

November 7, 2002

Mr. Robert M. Bellamy
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Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, Massachusetts 02360-5599

SUBJECT: PILGRIM NUCLEAR POWER STATION - INTEGRATED INSPECTION
REPORT 50-293/02-06

Dear Mr. Bellamy:

On September 28, 2002, the NRC completed an inspection at your Pilgrim reactor facility. The enclosed report documents the inspection findings which were discussed on October 9, 2002, 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. No findings of significance were identified during this inspection.

The NRC has increased security requirements at the Pilgrim reactor facility in response to terrorist acts on September 11, 2001. Although the NRC is not aware of any specific threat against nuclear facilities, the NRC has issued an Order and several threat advisories to commercial power reactors to strengthen licensees' capabilities and readiness to respond to a potential attack. The NRC continues to inspect the licensee's security controls and its compliance with the Order and current security regulations.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Clifford Anderson, Chief
Projects Branch 5
Division of Reactor Projects

Docket No. 50-293

Robert M. Bellamy

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License No. DPR-35

Enclosure: Inspection Report 50-293/02-06

Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-293

License No: DPR-35

Report No: 50-293/02-06

Licensee: Entergy Nuclear Operations, Inc.

Facility: Pilgrim Nuclear Power Station

Location: 600 Rocky Hill Road
Plymouth, MA 02360

Inspection Period: June 30, 2002, through September 28, 2002

Inspectors: W. Raymond, Senior Resident Inspector
R. Arrighi, Resident Inspector
J. Furia, Senior Health Physicist
P. Frechette, Physical Security Inspector
D. Silk, Emergency Preparedness Inspector (in-office)
R. Moody, Office of Nuclear Reactor Regulation (in-office)
T. Burns, Reactor Inspector

Approved By: Clifford Anderson, Chief
Projects Branch 5
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000293-02-06; Entergy Nuclear Operations, Inc.; on 06/30-09/28/2002; Pilgrim Nuclear Power Station, Resident Inspection Report.

The inspection was conducted by resident inspectors, a regional security inspector and a regional health physicist. In addition, an in-office review was conducted by a headquarters and regional emergency preparedness inspector. This inspection identified no significant findings. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector Identified Findings

None

A. Licensee Identified Violations

None

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Report Details

SUMMARY OF PLANT STATUS

Pilgrim Nuclear Power Station operated during the period at 100 percent (%) core thermal power, except for periods of planned operation at reduced power to maintain condenser performance (July 8, July 17-18, July 25-27, September 10-11 and September 27-28), for control rod pattern adjustments, and a brief down power to 87% on August 31 during turbine stop valve testing.

1. REACTOR SAFETY (Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness)

1R01 Adverse Weather

a. Inspection Scope

The inspector reviewed the Pilgrim adverse weather procedures for excessive ambient temperatures to verify that risk significant systems would be protected from adverse weather. The inspector reviewed licensee methods to protect essential equipment in the switchgear rooms, the emergency diesel generator rooms and the salt service water pump rooms. The inspector reviewed the procedures and design basis documents listed in the enclosed attachment to this report to verify that licensee controls were appropriate to protect essential equipment.

The inspector reviewed the licensee response to excessive ambient temperatures and adverse environmental conditions during periods in July, August and September, 2002. The inspector reviewed licensee actions to implement compensatory measures to protect essential equipment in the switchgear rooms, the emergency diesel generators and the salt service water pumps. The inspector toured the intake structure, upper switchgear room, and emergency diesel generator areas to verify adequate protection for excessive temperatures.

The inspector verified that the licensee was identifying weather and environmental related problems that could affect the operation of mitigating equipment in the corrective action program (reference Condition Reports 2002-11117 and 2002-121135), and that the issues were properly resolved.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

The inspector conducted a partial system review of the “B” emergency diesel generator (EDG) at times when the “A” EDG was out of service for scheduled preventive maintenance and surveillance testing. The inspector reviewed operating procedures and verified licensee actions to protect redundant equipment. The references used for this review included procedure Drawings M219 and M223. The inspector reviewed control room indications and conducted a walkdown of diesel support systems. The inspector confirmed that the “B” EDG was properly aligned to support normal and emergency plant operations during the following periods:

- A EDG Outage for Preventative Maintenance, July 16 -17, 2002
- A EDG Inoperable for Surveillance, August 8, 2002

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

Quarterly Fire Protection Inspection

The inspector toured selective areas of the plant to observe conditions related to: (1) transient combustibles and ignition sources; (2) the material condition and readiness of fire protection systems and equipment; and (3) the condition and status of readiness of fire barriers used to prevent fire damage or fire propagation. The inspector verified that any identified degraded conditions were compensated by compensatory measures until appropriate corrective actions could be taken. The inspector also reviewed the applicable fire hazard analysis fire zone data sheets and selective surveillance procedures to ensure that the specified fire suppression systems surveillance criteria were met. Selected documents reviewed are listed in the enclosed Attachment. The areas inspected included:

- Fire zone 1.1, “A” residual heat removal and core spray pump quadrant
- Fire zone 1.19A, “A” residual heat removal pipe room
- Fire zone 2.4, Battery room “B”
- Fire zone 3.2, Cable spreading room
- Fire zone 4.1, “B” train diesel generator room
- Fire zone 4.3, “A” train diesel Generator room

Annual Fire Drill Inspection

The inspector monitored the performance of the fire brigade training drill conducted on August 7, 2002. The drill involved a simulated fire in the overhead cable trays in the 23 foot elevation of the reactor building. The inspector observed fire brigade personnel performance, and verified that the licensee's pre-planned drill scenario was followed and that the drill objectives were met. The inspector verified that proper protective clothing and breathing apparatus was donned, that sufficient fire fighting equipment was brought to the scene, and fire protection personnel entered the fire area in a controlled manner. The inspector also ensured that the fire hose was capable of reaching the fire location and that the fire equipment specified in procedure PNPS 5.5.2, "Special Fire Procedure," was properly stored for the 23 foot elevation of the reactor building.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspector observed the performance of an operating crew in the simulator on August 5, 2002. The inspector verified that the crew met the training scenario objectives and performed the critical tasks. The scenarios involved operational transients and design basis events. The inspector verified proper use of the system operating procedures and emergency operating procedures. The inspector also verified that the post-scenario critique discussed any relevant lessons learned. The inspector verified that the identified discrepancies during the scenario were discussed with the crew to enhance future performance. The inspector observed training on the following dates:

- Requalification Program Simulator Testing, August 5, 2002
- Requalification Program Exams, September 10, 2002

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule

a. Inspection Scope

The inspector reviewed the implementation of the maintenance rule (10 CFR 50.65) for selected systems and components. The review included applicable maintenance rule basis documents, system health report and the Updated Final Safety Analysis Report (UFSAR). The review included the following specific equipment issues:

- Proper classification of the equipment failure for condition report 2001-09055, failure of the "B" train standby gas treatment (SBGT) system to start. The inspector evaluated the adequacy of the licensee's corrective actions and

ensured that the corresponding equipment unavailability was properly captured. The inspector noted that the licensee had properly classified this system as (a)2.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspector evaluated on-line risk management for planned and emergent work. The inspector reviewed maintenance risk evaluations, work schedules, recent corrective actions, and control room logs to verify that other concurrent planned and emergent maintenance or surveillance activities did not adversely affect the plant risk already incurred with the out of service components. The inspector verified that the licensee took the necessary steps to control work activities, took actions to minimize the probability of initiating events and maintained the functional capability of mitigating systems. The inspector assessed Pilgrim's risk management actions during plant walkdowns. The inspector also discussed the risk management with maintenance, engineering and operations personnel for the following activities:

- HPCI Injection Valve 2301-08 Power Supply Repair, WRT 075719, July 7, 2002
- Automatic Transfer Switch 83-1 (Y10) SE Relay Testing, July 9, 2002
- "A" Emergency Diesel Generator On-line Maintenance per 3M3-61.2 and 61.5, July 15-19, 2002
- Reactor Core Isolation Cooling Surveillance and Repair, July 22, 2002
- Control Rod System 3A-K32 Relay Replacement, MR 02113076 and 02113079, August 8, 2002

The inspector also attended the weekly operational risk assessment for work week August 5, 2002. The inspector verified that the appropriate members of the risk assessment team (operations, maintenance, reactor engineering and integrated scheduling) attended the meeting and discussed pertinent work activities scheduled for the week, and that protective areas were identified and compensatory measure sheets were included for various work activities in accordance with procedure 1.5.22, "Risk Assessment Process."

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspector reviewed the operator response to a failure of the Hathaway/Beta 4100 annunciator system on July 13, 2002, while the plant operated at steady state, 100% full power conditions. The inspector reviewed the operator's use of abnormal and normal operating procedures to monitor plant status, to investigate the Beta System, and to restore the control board annunciators within 20 minutes of the discovery of the failure. Based on a review of plant logs, the Beta system had not provided control room annunciators for at most 72 minutes.

The inspector reviewed the licensee's assessment of the remaining plant status information in the control room. The inspector interviewed plant operators and reviewed the control room indications to identify the operator assessment aids. This information included several plant computer generated status monitors and printers, which displayed plant system status as well as audio and visual alarms for off-normal conditions. The licensee concluded that sufficient information remained available in the control room to provide for plant assessment capability in the event of an emergency.

The inspector reviewed the licensee evaluation of the event for reportability per 10 CFR 50.72 and the emergency plan implementing procedures. The licensee concluded that no notification or reporting criteria were met. The licensee initiated a review of the emergency plan action levels to assure they were consistent with industry standards.

The inspector reviewed the licensee short and long term corrective actions as described in Condition Report 200210889. The corrective actions included completing a root cause evaluation for the event; assigning an action item to engineering to resolve the Beta System firmware problem; implementing administrative measures to reduce the vulnerability to a loss of annunciators; and, generating an Operating Experience notice to identify the vulnerability to other Beta System users. The inspector reviewed the licensee self-assessment and long term corrective actions to address the initial slow response to the event in July 2002, and the failure to implement a vendor-recommended firmware upgrade in 1995 that would have addressed the cause of the event (CR 200211373).

The inspector reviewed the licensee's evaluation to characterize the risk significance of the loss of control room annunciators. The licensee's conservative analysis showed that the change in core damage probability was much below the threshold value of 1E-6 used to determine risk significance.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspector reviewed selected operability determinations to assess the adequacy of the evaluations, the use and control of compensatory measures, compliance with the technical specifications, and the risk significance of the issues. The inspector used the technical specifications, Final Safety Analysis Report, associated Design Basis Documents and PNPS Procedure 1.3.34.5, "Operability Evaluations," as references. The specific issues reviewed included:

- CR 2002-10824, HPCI Inoperable for Thirty Minutes, July 7, 2002;
- CR 2002-11212, RCIC Inoperable for Three Hours, August 9, 2002;
- OE 02-12, Standby gas treatment system damper operation. The licensee assessed this condition in condition report 2002-09776 and engineering evaluation 02-015;
- OE 02-17, Main steam valve stroke time. The licensee assessed this condition in condition report 2002-10902 and engineering evaluation 02-021
- OE 02-022 "B" RHR Heat Exchanger Flange Leak (CR 2002-11422)
- OE 02-24, Calibration of ATWS Time Delay Relays (CR 2002-11539)

The inspector reviewed the licensee actions to restore the High Pressure Coolant Injection System to an operable status on July 7, 2002, and to complete operability and reportability evaluations. This issue is also reviewed in Section 4OA3 of this report.

The inspector reviewed the licensee evaluations of the Reactor Core Isolation Cooling (RCIC) System following the loss of turbine oil during a surveillance test on August 9, 2002. The inspector reviewed the licensee's reportability evaluations, and the operability evaluation that supported retracting the 10 CFR 50.72 report on September 4, 2002.

b. Findings

No findings of significance were identified.

1R16 Operator Work-Arounds

a. Inspection Scope

The inspector reviewed the operator work-around, control room deficiency, operator burden, and disabled annunciator lists to evaluate the potential impact on the operators' ability to implement abnormal or emergency operating procedures. The inspector walked down the control room panels to ensure that applicable deficiencies were captured in the licensee's control room deficiency list. During the review, the inspector used the criteria contained in licensee procedure 1.3.34.4, "Compensatory Measures."

The inspector also attended the July 23, 2002, weekly meeting on Operations aggregate impact. During the meeting, the licensee discussed the planned maintenance activities to correct the identified operational deficiencies.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspector reviewed post-maintenance test activities to verify that the effect of the test on the plant had been evaluated adequately, the test was properly performed and the test data met the required acceptance criteria, and the test activity was adequate to verify system operability and functional capability following maintenance. The inspector reviewed the following post maintenance testing (PMT) activities:

- 3.M.3-61.7, EDG Woodward Governor Tuning Procedure, July 19, 2002;
- TP01-059, Special Test for EDG Governor Adjustment or Replacement Post Work Testing, July 19, 2002;
- 8.9.1.1, Post Work Test for Diesel Oil Transfer Pump, July 19, 2002; and
- Control Rod 14-07 and 18-07 Exercise per procedure 8.3.2 and TP 00-20 on August 8, 2002.

The inspector reviewed the licensee actions for an inadequate post- maintenance test for maintenance request (MR) 01116079, for the replacement of the "B" control room high efficiency air filtration (CRHEAF) humidistat in accordance with plant design change (PDC) 01-08 (reference Condition Report 200211609 and OE 02-029).

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspector reviewed and observed surveillance testing to verify that the test acceptance criteria was consistent with technical specifications and Updated Final Safety Analysis Report requirements, the test was performed in accordance with the written procedure, the test data was complete and met procedural requirements, and the system was properly returned to service following testing.

The inspector reviewed the results of the following surveillance tests:

- 8.5.2.2.2 LPCI Pump and Valve Quarterly, July 2, 2002
- 8.5.4.1-1 HPCI System Simulated Automatic Initiation Test, August 2, 2002
- 8.M.1-32.5 Analog Trip System Test, Cabinet C2233A, August 8, 2002
- 8.M.2-3.6.5 Neutron Monitoring System Flow Converter Test, August 8, 2002
- 8.M.2-4.2 Offgas Radiation Monitor Functional Test, August 8, 2002
- 8.3.2 Control Rod Exercise, with Temporary Procedure TP00-020 during routine control rod tests in July and August, 2002.

The inspector reviewed licensee corrective actions for anomalies that occurred during surveillance testing to verify deficiencies were adequately resolved. The inspector reviewed the licensee's evaluation of the performance of the #2 turbine stop valve following a test per procedure 8.M.1-11 on August 31, 2002 (reference Condition Report 200211475). The inspector reviewed the licensee's evaluations for a misalignment of control rod 18-07 during the weekly exercise test (reference condition report 200209989), along with the actions to improve equipment and personnel performance.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

During this inspection period, an in-office inspection was conducted by regional and headquarters personnel that reviewed recent changes to the emergency plan pertaining to on-shift staffing in Section B, Station Organization, Table B-1, Rev 25. These changes were reviewed against 10 CFR 50.54(q) to ensure that the changes do not decrease the effectiveness of the plan, and that the changes, as made, continue to meet the standards of 10 CFR 50.47(b), the requirements of Appendix E, and the intent of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants."

During this inspection period, an in-office inspection was conducted by a regional inspector that reviewed recent changes to emergency plan implementing procedures (listed below) to determine if the changes decreased the effectiveness of the plan. A thorough review was conducted of documents related to the risk significant planning standards (RSPS), such as classifications, notifications and protective action recommendations. A cursory review was conducted for non-RSPS documents. These changes were reviewed against 10 CFR 50.54(q) to ensure that the changes do not decrease the effectiveness of the plan, and that the changes as made continue to meet the standards of 10 CFR 50.47(b), the requirements of Appendix E, and the intent of NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants. These changes are subject to future NRC inspections to ensure that the results of the changes continue to meet NRC regulations.

- EP-IP-100, Emergency Classification and Notification, Rev 19, 20
- EP-IP-100.1, Emergency Action Levels (EALs), Rev 0
- EP-IP-200, On-Call Emergency Director, Rev 10
- EP-IP-201, Emergency Plant Manager, Rev 3
- EP-IP-210, Control Room Augmentation, Rev 8
- EP-IP-240, Emergency Security Organization Activation and Response, Rev 10
- EP-IP-252, Facilities Support, Rev 8

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY
Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas

a. Inspection Scope

During the period of July 8-11, 2002, the inspector identified exposure significant work areas (e.g., high radiation areas, and potential airborne radioactivity areas) in the turbine (including radwaste), reactor, augmented off-gas and retube buildings and the trash compaction facility, and reviewed associated controls and surveys of these areas to determine if the controls (i.e., radiological surveys, postings, barricades) were adequate to identify and control radiation exposures. For these areas, the inspector: reviewed radiological job requirements and attended job briefings; determined if radiological conditions in the work area were adequately communicated to workers through briefings and postings; verified the implementation of radiological job coverage and contamination controls; and verified the accuracy of surveys and applicable posting and barricade requirements. The inspector obtained this information via: interviews with licensee personnel; walkdown of systems, structures, and components; and, examination of records, procedures, or other pertinent documents. The inspector determined if prescribed radiation work permit (RWPs) controls were in-place, procedure and engineering controls were in place, whether licensee surveys and postings were complete and accurate, and whether air samplers were properly located. The inspector reviewed electronic pocket dosimeter alarm set points (both integrated dose and dose rate) for conformity with survey indications and plant policy. Plant technical specification (TS) 5.7 and the requirements contained in 10 CFR 20, Subpart G were utilized as the standard for necessary barriers.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls

a. Inspection Scope

The inspector reviewed ALARA job evaluations, reviewed exposure estimates and exposure mitigation requirements, and reviewed ALARA plans. The inspector conducted a review of: the integration of ALARA requirements into work procedures and RWP documents; the accuracy of person-hour estimates and person-hour tracking; and the generation of shielding requests including their effectiveness in dose rate reduction. The inspector obtained this information via: interviews with licensee personnel; walkdown of systems, structures, and components; and, examination of records, procedures, or other pertinent documents.

For the work areas identified in section 2OS1 (above), the inspector: evaluated the licensee's use of engineering controls to achieve dose reductions; determined if workers utilized the low dose waiting areas and were effective in maintaining their doses ALARA; determined if workers received appropriate on-the-job supervision to ensure ALARA requirements were met; and reviewed individual exposures of selected work groups.

The inspector conducted a review of actual exposure results versus initial exposure estimates including comparison of estimated and actual dose rates and person-hours expended; determination of the accuracy of estimations to actual results; and determination of the level of exposure tracking detail, exposure report timeliness and exposure report distribution. The review was against requirements contained in 10 CFR 20.1101(b).

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation

a. Inspection Scope

The inspector reviewed field instrumentation utilized by health physics technicians and plant workers to measure radioactivity including; portable field survey instruments, friskers, portal monitors and small article monitors. The inspector obtained this information via: interviews with licensee personnel; walkdown of systems, structures, and components; and, examination of records, procedures, or other pertinent documents. The inspector conducted a review of instruments observed, specifically verification of proper function and certification of appropriate source checks for these instruments, which were utilized to ensure that occupational exposures were maintained in accordance with 10 CFR 20.1201.

The inspector also reviewed documentation related to sources utilized in the calibration of radiological survey instrumentation. Documentation reviewed was related to establishing source traceability back to the National Institute of Standards and Technology (NIST).

b. Findings

No findings of significance were identified.

3. SAFEGUARDS

Cornerstone: Physical Protection (PP)

3PP1 Access Authorization Program

a. Inspection Scope

The following activities were conducted to determine the effectiveness of the Pilgrim Nuclear Power Station behavior observation portion of the personnel screening and fitness-for-duty (FFD) programs, as measured against the requirements of 10 CFR 26.22 and the Pilgrim Nuclear Power Station Fitness for Duty Program documents.

Five supervisors representing the Maintenance, Licensing, Operations, Systems Engineering and Nuclear Oversight departments were interviewed, on July 11, 2002, regarding their understanding of behavior observation responsibilities and the ability to recognize aberrant behavior traits. Two (2) Access Authorization/Fitness-for-Duty self-assessments, two (2) semi annual FFD testing data reports, an audit, and event reports and loggable events for the four previous quarters were reviewed, during July 8-11, 2002. On July 11, 2002, five (5) individuals who perform escort duties were interviewed to establish their knowledge level of those duties. Behavior observation training procedures and records were reviewed on July 10, 2002.

b. Findings

No findings of significance were identified.

3PP2 Access Control

a. Inspection Scope

The following activities were conducted during the period July 8-11, 2002, to verify that Pilgrim Nuclear Power Station has effective site access controls, and equipment in place designed to detect and prevent the introduction of contraband (firearms, explosives, incendiary devices) into the protected area as measured against 10 CFR 73.55(d) and the Physical Security Plan and Procedures.

Site access control activities were observed, including personnel and package processing through the search equipment during peak ingress periods on July 8, 9, and 10, 2002, and vehicle searches, on July 9 and 10, 2002. On July 8, 2002, testing of all access control equipment; including metal detectors, explosive material detectors, and X-ray examination equipment, was observed. The Access Control event log, an audit, and three (3) maintenance work requests were also reviewed.

b. Findings

No findings of significance were identified.

3PP3 Response to Contingency Events

The Office of Homeland Security (OHS) developed a Homeland Security Advisory System (HSAS) to disseminate information regarding the risk of terrorist attacks. The HSAS implements five color-coded threat conditions with a description of corresponding actions at each level. NRC Regulatory Information Summary (RIS) 2002-12a, dated August 19, 2002, "NRC Threat Advisory and Protective Measures System," discusses the HSAS and provides additional information on protective measures to licensees.

a. Inspection Scope

On September 10, 2002, the NRC issued a Safeguards Advisory to reactor licensees to implement the protective measures described in RIS 2002-12a in response to the Federal government declaration of threat level "orange." Subsequently, on September 24, 2002, the OHS downgraded the national security threat condition to "yellow" and a corresponding reduction in the risk of a terrorist threat.

The inspector interviewed licensee personnel and security staff, observed the conduct of security operations, and assessed licensee implementation of the threat level "orange" protective measures. Inspection results were communicated to the region and headquarters security staff for further evaluation.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspector reviewed licensee event reports, portions of operator logs, and NRC Inspection reports for the period of January 2001 to July 2002 to determine the accuracy and completeness for the reported Pilgrim performance indicators (PIs). The inspector verified that the licensee had classified equipment unavailability in accordance with NRC endorsed criteria contained in NEI 99-02, "Regulator Assessment of Performance Indicator Guideline." The following PIs were reviewed:

- Residual Heat Removal System Unavailability
- High Pressure Injection System Unavailability
- Emergency AC Power System Unavailability
- Heat Removal (RCIC) System Unavailability

The inspector reviewed operator logs and licensee records for the period of July 2001 to June 2002 to determine the accuracy and completeness for the reported Pilgrim performance indicators (PIs). The following PIs were reviewed:

- RCS Leak Rate
- RCS Activity

The inspector also reviewed licensee actions to address anomalies in RCS leak rate determinations (reference Condition Reports 200210817 and 200210825).

The inspector reviewed the Pilgrim Nuclear Power Station program for gathering and submitting data relative to Fitness-for-Duty, Personnel Screening, and Protected Area Security Equipment Performance Indicators. The review included the licensee's tracking and trending reports, personnel interviews and security event reports for the Performance Indicator data collected from the 1st quarter of 2001 through the 2nd quarter of 2002.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

.1 Effectiveness of Problem Identification

a. Inspection Scope

The inspector reviewed the licensee's activities regarding the failure of a steam dryer cover plate at a domestic BWR after a recent power uprate to determine if the licensee had reviewed this event in the operating experience (OE) program and, if determined to be applicable to Pilgrim Nuclear Power Station (PNPS), properly characterized and entered the issue into the condition reporting process for evaluation and resolution. The inspector reviewed NRC Information Notice (IN) 2002-26, Failure of Steam Dryer Cover Plate After a Recent Power Uprate, Service Information Letter (SIL) 644, BWR/3 Steam Dryer Failure, OE14300, Reactor Steam Dryer Found Damaged, NOP01A1, Reactor Vessel Internals Inspection Program and Drawing 729E272, Steam Dryer. The inspector interviewed several members of the Pilgrim Reactor Vessel Internals Program to assess involvement in the determination for inspection of the steam dryer. The licensee entered this item into the corrective action program as Condition Report 200211783.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

(Closed) LER 50-293/2002-001: HPCI System Inoperable for Thirty Minutes Due to Inoperable Injection Valve 2301-8: The inspector reviewed the corrective actions associated with Licensee Event Report (LER) 50-293/2002-001-00, when the HPCI system was found inoperable due to a blown fuse in the power supply for injection valve 2301-8. This LER is closed.

(Closed) LER 50-293/21999-003-01: Local Leak Rate Test Results Exceeded Allowable Limits: The inspector reviewed the licensee's update report for this event, which was previously reviewed in Inspection 50-293/99-07. The update report described the results of the licensee failure analysis for the components that failed the leak test. The corrective actions associated with the event were acceptable. This LER is closed.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. R. Bellamy and other members of licensee management at the conclusion of the inspection on October 9, 2002. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered propriety. No propriety information was identified.

ATTACHMENT

SUPPLEMENTAL INFORMATION

a. Key Points of Contact

C. Dugger, Vice President, Operations
 P. Dietrich, Plant Manager
 V. Fallacara, Director, Operations
 J. Hurley, Radiation Protection Supervisor
 W. Lobo, Licensing Engineer
 W. Mauro, ALARA Team Manager
 J. McClellan, Senior Engineer - Nuclear
 W. Perks, Technical Services Manager
 D. Perry, Radiation Protection Manager
 W. Riggs, Director, Safety Assessment
 R. Rose, Security Manager
 T. Sowdon, Superintendent Emergency Preparedness

b. List of Items Opened, Closed and Discussed

Closed

LER 50-293/2002-001	HPCI System Inoperable for Thirty Minutes Due to Inoperable Injection Valve 2301-8
LER 50-293/21999-003-01	Local Leak Rate Test Results Exceeded Allowable Limits

c. List of Documents Reviewed

References for Section 1R01 Adverse Weather

2.4.144, "Degraded Voltage"
 2.2.8, "Standby AC Power Systems"
 2.2.45, "Screen House Heating and Ventilation Systems"
 2.2.108, "Diesel Generator Cooling and Ventilation System"
 2.4.153, "Loss of Turbine Building/Aux Bay Area Ventilation"
 2.1.35, "Control Room Readings"
 2.2.32, "Salt Service Water System"
 Calculation M996, EDG Room Temperature Differentials
 Plant Design Change PDC99-12, EDG Ventilation System Modifications
 Technical Specification 3/4.5.B, Ultimate Heat Sink Temperature Limits
 License Amendment 176 for TS 3/4.5.4 Ultimate Heat Sink
 Final Safety Analysis Report (FSAR) Sections 10.9.3.4, 10.9.3.7 and 10.9.3.9.

References for Section 1R05 Fire Protection

8.B.4.12, Fire Panel C93, Emergency Diesel Generator Building, Functional Test
 8.B.6.1, EDG "A" Pre-Action Sprinkler System Functional Test, dated 3/21/02
 8.b.6.2, EDG "B" Pre-Action Sprinkler System Functional Test, dated 2/13/02
 8.B.7, Fixed Dry Chemical Fire Protection Systems

References for Section 3PP1 and 3PP2

Plant Access Training - Fitness for duty
 Security/Fitness for Duty Semi-Annual Report, June, 2002 (Draft)
 Security/Fitness for Duty Semi-Annual Report, December, 2001
 Audit Report No. 02-01, Fitness for Duty and Access Authorization, March, 2002
 Audit Report No. 02-02, Security Program, April, 2002
 Security Loggable event report, 06/01-06/02
 Security Controlled Locks and Keys Audit Report, 2nd Quarter, 2002
 Fitness for Duty Self Assessment, April, 2002

d. List of Acronyms

ALARA	As Low As Reasonable Achievable
CFR	Code of Federal Regulations
CR	Condition Reports
CRHEAF	Control Room High Efficiency Air Filter
FFD	Fitness-For-Duty
FSAR	Final Safety Analysis Report
HSAS	Homeland Security Advisory System
LER	Licensee Event Report
MR	Maintenance Request
NIST	National Institute of Standards and Technology
OE	Operability Evaluations
PARS	Publically Available Records
PR	Problem Report
RIS	Regulatory Information Summary
RP	Radiation Protection
RWP	Radiation Work Permit
SBGT	Standby Gas Treatment
SIL	Service Information Letter
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report