris, Acting Chief
Projects Branch 5
Division of Reactor Projects

Docket No. 50-293
License No. DPR-35

Enclosure: Inspection Report 05000293/2008003
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-293

License No: DPR-35

Report No: 05000293/2008003

Licensee: Entergy Nuclear Operations, Inc.

Facility: Pilgrim Nuclear Power Station (PNPS)

Location: 600 Rocky Hill Road
Plymouth, MA 02360

Inspection Period: April 1, 2008 through June 30, 2008

Inspectors: M. Schneider, Sr. Resident Inspector, Division of Reactor Projects (DRP)
B. Smith, Resident Inspector, DRP
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Approved By: Barry Norris, Acting Chief
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Enclosure

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SUMMARY OF FINDINGS

IR 05000293/2008-003; 04/01/2008-06/30/2008; Pilgrim Nuclear Power Station; Routine Integrated Report.

The report covered a 13-week period of inspection by resident and region-based inspectors. No findings were identified. The NRC's program for overseeing the safe operation of 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.

Violations of very low safety significance, which were identified by Entergy have been reviewed by the inspectors. Corrective actions taken or planned by Entergy have been entered into their corrective action program. These violations and corrective actions are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Pilgrim Nuclear Power Station (PNPS) operated at or near 100 percent power during the inspection period with the following exceptions: On April 4, 2008, Entergy shut down for a planned outage to repair a leaking safety relief valve; Entergy restored the plant to 100 percent power on April 8, 2008. On May 18, 2008, Entergy reduced power to approximately 48 percent to perform a thermal backwash on the main condenser; Entergy resumed 100 percent power operation on May 19, 2008. On June 26, 2008, Entergy reduced power to approximately 50 percent to perform a thermal backwash on the main condenser; Entergy resumed 100 percent power operation on June 27, 2008. On June 30, 2008, Entergy reduced power to approximately 52 percent to perform a thermal backwash on the main condenser; Entergy resumed 100 percent power operation on June 30, 2008. The plant remained at or near 100 percent for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

.1 Alternating Current (AC) Power System Readiness

a. Inspection Scope (1 sample)

The inspectors performed a review of Entergy's offsite and alternate AC power system readiness for susceptibilities during adverse weather. The inspectors reviewed Entergy's plant features and procedures for operation and continued availability of their AC power systems to determine if they were appropriate. The inspection focused on Entergy's procedures effecting communication protocols between the transmission system operator (TSO) and Entergy to verify that appropriate information would be exchanged when issues arise that could impact the offsite power system. The inspectors also reviewed Entergy's procedures to ensure that they addressed actions to be taken when notified by the TSO that they would need to transfer safety-related loads to the onsite power supply, compensatory actions to be performed if it were not possible to predict grid conditions, reassessment of plant risk based on maintenance activities which could affect grid reliability, and required communications between Entergy and the TSO. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

.2 External Flooding

a. Inspection Scope (1 sample)

The inspectors reviewed the Pilgrim plant design and procedures for coping with the design basis probable maximum flood. The inspectors reviewed the Storm Flooding Protection section of the Updated Final Safety Analysis Report (UFSAR) and the

operating procedures for mitigating external flooding conditions during severe weather. The inspectors also conducted a walkdown of the site to determine if all susceptible flooding conditions had been considered in the plant design and whether operating procedures could be reasonably carried out to mitigate flooding concerns. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdowns (71111.04Q)

a. Inspection Scope (3 samples)

The inspectors performed three partial system walkdowns during this inspection period. The inspectors reviewed the documents listed in the Attachment to determine the correct system alignment. The inspectors conducted a partial walkdown of each system to determine if the critical portions of the selected systems were correctly aligned in accordance with these procedures and to identify any discrepancies that may have had an effect on operability. The walkdowns included selected switch and valve position checks, and verification of electrical power to critical components. Finally, the inspectors evaluated other elements, such as material condition, housekeeping, and component labeling. The following systems were reviewed based on their risk significance for the given plant configuration:

- Reactor Core Isolation Cooling (RCIC) during High Pressure Coolant Injection (HPCI) Maintenance;
- "B" Reactor Building Component Cooling Water (RBCCW); and
- "A" Residual Heat Removal (RHR) during "A" Core Spray (CS) Pump Testing

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown (71111.04S)

a. Inspection Scope (1 sample)

The inspectors completed a detailed review of the Automatic Depressurization System (ADS) to verify the functional capability of the system. The inspectors conducted a walkdown of the system to verify that the critical components such as valves, switches, and breakers were aligned in accordance with procedures and to identify any discrepancies that could have an effect on operability. The inspectors discussed system health with the system engineer and conducted a review of outstanding maintenance work orders to verify that the deficiencies did not significantly affect the ADS system function. The inspectors also reviewed the condition report (CR) database to verify that equipment problems were being identified and appropriately resolved. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

Fire Protection - Tours (71111.05Q)

a. Inspection Scope (5 samples)

The inspectors performed walkdowns of five fire protection areas during the inspection period. The inspectors reviewed Entergy's fire protection program to determine the required fire protection design features, fire area boundaries, and combustible loading requirements for the selected areas. The inspectors walked down these areas to assess Entergy's control of transient combustible material and ignition sources. In addition, the inspectors evaluated the material condition and operational status of fire detection and suppression capabilities, fire barriers, and any related compensatory measures. The inspectors then compared the existing condition of the areas to the fire protection program requirements to determine if all program requirements were being met. Documents reviewed during the inspection are listed in the Attachment. The fire protection areas reviewed were:

- "A" Train EDG Room – Fire Zone 4.3;
- "B" Train EDG Room – Fire Zone 4.1;
- "B" RHR Room – Fire Zone 1.2;
- Standby Gas Treatment System Room – Fire Zone 1.23; and
- HPCI / Turbine Room – Fire Zone 1.3

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Regualification Program (71111.11)

.1 Resident Inspector Quarterly Review (71111.11Q)

a. Inspection Scope (1 sample)

The inspectors observed licensed operator simulator training on April 23, 2008. Specifically, the inspectors observed crew response to a small-break loss of coolant accident concurrent with a loss of offsite power and complicated by a loss of the "A" EDG. The inspectors assessed the licensed operators' performance to determine if the training evaluators adequately addressed observed deficiencies. The inspectors reviewed the applicable training objectives from the scenario to determine if they had been achieved. In addition, the inspectors conducted a simulator fidelity review to determine if the arrangement of the simulator instrumentation and controls closely paralleled that of the control room. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope (2 samples)

The inspectors reviewed Entergy's functional failure determination associated with CR-PNP-2008-00852, "Cracked Snubber Valve on High Pressure Fuel Tube," conducted in accordance with Entergy procedures and the requirements of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The inspectors reviewed the system maintenance rule functions, the basis for the conclusion that the issue was not considered a functional failure, and the potential for common cause and extent of condition.

The inspectors also reviewed the performance history of the electric and diesel driven fire pumps to assess the effectiveness of Entergy's maintenance activities. The inspectors selected a sample of system health reports for review to evaluate the results of system performance monitoring, material condition, and operations impact, to determine if actions taken were reasonable and appropriate. In addition, the inspectors reviewed Entergy's CRs and corrective actions. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope (6 samples)

The inspectors evaluated online and shutdown risk management for emergent and planned activities. The inspectors reviewed maintenance risk evaluations, work schedules, and control room logs to determine if concurrent maintenance or surveillance activities adversely affected the plant risk already incurred with out-of-service components. The inspectors evaluated whether Entergy took the necessary steps to control work activities, minimize the probability of initiating events, and maintain the functional capability of mitigating systems. The inspectors assessed Entergy's risk management actions during plant walkdowns. Documents reviewed during the inspection are listed in the Attachment. The inspectors reviewed the conduct and adequacy of maintenance risk assessments for the following maintenance and testing activities:

- Yellow risk due to Logic System Functional Testing of the "B" EDG with the Startup Transformer Unavailable;
- Shutdown Risk Assessment to support SRV3C Replacement Outage;
- Yellow Risk during Low Pressure Coolant Injection Logic System Functional Testing;
- Yellow Risk due to "B" EDG Maintenance;
- Yellow Risk due to HPCI Out of Service; and

- Yellow Risk due to Fire Protection Deluge Inoperable

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope (5 samples)

The inspectors reviewed five operability determinations associated with degraded or non-conforming conditions to determine if the operability determination was justified and if the mitigating systems or those affecting barrier integrity remained available such that no unrecognized increase in risk had occurred. The inspectors also reviewed compensatory measures to determine if the compensatory measures were in place and were appropriately controlled. The inspectors reviewed licensee performance against related Technical Specifications (TS) and UFSAR requirements. Documents reviewed during the inspection are listed in the Attachment. The inspectors reviewed the following degraded or non-conforming conditions:

- CR-PNP-2008-01413, "B" EDG failed to meet specification during pneumatic system leak test;
- CR-PNP-2008-01201, "A" EDG experienced Kilowatt swings approaching abort criteria;
- CR-PNP-2008-01393, Drywell Temperatures near TS limit;
- CR-PNP-2008-01723, HPCI Bearing Gearbox Smoke; and
- CR-PNP-2008-01894, Cracked Snubber Valve Identified on "A" EDG Fuel Injector "9R"

b. Findings

No findings of significance were identified.

1R18 Plant Modifications (71111.18)

a. Inspection Scope (1 sample)

The inspectors reviewed Temporary Modification Engineering Change (EC) 0000003767, Revision 000, "Alternate Vent Path for the Stator Cooling Water Tank", and the associated 10 CFR 50.59 screening, to determine whether the licensing bases and performance capability of the associated system had been degraded through the modification. A walkdown was performed to determine whether the temporary equipment had been removed after the modification was no longer required. The inspectors reviewed applicable drawings and procedures to determine whether they properly reflected the temporary modification. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope (6 samples)

The inspectors reviewed six samples of post-maintenance tests (PMT) during this inspection period. The inspectors reviewed these activities to determine whether the PMT adequately demonstrated that the safety-related function of the equipment was satisfied, given the scope of the work performed, and that operability of the system was restored. In addition, the inspectors evaluated the applicable test acceptance criteria to verify consistency with the associated design and licensing bases, as well as TS requirements. The inspectors also evaluated whether conditions adverse to quality were entered into the corrective action program for resolution. Documents reviewed during the inspection are listed in the Attachment. The following maintenance activities and their post-maintenance tests were evaluated:

- Hydraulic Control Unit 42-39 Accumulator Replacement;
- Safety Relief Valve 3C Pilot Valve Replacement;
- "B" EDG fuel control linkage inspection, cleaning and repairs;
- HPCI Flow Controller Replacement;
- "A" EDG Overspeed test and inspection of bearing temperatures; and
- "A" EDG Voltage Regulator and Governor Replacement

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities (71111.20)

a. Inspection Scope (1 sample)

The inspectors reviewed the outage plan and shutdown risk assessment plan for a non-refueling outage conducted April 4, 2008 through April 8, 2008. The outage was conducted to support replacement of the pilot valve for Safety Relief Valve 3C, which had exhibited leakage since the beginning of the first quarter of 2008. During this outage, the inspectors observed portions of the shutdown and cooldown processes, conducted a post work drywell inspection, and reviewed the outage activities listed below. Documents reviewed during the inspection are listed in the Attachment.

- Plant shutdown and cooldown, including cooldown rate data reviews;
- RHR Operation;
- Shutdown Risk Assessment and Risk Management;
- Implementation of TS;
- Containment Isolation Valve (AO-7011A) Local Leak Rate Testing and Corrective Actions;
- Analysis of Turbine Trip during shutdown;
- Drywell closeout tour;
- Outage Control Center activities;
- Plant Heatup and Startup; and
- Licensee identification and resolution of problems identified during and related to outage activities

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope (6 samples)

The inspectors reviewed six samples of surveillance activities to determine whether the testing adequately demonstrated equipment operational readiness and the ability to perform the intended safety-related functions. The inspectors reviewed selected prerequisites and precautions to determine if they were met and if the tests were performed in accordance with the procedural steps. Additionally, the inspectors evaluated the applicable test acceptance criteria for consistency with associated design bases, licensing bases, and TS requirements. The inspectors also evaluated whether conditions adverse to quality were entered into the corrective action program for resolution. Documents reviewed during the inspection are listed in the Attachment. The following surveillance tests were evaluated:

- “A” Salt Service Water (SSW) Operability Test Loop;
- HPCI Valve Operability;
- Reactor Water Clean Up Containment Isolation Valve Stroke Times;
- Station Blackout Diesel Generator Run in preparation for “A” EDG Outage;
- “A” CS Pump and Valve Operability; and
- “B” EDG Operability

b. Findings

No findings of significance were identified.

CORNERSTONE: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope (1 simulator training sample)

The inspectors observed an evaluated licensed operator “as found” simulator training exercise on April 23, 2008. The inspectors evaluated the operating crew activities relating to accurate and timely classifications and notifications of Emergency Action Level (EAL) declarations. Additionally, the inspectors assessed the ability of training evaluators to adequately address operator performance deficiencies identified during the exercise. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

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

a. Inspection Scope (9 samples)

During the period June 2-5, 2008, the inspectors conducted the following activities to ensure that Entergy was properly maintaining the liquid and gaseous effluent processing systems and controlling abnormal releases when radiation monitors were out of service. The inspectors also conducted the activities to verify that the Quality Control program for effluent sampling and analysis for releases adequately quantified and evaluated releases. Documents reviewed during the inspection are listed in the Attachment.

Inspection Planning

The inspectors reviewed the most current Radiological Effluent Release Report to verify that the program was implemented as described in the Radiological Effluent Technical Specification/Offsite Dose Calculation Manual (RETS/ODCM) and reviewed the report for significant changes to the ODCM and to radioactive waste system design and operation. The inspectors determined that anomalous results reported in the current Radiological Effluent Release Report were adequately resolved. The inspectors reviewed the RETS/ODCM to identify the effluent radiation monitoring systems and flow measurement devices; the effluent radiological occurrence performance indicator incidents for onsite follow-up; and Entergy self assessments, audits, and event reports that involved unanticipated offsite releases of radioactive material.

On-Site Inspection

The inspectors walked down the major components of the gaseous and liquid release systems (e.g., radiation and flow monitors, demineralizers and filters, tanks, and vessels) to observe current system configuration with respect to the description in the UFSAR, ongoing activities, and equipment material condition.

The inspectors reviewed the three liquid discharge permits used since the previous inspection, including the projected doses to members of the public. The inspectors also observed the routine sample collection for the continuous release of radioactive tritium effluent from the reactor building vent and routine sample collection and analysis of particulate and iodine from the turbine building roof exhausters to verify that appropriate treatment equipment is used and that radioactive effluents are processed and released in accordance with the RETS/ODCM requirements.

The inspectors reviewed the records of any abnormal releases or releases made with inoperable effluent radiation monitors, and reviewed Entergy's actions to ensure that adequate defense-in-depth was maintained against an unmonitored, unanticipated release of radioactive material to the environment. The inspectors noted there had been no changes made by Entergy to the ODCM since 2006, as well as to the liquid or gaseous radioactive waste system design or operation since the last inspection in 2006. The inspectors reviewed a selection of monthly, quarterly, and annual dose calculations to ensure that Entergy had properly calculated the offsite dose from radiological effluent

releases, to determine if any annual RETS/ODCM (i.e., Appendix I to 10 CFR Part 50) values were exceeded, and whether a Performance Indicator report was issued if any quarterly values were exceeded.

The inspectors reviewed air cleaning system surveillance test results and Entergy specific methodology to ensure that the system is operating within the acceptance criteria. The inspectors also reviewed surveillance test results and the methodology that Entergy uses to determine the stack and vent flow rates and verified that the flow rates are consistent with RETS/ODCM or UFSAR values.

The inspectors reviewed records of instrument calibrations performed since the last inspection for each point of discharge effluent radiation monitor and flow measurement device and reviewed any completed system modifications and the current effluent radiation monitor alarm setpoint value for agreement with RETS/ODCM requirements. The inspectors also reviewed calibration records of radiation measurement (i.e., counting room) instrumentation associated with effluent monitoring and release activities.

Problem Identification and Resolution

The inspectors reviewed Entergy's self assessments, audits, and Special Reports related to the radioactive gaseous and liquid effluents program and processing systems. The inspectors reviewed 26 CRs related to the radioactive gaseous and liquid effluents program and processing systems to determine if follow-up actions were conducted in a timely and effective manner.

b. Findings

No findings of significance were identified.

4. **OTHER ACTIVITIES [OA]**

4OA1 Performance Indicator (PI) Verification (71151)

Cornerstone: Initiating Events

a. Inspection Scope (3 samples)

The inspectors reviewed the Initiating Events cornerstone PI data for unplanned scrams per 7,000 critical hours; unplanned scrams with loss of normal heat removal; and unplanned power changes per 7,000 critical hours to assess the completeness and accuracy of the reported information. Specifically, PI data for the year 2007 and first quarter 2008 was reviewed and compared to information contained in NRC inspection reports, Licensee Event Reports (LERs), and operator logs. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Review of Items Entered into the Corrective Action Program

a. Inspection Scope

The inspectors performed a screening of each item entered into Entergy's Corrective Action Program. This review was accomplished by reviewing printouts of each condition report, attending daily screening meetings, and/or accessing Entergy's database. The purpose of this review was to identify conditions such as repetitive equipment failures or human performance issues that might warrant additional follow-up.

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, "Identification and Resolution of Problems," the inspectors performed a review of Entergy's Corrective Action Program (CAP) and associated documents to identify trends that could indicate the existence of a more significant safety issue. The review was focused on repetitive equipment and corrective maintenance issues, but also considered the results of daily inspector CAP item screening, as discussed in Section 4OA2.1. The review included issues documented in CAP trend reports and the site CAP performance indicator data. The review focused on the six month period of January through June 2008, although the inspectors also evaluated the trend review results for CRs from June through December 2007, as discussed in NRC IR 05000293/2007005. Documents reviewed during the inspection are listed in the Attachment.

b. Findings and Observations

No findings of significance were identified. The inspectors continued to note equipment configuration control issues during the first two quarters of 2008. See Section 4OA2.3 for a specific discussion on the evaluation of this particular trend. The inspectors will monitor the effectiveness of Pilgrim's configuration control corrective actions during the upcoming assessment period. No additional low level trends were identified by the inspectors during this time period.

.3 Annual Sample: Adverse Trend in Station Mispositioning Errors

a. Inspection Scope (1 sample)

The inspectors selected CR-PNP-2007-03925 for detailed review. The CR was written in September 2007 to evaluate whether an adverse trend existed for station equipment misposition errors. The inspectors had documented configuration control issues at Pilgrim as a low level trend in the fourth quarter report of 2007. The inspectors reviewed the licensee's common cause analysis, corrective actions, timeliness of corrective

actions, and completion and effectiveness of corrective actions. Documents reviewed during the inspection are listed in the Attachment.

b. Findings and Observations

No findings of significance were identified. The Operations organization generated CR-PNP-2007-03925 on September 10, 2007, to evaluate whether an adverse trend existed for station equipment mispositioning errors. The Pilgrim 3rd Quarter 2007 Trend Report had stated that no adverse trend existed, but the Operations management noted that performance was at an unacceptable level. The station instituted corrective actions to conduct operator fundamental training on precise plant control and human performance, to generate lessons learned, and to generate a standard for mispositioned components and a fleet procedure on configuration control.

On December 20, 2007, an assignment to the CR was generated for Operations to perform a Common Cause Analysis (CCA) on operations human performance issues; the CCA was completed on March 21, 2008. A human performance team reviewed the data from the equipment mispositioning events and conducted a cross-cutting analysis. The team recommended several corrective actions, including: assess the effectiveness of shift turnovers and selected pre-evolution briefs, and provide mentoring, as appropriate; and accompany field operators when conducting specific activities, to ensure appropriate attributes were demonstrated. On May 25, 2008, Operations generated a new CR (CR-PNP-2008-01757) to document a declining trend in component mispositionings.

The inspectors observed that the timeframe from the identification of the potential trend in September 2007, to the evaluation and specification of corrective actions in March 2008, to the implementation of corrective actions in May 2008, was not timely given the potential significance of a declining configuration control trend. However, the inspectors determined that the CCA and cross-cutting analyses were detailed and insightful, and that the specified corrective actions should improve performance. In addition, the station has instituted additional interim corrective actions: operations supervisors and managers will conduct a minimum of 2 hours of observations of plant equipment manipulations in the field; pre-evolution briefs for manipulations of plant equipment will include an evaluation of the process to be used to ensure a correct final configuration; and any mispositioned component will be investigated using a human performance error review process. The inspectors concluded that, though not timely, corrective actions to improve configuration control at Pilgrim have not been in effect long enough to conclude whether they will be effective. The inspectors will continue to follow configuration control issues and station performance in this area. The configuration control low level trend initiated in the fourth quarter report of 2007 will continue to be monitored and Pilgrim's performance in this area will be evaluated over the next six months.

4OA3 Event Follow-up (71153)

.1 Above Normal Drywell Temperature Indications

a. Inspection Scope (1 sample)

On April 23, 2008, operators identified that two temperature instruments located in the drywell exhibited a prompt increase in temperature. One of the instruments is used to

ensure compliance with TS 3.2.H, "Protective Instrumentation – Drywell Temperature." Operations verified that other drywell parameters (i.e. humidity, pressure, leakage, and gaseous and particulate radiation monitors) were normal and concluded that no reactor coolant system leak was in progress. Operations also checked safety valve downstream temperatures and RBCCW temperatures to determine if a safety valve was leaking or if a loss of cooling to drywell coolers had occurred. No abnormalities were identified with these system lineups. Operations reviewed TS 3.2.H, commenced more frequent monitoring of drywell temperatures, adjusted RBCCW flow to increase cooling to drywell coolers, and requested an engineering investigation into the potential cause(s) of this occurrence. No TS 3.2.H drywell temperature limits were exceeded.

The inspectors responded to the control room, reviewed plant and drywell parameters, TS and applicable procedural requirements and system drawings. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

.2 Operator Performance during Thermal Backwash

a. Inspection Scope (2 samples)

The inspectors observed two infrequently performed evolutions on May 4 and June 26, 2008. Specifically, the inspectors observed two planned plant downpowers to support thermal backwash of the condenser. The inspectors observed the operators reduce power from 100 percent to approximately 50 percent by lowering recirculation flow and inserting control rods. The inspectors attended the pre-job briefs, reviewed procedural guidance and contingency plans, and observed control room conduct and control of the evolutions.

b. Findings

No findings of significance were identified.

.3 (Closed) LER 05000293/2008-001-00, Failure to Meet Technical Specification Requirements for Secondary Containment

On January 10, 2008, damper AO-N-78, a Reactor Building Isolation Control System ventilation damper, failed to go fully closed on demand during testing. Specifically, damper AO-N-78 had a one-half inch gap across two of the four damper blades in the closed position. On January 14, 2008, it was recognized that the damper was inoperable in this configuration. The cause of the failure of the damper to go fully closed was interference from the blade edge seal. Compensatory actions to restore operability or to secure the damper were not taken for approximately 96 hours, when the control room was notified and declared the damper inoperable. The cause of the failure to notify the control room was determined to be the result of unclear procedure instructions and inadequate assignment of test procedure reporting responsibilities. Corrective actions included repairing the damper, verifying that it fully closed, and adding additional instruction in the procedure on how to clean and inspect isolation dampers. They also changed the procedures to address clear acceptance criteria for damper closure and

when to notify the control room. The finding is more than minor because it had a credible impact on safety, in that if the redundant damper in the penetration did not close when called upon, secondary containment would not be ensured. The finding affects the Barrier Integrity Cornerstone and was determined to be of very low safety significance (Green) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)," Appendix H, "Containment Integrity SDP," because the likelihood of an accident leading to core damage was not affected, the probability of a large early release was negligible, and the redundant damper remained operable. This licensee-identified finding involved a violation of TS 3.7.C, "Secondary Containment Integrity." The enforcement aspects of the violation are discussed in Section 40A7. This LER is closed.

.4 (Closed) LER 05000293/2008-002-00, Failure to Meet Technical Specification Requirements for Undervoltage Relay Trip Settings

On January 11, 2008, Entergy identified two undervoltage relays that exceeded the required TS set point range. Specifically, relays 127-A5/1 and 127-A5/2, installed on a safety-related bus from May 2, 2005, to June 11, 2007, exceeded the range of 20-25 percent of rated voltage, as specified in TS 3.2.B, "Instrumentation and Control of Core and Containment Cooling Systems." The as-found set points were 27.17 percent and 30.29 percent of rated bus voltage, respectively. The cause of the out of specification settings was determined to be an improper calibration method used prior to the installation of the relays in May of 2005. Corrective actions included procuring a "Doble System Power Simulator" test set for relay testing. The Doble test set has built-in software that defines the testing method for different types of protective relays and will reduce the potential for testing the relay in an improper configuration. The finding is more than minor because it affected the Mitigating Systems Cornerstone objective of ensuring the function of a system or train in a safety system. Using IMC 0609, the finding was considered to have very low safety significance (Green) because the finding did not contribute to loss of function of the 4kV bus or associated safety-related equipment. Specifically, the as-found relay trip settings were within the acceptable voltage limit per industry standard 'Handbook on Electric Motors', section 9.1.8.4 which specifies a maximum value of 33 percent of rated bus voltage. This licensee-identified finding involved a violation of TS 3.2.B, "Instrumentation and Control of Core and Containment Cooling Systems." The enforcement aspects of the violation are discussed in Section 40A7. This LER is closed.

40A5 Other Activities

Strike Contingency Plan (92709)

a. Inspection Scope

Entergy developed a Staffing Contingency Plan to ensure a sufficient number of qualified personnel were available to continue operations in the event that the United Workers Union of America (UWUA), Local 369, personnel engaged in a job action upon the expiration of their contract on May 16, 2008. Using the guidance contained in NRC Inspection Procedure 92709, "Licensee Strike Contingency Plans," the inspectors reviewed Entergy's plans to address a potential job action at the site. The inspection included an evaluation of the Staffing Contingency Plan content and the actions needed to implement the plan; a review to determine whether the number of qualified personnel needed for the proper operation of the facility would be available; a review to determine if

reactor operations would be maintained, as required; and, a review to determine if the plan complied with Technical Specification requirements and other NRC requirements. On May 15, 2008, Entergy and UWUA, Local 369, tentatively agreed to a new contract and union members approved the contract on May 23, 2008. No job action was taken.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On June 5, 2008, an Occupational Radiation and Public Radiation Safety exit meeting was conducted. The preliminary inspection results were presented to Mr. Brian Sullivan, Director of Engineering, and other members of the Pilgrim staff. Entergy did not identify any material as proprietary during this inspection.

On July 10, 2008, the resident inspectors conducted an exit meeting and presented the preliminary inspection results to Mr. Kevin Bronson, Site Vice President, and other members of the Pilgrim staff. The inspectors confirmed that no proprietary information was provided or examined during the inspection.

4OA7 Licensee-Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, for being dispositioned as NCVs.

- TS 3.7.C, "Secondary Containment," requires, in part, that whenever the reactor is critical, secondary containment integrity must be maintained. Contrary to this, on January 10, 2008, damper AO-N-78, the Reactor Building Isolation Control System ventilation damper, failed to go fully closed on demand during testing, resulting in secondary containment integrity not being maintained. TS actions to restore operability or to secure the damper were not taken for approximately 96 hours. This was identified in Entergy's CAP as CR-PNP-2008-140 and CR-PNP-2008-143. This violation is of very low safety significance (Green) because it did not represent an open pathway in secondary containment due to the availability of a backup isolation damper.
- TS 3.2.B, "Instrumentation and Control of Core and Containment Cooling Systems," requires undervoltage relays 127-A5/1 and 127-A5/2 trip settings to be within a range of 20-25 percent of rated bus voltage. Contrary to this, on January 11, 2008, the as-found set points were 27.17 percent and 30.29 percent, respectively, of rated bus voltage. This was identified in Entergy's CAP as CR-PNP-2008-00117. This finding is of very low safety significance (Green) because it did not represent a loss of function of the 4kV safety related bus or associated safety related loads because the relay trip settings were within the acceptable limit per industry standard "Handbook on Electric Motors."

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION**KEY POINTS OF CONTACT**Licensee personnel:

S. Bethay	Safety Assessment Director
G. Blankenbiller	Chemistry Supervisor
R. Bowen	Chemistry Specialist
K. Bronson	Site Vice President
V. Fallacara	Nuclear Training Director
P. Gavin	I&C Supervisor
W. Grieves	Quality Assurance Manager
J. Hageman	Chemistry Technician
P. Leavitt	Chemistry Specialist
W. Lobo	Licensing Engineer
J. Lynch	Licensing Manager
W. Mauro	ALARA Supervisor
J. McClellan	QA Specialist
T. McElhinney	Chemistry Superintendent
D. Noyes	Operations Director
J. Scheffer	Environmental Engineer
K. Sejkora	Senior Chemistry Specialist
R. Smith	General Manager of Plant Operations
B. Sullivan	Engineering Director
J. Taormina	Maintenance Manager
D. Williams	Chemistry Technician

LIST OF ITEMS OPENED, CLOSED AND DISCUSSEDClosed

05000293/2008-001-00	LER	Failure to Meet Technical Specification Requirements for Secondary Containment
05000293/2008-002-00	LER	Failure to Meet Technical Specification Requirements for Undervoltage Relay Trip Settings

LIST OF DOCUMENTS REVIEWED**Section 1R01**

CR-PNP-2008-01582 on 23KV monitoring, NStar notifying Pilgrim if 23KV cannot be maintained
 FSAR Chapter 2.4.4, Storm Flooding Protection
 GL 2006-02, Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power
 PNPS 1.4.4, New England Power Grid Operations Interfaces
 PNPS 2.1.14, Station Power Changes, Section 7.8, Load Reductions in Accordance with ISONE
 or NStar Request
 PNPS 2.1.37, Revision 24, Coastal Storm – Preparations and Actions
 PNPS 2.1.42, Operation During Severe Weather

PNPS 2.4.154, Severe Weather, Intake Structure Fouling
PNPS 5.2.2, Revision 31, High Winds (Hurricane)

Section 1R04

CR-PNP-2008-01932, 30-AD-4044A & B Do Not Have Position Indication Available on the Valve Stem
Drawing M241, Revision 47, Residual Heat Removal
Drawing M215, Revision 48, P&ID Cooling Water System Reactor Building
EOP-01, RPV Control
EOP17, Emergency RPV Depressurization
PNPS 2.2.19, Revision 97, Residual Heat Removal
PNPS 2.2.22, (RCIC) Reactor Core Isolation System Diagrams M245 and M246
PNPS 2.2.22.5, RCIC Injection and Pressure Control
PNPS 2.2.23, Automatic Depressurization System
PNPS 2.2.30, Revision 66, Reactor Building Closed Cooling Water (RBCCW) System
PNPS 2.2.70, Primary Containment Atmospheric Control System
PNPS 2.4.29, Stuck Open Safety/Relief Valve
PNPS 2.4.35, Inadvertent Initiation of the Core Standby Cooling Systems
PNPS 8.C.43, Revision 9, Monthly System Valve Lineup Surveillance
PNPS 8.C.43, Revision 8, Monthly System Valve Lineup Surveillance
Systems Reference Text (ADS)
TS 3.5.C, HPCI and 3.5.D, RCIC
TS 3.5.E & 4.5.E (ADS)
TS 3.6.D, Safety Relief Valves
UFSAR 4.7, RCIC
UFSAR 10.5, Reactor Building Closed Cooling Water System
UFSAR 4.4, Pressure Relief System
UFSAR 6.4.2, Automatic Depressurization System

Section 1R05

Fire Hazards Analysis Fire Area Summary Sheet Fire Area 1.10 89XM-1-ER-Q-E5
Fire Protection System Logic Flow Diagram M76A14
Fire Protection Engineering Evaluation 59 Pipe Penetrations with Steel Plates, Revision 1
Heating, Ventilation & Air Conditioning SGTS Control Diagram M294
PNPS Appendix R Exemption Summary ER #12 – Torus to SE Quad Fire Barrier
PNPS 2.4.143.2 Revision 15, Shutdown with a Fire in Reactor Building West
PNPS 2.4.143, Shutdown from Outside Control Room
PNPS 5.5.1, Revision 25, General Fire
PNPS 5.5.2, Special Fire Procedure, Revision 38
Updated Fire Hazard Analysis, Revision E5

Section 1R11

LORT/NRC Simulator Exam Scenario SES-174 on 4/23/08

Section 1R12

10 CFR 50.65, Maintenance Rule
Control Rooms logs, March 2006 - March 2008, for references to Electric Fire Pump
CR-PNP-2006-3905, Fuel Leaks on "A" Diesel
CR-PNP-2007-0744, Oil Analysis for Diesel Fire Pump identified Excessive Boron
CR-PNP-2007-4596, Diesel Fire Pump would not start on Battery 2 during surveillance
CR-PNP-2008-0089, Electric Fire Pump did not pass acceptance criteria

CR-PNP-2008-0643, Pump P-135 Pitting and Corrosion discovered during Work Order 00135197
CR-PNP-2008-0852, Cracked Snubber Valve and Fuel Leak
CR-PNP-2008-1071, Part 21 Report on Snubber Valves
CR-PNP-2008-1206, Electric Fire Pump not included in Scope of Maintenance Rule
CR-PNP-2008-1951, EDG KW Swings
EN-LI-119, Apparent Cause Evaluation for "A" Diesel Cracked Snubber
EN-OP-104, Operability Determination for Cracked Snubber Valve
Maintenance Rule SSC Basis Document for Fire Protection System (33), Revision 5, 6/6/2001
Maintenance Rule Expert Panel meeting notes, Meeting 7/10/2001
NEI-99-02, Revision 5, Regulatory Assessment Performance Indicator Guidelines
Numarc 93-01, Monitoring the Effectiveness of Maintenance at Nuclear Power Plants
P&ID M223, Revision 30, Diesel Oil Storage & Transfer System
PNPS UFSAR, Section 10.8, Fire Protection System
PNPS 2.4.54, Revision 22, Loss of All Fire Suppression Pumps or Loss of Redundancy in the Fire Water Supply System
PNPS 5.3.26, Revision 24, RPV Injection During Emergencies
PNPS 8.B.1, Revision 83, Fire Pump Test
PNPS 8.B.15, Functional Tests of Fire Pumps P-135, P-140, and P-181, Revision 40
Reg Guide 1.160, Monitoring the Effectiveness of Maintenance at Nuclear Power Plants
Regulatory Guide 1.160, Revision 2, Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, March 1997
System Health Report, Emergency Diesels & Fuel
Technical Specifications Bases for EDG fuel oil requirements (3/4.9)
UFSAR Table 8.5-1, Diesel Loading Table
Work Order 142663, Repair of Fuel Oil Leak on Cylinder 7R

Section 1R13

10 CFR 50, App. J, Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors
10 CFR 50.65 (a)(4)
EOOS Scheduler's Evaluation for PNPS for 3/30 to 4/6/08
EOOS Software
Equipment Out-Of-Service (EOOS) Quantitative Risk Assessment Tool
NRC Reg. Guide 1.182, Assessing and Managing Risk before Maintenance Activities at Nuclear Power Plants
NUMARC 93-01, Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants
NUMARC 91-06, Guidelines for Industry Actions to Assess Shutdown Management
PNPS online daily schedule 4/2 to 4/6/08
PNPS Control Room Log for 5/20/08 and 5/22/08
PNPS 3.M.1-45, Revision 6, Outage Shutdown Risk Assessment
PNPS 1.5.22, Risk Assessment Process
PNPS 1.5.22, Revision 11, Risk Assessment Process
PNPS 8.M.2-2.10.8.6, Revision 34, Diesel Generator "B" Initiation by Loss of Offsite Power Logic
PNPS 8.M.2-2.10.8.6, Risk Assessment Review Checklist for "B" EDG testing
Risk Assessment Review Checklist for "Commence Shutdown April 4, 20:00 to Unit online April 7, 9:00"
Scheduler's Evaluation for PNPS
TS 3.5.A.4, Core and Containment Cooling Systems – Core Spray and LPCI Systems
Work Week Schedule for Work Week Commencing 4/21/08 and 5/19/08

Section 1R15

CR-PNP-2007-0703, "B" EDG Experienced KW Swings
CR-PNP-2008-0852, Fuel Oil Leak on "A" EDG Fuel Injector "7R"
CR-PNP-2008-1201, "A" EDG Experienced KW Swings Approaching Abort Criteria
CR-PNP-2008-1393, Drywell Temperatures near TS Limit
CR-PNP-2008-1413, "B" EDG failed to meet specification during performance of pneumatic system leak test
CR-PNP-2008-1723, HPCI Bearing Gearbox Smoke
CR-PNP-2008-1724, Turbine Bearing High Temperature Alarm
CR-PNP-2008-1894, Cracked Snubber Valve Identified on "A" EDG Fuel Injector "9R"
EN-OP-104, Operability Determination of HPCI Smoke Wisp in Gearbox
Fairbanks Morse Training Manual
Fuel Injection Pump Vendor Technical Manual (MI-11267D)
GE Equipment Bulletin, EB-11243, Fuel Injection Equipment, Injection Pump Snubber Valves
ODMI Implementation Action Plan, Drywell Temperatures dated 4/23/2008
Operability Evaluation Basis on CR-PNP-208-01201
PNPS Control Room Log 4/29/2008
PNPS 8.5.4.1, Attachment 1, HPCI Quarterly Surveillance
PNPS 2.2.108, "B" Diesel Ventilation System
PNPS 8.9.1, EDG and Associated Bus Surveillance
Reasonable Expectation of Operability on CR-PNP-2008-01201
Snubber Valve Transaction History
Spectrometer Test Report Dated 06/10/08
TS Section 3.9.A, Auxiliary Electrical Equipment
TS 3.5.C, HPCI System
TS-3.2.H, Protective Instrumentation Drywell Temperature
UFSAR Section 8.5, Standby AC Power Source
UFSAR 6.4.1, HPCI
UFSAR Chapter 8.5, Standby AC Power Source
Work Order 149469, Replace Damper EDG "B" Ventilation

Section 1R18

Drawing M275, Revision 18, P&ID Generator Stator Winding Cooling Water System
Drawing M211, Revision 47, P&ID Circulating Water System
Engineering Change 0000003767, Revision 000, Alternate Vent Path for the Stator Cooling Water Tank
Temporary Modification EC3767 Drawings M211 and M275 Partial (Control Room Drawing)

Section 1R19

ALCO Vendor Technical Manual, Governor Control Linkage, Type EGS Governor with Air Booster
ALCO Vendor Technical Manual, Fuel Pump Control Shaft and Crossover Linkage
EN-MA-102, Revision 2, PNPS Inspection Program, Attachment 9.2, Inspection Report
Fuel Pump Control Shafts and Levers Drawing
Pilgrim System Reference Text, HPCI
PNP On-Line Master Schedule 6/11/08
PNPS 2.2.8, Standby AC Power System
PNPS 3.M.3-61.5, "A" Diesel Generator Post-Overhaul Testing
PNPS 2.2.87, Revision 117, Control Rod Drive System
PNPS 9.9, Revision 63, Control Rod Scram Insertion Time Evaluation

PNPS 3.M.4-6, Revision 57, Removal, Installation, Test, Disassembly, Inspection, and Reassembly of Main Steam Relief Valves
PNPS 8.5.6.2, Revision 36, Special Test for ADS System Manual Opening of Relief Valves
PNPS 8.I.26.2, Revision 5, Class I Safety Relief Valve Periodic Tests
SR 4.3.B.1.4, Control Rod Operability, Verify each control rod scram time from fully withdrawn to notch position 04 is >7 seconds iaw SR 4.3.C.1, 4.3.C.2, 4.3.C.3 or 4.3.C.4
TS 3.3.B, Reactivity Control – Control Rod Operability
TS 3.5.C, HPCI
UFSAR 8.5, Standby AC Power Source
UFSAR Section 6, Core Standby Cooling Systems
VT-2 Examination Report No. VT-1-08002, 4/7/2008 (Procedure ENN-NDE-10.2, Attachment 9.2)
WO 00131960, Replace HPCI Flow Controller
WO 51529517, Verify Motor Heaters and Wiring of HPCI
WO 51556773, HPCI Booster Pump Lube Oil Change
Work Order 0012507401, HCU-42-39 Accumulator Replacement
Work Order 0012507402, Post Maintenance Testing for HCU-42-39
Work Order 00134251 Task 3, Work Package Replace RV-203-3C
Work Order 00134251 Task 4, SRV 3C Tailpipe Temperature Indicates a Rising Trend - Post Maintenance Test
Work Order 51534468, Inspect governor and fuel rack linkages and replace any work components
Work Order 51651430, 8.9.1 (TS SURV) EMER DSL GEN & ASSOCIATED EMER BUS SURV TRN "B"
Work Order 00135043, Diesel Post Work Test Bearing

Section 1R20

Analysis of Turbine Trip During Plant Shutdown
Control Room Logs
CR-PNP-2008-1102, Rapidly Rising Trend on SRV3C Temperature
CR-PNP-2008-1117, Turbine High Vibration at approximately 10% Power, Tripped the Turbine at 0727
CR-PNP-2008-1119, Received ½ Scram Channel "A" during plant shutdown on IRM Hi Hi
CR-PNP-2008-1120, Relief/Safety Valve Alarm
CR-PNP-2008-1127, Steam Leakage Area Temp Hi Alarms (RHR A&C Pump Area)
CR-PNP-2008-1132, MSIV AD-203-1A failed stroke time test
CR-PNP-2008-1148, Drywell Closeout Inspection identifies leak on "A" Recirculation Pump insulation
CR-PNP-2008-1170, Drywell Equipment Sump CIV failed as-found LLRT
Outage Schedule
Plant Cooldown Data
PNPS 2.1.5, Revision 104, Controlled Shutdown from Power
PNPS 2.1.7, Revision 52, Vessel Heatup and Cooldown
PNPS 2.2.19.1, Revision 25, RHR System – Shutdown Cooling Mode of Operation
TS 3.6.A.1, Primary System Boundary Thermal and Pressurization Limitations

Section 1R22

ASME Code Section IST, Subsections ISTB and ISTC
ASME OM Code-1996, Subsection ISTC, Inservice Testing of Valves in Light-Water Reactor Power Plants
CR-PNP-2008-1718, HPCI Valve Operability Test to Avoid Preconditioning OP Valves

CR-PNP-2008-1742, SBO Fuel Sampling
 CR-PNP-2008-2035, EDG "B" Reactive Load Drifted to 250 KVAR
 Part 9900: Technical Guidance on Preconditioning of SSCs before determining Operability
 PNPS 8.1.1.1, Inservice Pump and Valve Testing Program
 PNPS 8.5.1.1, Core Spray System Operability
 PNPS 8.5.1.3, Core Spray MOV Operability Test
 PNPS 8.9.1, Attachment 3, Emergency Diesel Generators On-Site Fuel Oil Quantity
 PNPS 8.9.1, Emergency Diesel Generator Surveillance
 PNPS 8.9.16.1, Manually Start and Load Blackout Diesel
 PNPS 2.2.32, Attachment 7, SSW System, RBCCW/TBCCW Heat Exchanger Differential Pressure Evaluation
 PNPS 8.5.3.14, SSW Flow Rate Operability Test
 PNPS 8.5.4.1-1, HPCI Simulated Automatic Actuation, Flow Rate and Cold Quickstart Test
 PNPS 8.5.4.4, HPCI Valve Quarterly Operability Test
 PNPS 8.6.5.2, RWCU Valve Quarterly Operability
 RWCU Valve Stroke Trending Data
 TS 3.13, Inservice Code Testing
 TS 3.5.A, Core Spray and LPCI Systems
 TS 3.5.B.4, SSW System
 TS 3.5.F, Diesel Availability
 TS 3.7.A.2, Primary Containment Integrity
 TS 3.9.A and 4.9.A, Diesel Generators
 TS 3.9.A, Electrical Systems
 TS 3/4.13, Inservice Code Testing
 UFSAR 10.7.5, SSW System
 UFSAR Section 6.4.3, Core Spray
 UFSAR Section 8.10, Blackout AC Power Source
 UFSAR Section 8.5, Standby AC Power Source
 Work Order 51644803, Clean Up Valve Quarterly Operability
 Work Order 51646150, HPCI Valve Operability Test
 Work Order 51665636, Emergency Diesel Generator Fuel Storage

Section 1EP6

LORT/NRC Simulator Exam Scenario SES-174 on 4/23/08
 NEI-99-02, Revision 5, Regulatory Assessment Performance Indicator Guideline
 PNPS EP-IP-100.1, EALs

Section 2PS1

CR-PNP-2006-3603, CR-PNP-2007-0050, CR-PNP-2007-0313, CR-PNP-2007-0319,
 CR-PNP-2007-0419, CR-PNP-2007-1089, CR-PNP-2007-1144, CR-PNP-2007-1169,
 CR-PNP-2007-1259, CR-PNP-2007-1792, CR-PNP-2007-2072, CR-PNP-2007-2564,
 CR-PNP-2007-2712, CR-PNP-2007-2740, CR-PNP-2007-2950, CR-PNP-2007-3058,
 CR-PNP-2007-3166, CR-PNP-2007-3428, CR-PNP-2007-3837, CR-PNP-2007-4249,
 CR-PNP-2007-4514, CR-PNP-2007-4825, CR-PNP-2007-4919, CR-PNP-2008-0118,
 CR-PNP-2008-0853, CR-PNP-2008-0911
 PNPS 7.3.31, Revision 21, Tritium Sampling
 PNPS 7.3.37, Revision 35, Noble Gas Effluent Sampling
 PNPS 7.4.42, Revision 25, Calibration of the NUMAC Gaseous PRMs
 PNPS 7.3.48, Revision 12, Airborne Effluent Monitoring of the Turbine Deck and Reactor Feed Pump Bay
 PNPS 7.4.48, Revision 5, Calibration of Turbine Building Gaseous Effluent Monitors (GEMS)

PNPS 7.4.60, Revision 5, Operation of the EG&G ORTEC Gamma Spectroscopy System
PNPS 7.10.3, Revision 20, PRM Calibration Check
PNPS 8.M.3-5, Revision 18, Reactor Building Vent Monitor Calibration Check
PNPS 7.9.12, Revision 3, Liquid Effluent Releases with RETDAS
PNPS 7.3.25, Revision 41, Particulate and Iodine Monitoring at the Main Stack and Reactor Building Vent

Audits, Assessments and Reports

QA-02-2008-PNP-01, Quality Assurance Audit Report –Chemistry, April 3, 2008
QA-06-2007-PNP-01, Quality Assurance Audit Report –Effluent and Environmental Monitoring Program, June 18, 2007
Radioactive Effluent Release Report for January 1 through December 31, 2007
Snapshot Assessment: PNPS Chemistry OE Program, February 22, 2008

Calibration/testing procedure records

3.M.2-6.4, NUMAC Process Radiation Monitor Calibration, Revision 17, 7/17/07, 10/26/07
7.1.30, HEPA Filter and Charcoal Cell Efficiencies, 8/8/06, 8/9/06, 11/28/06, 11/29/06
Work Order Packages for Off-Gas Instrument Calibration (Main Stack and Reactor Building Vent Flow Rate), 51531003, 51531207, 51531914, 51531949, 51546844

Section 4OA1

LERs covering events occurring in 2007 and 1st quarter 2008
NEI-99-02, Revision 5, Regulatory Assessment Performance Indicator Guidelines
Performance Indicator Data for 2007 and 1st quarter 2008

Section 4OA2

CR-PNP-2007-3925, Potential Adverse Trend in Equipment Mispositioning Issues
CR-PNP-2008-0517, Pre-Determined Metrics to Measure Training Effectiveness, including no mispositioning events for the remainder of 2007, were not met
CR-PNP-2008-0994, Chemistry Training Metric to Reinforce Configuration Control not met
CR-PNP-2008-0997, Issues identified during QA control room drawing review
CR-PNP-2008-1757, Declining Trend in Component Mispositionings
EN-HU-103, Revision 1, Human Performance Error Reviews
Pilgrim Station Quarterly Trend Report, First Quarter 2008
Pilgrim Station Quarterly Trend Report, Fourth Quarter 2007

Section 4OA3

Control Room Log January 10, 2008
Control Room Logs
CR-PNP-2007-1172, Reactor Building Supply Fan Damper failed to go fully closed
CR-PNP-2008-0117, Undervoltage Relays Outside of Limits
CR-PNP-2008-1393, Drywell Temperature Reading Higher Than Normal
LER 05000293/2008-001-00, Failure to Meet Technical Specification Requirements for Secondary Containment
LER 05000293/2008-002-00, Failure to Meet Technical Specification Requirements for Undervoltage Relay Trip Settings
PNPS 2.1.15, Revision 193, Daily Surveillance Log (Technical Specifications and Regulatory Agencies)
PNPS 2.1.27, Revision 7, Drywell Temperature Indication
PNPS 2.2.49, Revision 32, Primary Containment Cooling System
PNPS 8.7.3, Secondary Containment Leak Rate Test, Attachment 1

PNPS 8.M.2-2.10.8.5, Diesel Generator “A” Initiation by loss of offsite power logic
 TS 3.2.B Undervoltage Relay Trip Settings”
 TS 3.2.H, Protective Instrumentation, Drywell Temperature
 TS 3.7.C.1 and 3.7.C.2.a “Secondary Containment”

LIST OF ACRONYMS

AC	Alternating Current
ADAMS	Agencywide Documents Access and Management System
ADS	Automatic Depressurization System
ASME	American Society of Mechanical Engineers
CAP	Corrective Action Program
CCA	Common Cause Analysis
CR	Condition Report
CS	Core Spray
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
EAL	Emergency Action Level
EC	Engineering Change
EDG	Emergency Diesel Generator
HPCI	High Pressure Coolant Injection
IMC	Inspection Manual Chapter
IR	Inspection Report
kV	Kilovolt
kW	Kilowatt
LER	Licensee Event Report
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
OA	Other Activities
ODCM	Offsite Dose Calculation Manual
PARS	Publicly Available Records
PI	Performance Indicator
PMT	Post Maintenance Test
PNPS	Pilgrim Nuclear Power Station
RBCCW	Reactor Building Closed Cooling Water
RCIC	Reactor Core Isolation Cooling
RETS	Radiological Effluent Technical Specification
RHR	Residual Heat Removal
SDP	Significance Determination Process
SRV	Safety Relief Valve
SSW	Salt Service Water
TS	Technical Specification
TSO	Transmission System Operator
UFSAR	Updated Final Safety Analysis Report
UWUA	United Workers Union of America