January 25, 2005

Mr. Michael Balduzzi
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, Massachusetts 02360

SUBJECT: PILGRIM NUCLEAR POWER STATION - NRC INTEGRATED INSPECTION REPORT 05000293/2004006

Dear Mr. Balduzzi:

On December 31, 2004, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Pilgrim Nuclear Power Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on January 6, 2004, 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, a licensee-identified violation, that was determined to be of very low safety significance, is listed in Section 4OA7 of this report. If you contest this non-cited violation, 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 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
License No. DPR-35

Enclosure: Inspection Report 50-293/2004006
w/Attachment: Supplemental Information

cc w/encl
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The Honorable Vincent deMacedo
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No:	50-293
License No:	DPR-35
Report No:	05000293/2004006
Licensee:	Entergy Nuclear Operations, Inc.
Facility:	Pilgrim Nuclear Power Station
Location:	600 Rocky Hill Road Plymouth, MA 02360
Dates:	September 28, 2004 - December 31, 2004
Inspectors:	W. Raymond, Senior Resident Inspector C. Welch, Resident Inspector J. A. Bobiak, Reactor Inspector John R. McFadden, Health Physicist David M. Silk, Senior Emergency Preparedness Inspector (in-office) Joseph D'Antonio, Operations Engineer (in-office)
Approved By:	Clifford Anderson, Chief Projects Branch 5 Division of Reactor Projects

Enclosure

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SUMMARY OF FINDINGS

IR 05000293/2004006; 09/28-12/31/2004; Pilgrim Nuclear Power Station; Routine integrated report.

The report covered a 13 week period of inspection by resident inspectors, a senior emergency preparedness inspector, a health physicist, a reactor engineer and an operations engineer. No findings of significance were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, July 2000.

A. Inspector Identified and Self-Revealing Findings

None.

B. Licensee-Identified Violations

A violation of very low safety significance, which was identified by Entergy, has been reviewed by the inspector. Corrective actions taken or planned by Entergy have been entered into Entergy's corrective action program. This violation is listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Pilgrim Nuclear Power Station operated during the period at 100 percent (%) core thermal power, except for short periods of planned operation at reduced power for routine testing and maintenance.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity, Emergency Preparedness

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope (2 samples)

Adverse Weather Preparations

The inspector reviewed Entergy's activities and the status of plant systems at the onset of cold weather and periodically during the months of November and December 2004. The inspector assessed Entergy's cold weather preparations to verify that the cold conditions did not render key safety systems inoperable. The safety systems and components focused on during the inspection included the fire water system and storage tanks, the condensate tanks, the A and B emergency diesel generators, the station blackout diesel generator, and the salt service water pumps. Completed copies of station procedure 8.C.40, "Cold Weather Surveillance," were reviewed. The Updated Final Safety Analysis Report section 10.9.3 and Table 10.9-1 "Design Temperatures (Winter)," were used as references during the inspection.

The inspector reviewed the EDG ventilation systems to verify that they were aligned for seasonal operation and as required in procedure 2.2.108, "Diesel Generator Cooling and Ventilation System." The inspector reviewed the system health report and outstanding maintenance items for the heating ventilation and air conditioning system.

The condition report (CR) database was searched for CRs associated with cold weather/freezing conditions for year 2004 to verify Entergy was identifying cold weather related issues and had taken effective corrective actions.

Adverse Weather Protection

The inspector performed walkdowns of plant systems during cold weather in the weeks of November 8 and December 13, 2004. The inspector assessed Entergy's cold weather protection and assessed the impact of the cold conditions on the operability of key safety systems. The safety systems reviewed during the inspection included the emergency diesel generators, the salt service water pumps, and the condensate storage tanks.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial System Alignment

a. Inspection Scope (3 samples)

The inspector completed a partial review of risk significant plant systems during periods when the redundant system was out of service for scheduled maintenance and testing. The inspector reviewed plant procedures, system drawings, and valve line-up procedures to walkdown and verify the correct system lineup. The Updated Final Safety Analysis Report and the Technical Specifications were reviewed to ascertain the required system configuration. The references used for this review are described in the attachment to this report. This inspection activity represented 3 samples:

- High pressure coolant injection (HPCI) during reactor core isolation cooling (RCIC) maintenance on 10/15/04
- 'A' emergency diesel generator (EDG) during 'B' EDG maintenance on 10/26/04
- RCIC system during HPCI maintenance on 11/22/04.

b. Findings

No findings of significance were identified.

.2 Full System Alignment

a. Inspection Scope (1 sample)

The inspector performed a full system review of the reactor building and the standby gas treatment system (SBGTS). The inspector determined the alignment of key valves and controls by walkdown of accessible portions of the system and observation of main control board indications and plant computer information. Procedures 2.2.50, "Standby Gas Treatment System," 2.2.78, "Reactor Building Truck Lock Doors," 5.4.6, "Primary Containment Venting and Purging Under Accident Conditions," and Drawing M294, "SBGTS Control Diagram," were reviewed to determine the required configuration. The Updated Final Safety Analysis Report (UFSAR), Technical Specifications, and system training manual were also reviewed.

The material condition of the reactor building and SBGTS was assessed through visual inspection of the accessible portions of the system, and a review of condition reports (January 2003- November 2004), outstanding maintenance requests, the third quarter 2004 system health report, maintenance rule information, and discussions with plant staff.

The inspector sampled Entergy's corrective action program records to verify that Entergy was identifying and correcting equipment alignment problems at an appropriate threshold. Specifically, the inspector reviewed Entergy's corrective actions for the secondary containment issues described in Condition Report 200301413. The references used during this review are described in the attachment to this report.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope (6 samples)

The inspector toured plant areas 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 determined whether any identified degraded condition was 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 detection and suppression systems surveillance criteria were met. The inspector also determined whether Entergy was addressing fire protection related problems in the corrective action program. This inspection activity represented 6 samples.

- Fire Zone 1.10, Reactor Building 23 ft Control Rod Drive Hydraulic Control Units West Side
- Fire Zone 1.14, Reactor Building 74 ft Open Areas and Fan Room
- Fire Zone 1.16, Reactor Building 91 ft Open Areas
- Fire Zone 3.1, Main Control Room
- Fire Zone 1.23, Standby Gas Treatment System Rooms
- Fire Zone 1.23A, Reactor Building Contaminated Exhaust Area

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

1. External Flooding (1 sample)

a. Inspection Scope

The inspector reviewed the UFSAR and the individual plant examination for external events report to assess the site protection for external flooding. A walk down of the site was performed to assess the site's drainage capabilities and to identify potential flooding

pathways into the process buildings. The diesel generator and intake building scupper drains were checked for free movement. The exteriors of plant buildings were walked down to verify flood barriers were capable of performing the intended function. The inspector reviewed plant procedures coping with postulated site flooding events to verify that operator actions could be performed to achieve the desired actions. The inspector reviewed the condition reports to verify that Entergy addressed potential flood issues in the corrective action program. The references used for this review are listed in the attachment to this report.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope (1 sample)

The inspector reviewed performance testing for the B residual heat removal (RHR) heat exchangers to verify that the performance monitoring techniques used ensured heat removal capabilities were acceptable. The inspector reviewed the testing to verify that Entergy compared the inspection results against established acceptance criteria; the performance monitoring considered the differences between plant conditions and design conditions; and the frequency of testing and inspections was sufficient. The inspector also determined whether Entergy evaluated the results to ensure proper heat exchanger operation, and evaluated and corrected discrepancies.

The inspector reviewed performance testing and preventive maintenance (PM) records for the A and B reactor building closed cooling water (RBCCW) and the A and B turbine building closed cooling water (TBCCW) heat exchangers to verify that the performance monitoring techniques used to ensure heat removal capabilities were acceptable. The inspector reviewed the weekly test results for the month of August - September 2004 to verify that Entergy compared the results against established acceptance criteria; the performance monitoring considered the differences between plant conditions and design conditions; the frequency of testing and inspections was sufficient; and, Entergy had a program for bio-fouling monitoring and control. The inspector reviewed the results to determine whether Entergy evaluated the results to ensure proper heat exchanger operation, and evaluated and corrected deficiencies.

The inspector also reviewed a sample of corrective action condition reports related to the selected equipment to verify that identified problems were appropriately resolved. The inspector reviewed Entergy's actions in response to Condition Report 200402792 and the actions to verify that biofouling conditions (hydroids) at the plant intake structure did not impact the plant safety related heat exchangers. The inspector conducted a walkdown of the selected heat exchangers to assess material conditions.

The documents listed in the attachment were used for this inspection.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

Licensed Operator Requalification Exams (2 samples)

The inspector reviewed licensed operator requalification examination activities during the period from September 28 - October 1, 2004 and on October 19, 2004. The inspector observed the performance of an operating crew during simulator exams. The exams were conducted per the scenarios below as part of Entergy's licensed operator requalification program. The scenarios involved operational transients and design basis events. The inspector observed the simulator activities to verify that the crew met the training scenario objectives and performed the critical tasks. The inspector observed proper use of the emergency operating procedures. The inspector observed the crew's actions to implement the emergency plan and to make event classifications and notifications. The inspector reviewed post scenario activities to verify that the training critique discussed any relevant lessons learned and that discrepancies were discussed with the crew to enhance future performance. The inspector observed the consistency between the simulator, plant design analyses and the plant control room. This inspection activity represented two samples:

- Scenarios SES-022 and SES-047 on September 28, 2004.
- Scenarios SES-014 and SES-023 on October 19, 2004.

Operating Test and Biennial Written Exams (1 sample)

On December 7, 2004, the inspectors conducted an in-office review of Entergy's annual operating tests and the biannual written exam results for 2004. The inspection assessed whether pass rates were consistent with the guidance of NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process (SDP)." The inspector assessed the following areas:

- Crew failure rate was less than 20%.

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

- Individual failure rate on the walk-through test was less than or equal to 20%.

- Individual failure rate on the comprehensive biennial written exam was less than or equal to 20%.

- Overall pass rate among individuals for all portions of the exam was greater than or equal to 75%.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule (71111.12)

a. Inspection Scope (3 sample)

The inspector reviewed follow-up actions for issues relating to the selected system and reviewed the performance history of this system to assess the effectiveness of Entergy's maintenance activities. The inspector reviewed Entergy's problem identification and resolution (PI&R) actions for these issues in accordance with procedures and the requirements of 10 CFR 50.65(a)(1) and (a)(2), "Requirements for Monitoring the Effectiveness of Maintenance." In addition, the inspector reviewed system classification, performance criteria and goals, system health reports, and corrective actions that were taken or planned to verify whether the actions were reasonable and appropriate. These inspection activities represented 3 samples:

- Proper classification of equipment issues for the Emergency Lighting System. The inspector reviewed Entergy's basis for placing the system in maintenance rule a(2) status.

- Proper classification of equipment issues for the SBGTS/ Secondary Containment System. The inspector reviewed Entergy's basis for placing the system in maintenance rule a(2) status (CR 200401413, 200402327, OE03-022).

- Proper classification of valve MO-2301-15 failure for the High Pressure Core Injection system. The inspector reviewed Entergy's basis for placing the system in maintenance rule a(2) status (CR 200403676).

b. Findings

No findings of significance were identified.

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

a. Inspection Scope (4 samples)

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 effect the plant risk already incurred with the out of service components. The inspector reviewed activities to verify that Entergy 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 as applicable for the activities. Other references used for the inspection are identified in the attachment to this report. The inspection covered the following 4 samples:

- MR 04111480, Emergent Maintenance on SWP 208A Breaker, (CR 200403234, 3231)
- WO 02120287 and 02120354, Planned Maintenance on RHR Valves 7A and 7C, (CR 200403238)
- Yellow elevated risk condition on November 22 for planned maintenance on the HPCI system motor-operated valves
- Emergent Work and Risk Assessment on 12/14/04 for Degraded Line 342

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope (5 samples)

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, Procedure ENN-OP-104 "Operability Determinations", and the additional references listed in the attachment to this report for Section 1R15. This review covered 5 inspection samples.

- CR 200304541, TIP ball/shear valve non-metallic components Part 21
- CR 200403013 and 200403047, Safety Relief Valve SRV-3C Operability with Pilot Valve Leakage
- OE 03-022 and EE 03-027, Secondary Containment Degradation (CR 200301413, 200403333, 200403664)
- REO for CR 200403659, B Battery 125VDC Test Profile Error
- CR 200402889, Error in LOCA analysis for GE 14 fuel

The inspector determined whether Entergy was identifying problems involving operability evaluations and entering them into the corrective action program. For a sample of the items documented in the corrective action program, the inspector assessed whether Entergy had planned or taken appropriate corrective actions. The references used in this review are listed in the attachment to this report.

b. Findings

No findings of significance were identified.

1R16 Operator Work-Arounds (71111.16)

a. Inspection Scope (4 Samples)

The inspector reviewed the operator work around, burden, and tour lists to evaluate the potential cumulative impact of the equipment deficiencies on the operators' ability to implement abnormal or emergency operating procedures. The inspector walked down the control room panels and selected plant areas to review the impact of the deficiencies and to ensure that applicable deficiencies were captured in Entergy's deficiency list. The inspector discussed the operator workarounds with station personnel to assess the aggregate impact on plant operations. During the review, the inspector used the criteria contained in Entergy's procedure 1.3.34.4. This inspection covered one inspection sample of the cumulative effects of operator workarounds.

This review covered three inspection samples of specific operator workarounds. The inspector reviewed Entergy's actions to address items #304, #307 and #309 in the list of operator compensatory measures. The inspector reviewed the deficiencies to determine if the functional capability of the system or human reliability in responding to an initiating event was affected. The inspector evaluated the effect of the deficiency on the operator's ability to implement abnormal and emergency operating procedures.

The inspector's review determined whether Entergy evaluated deficiencies for potential impact as operator workarounds, entered them into the corrective action process, and had planned maintenance activities to correct the identified operational deficiencies. References used during this inspection are identified in the attachment to this report.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope (4 samples)

The inspector reviewed post-maintenance test activities on risk significant systems to verify that the effect of the test on the plant had been evaluated adequately, the test was properly performed in accordance with procedures, 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 testing activity to verify that systems were properly restored following testing and that discrepancies were appropriately documented in the corrective action process. The inspection activity represented 4 samples:

- Post Work Test for October 2004 RCIC Overhaul, 10/18/04
- Post Work Test for May 2004 'A' EDG Overhaul (CR 200403216), 10/20/04
- Post Work Test for RB Truck Lock Repair (MR 04107653), 12/10/04
- Post Work Test for B feedwater controller (MR 04117245), 11/19/04

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope (5 samples)

The inspector observed and reviewed surveillance testing results to verify that the test acceptance criteria was consistent with Technical Specifications and related Performance Indicators, that the test was performed in accordance with the written procedure, the test data was complete and met procedural requirements, and the components were capable of performing their intended safety functions. The inspection activity represented 5 samples:

- Reactor Coolant System Chemistry Sample on 10/15/04
- 8.5.3.18, RBCCW Loop 'B' Biennial Comprehensive Operability In-Service Test, 10/19/04
- 8.7.3, Secondary Containment Leak Rate Test, 12/10/04 (CR 200403918)
- Testing of the Public Alert and Notification System, 11/18/04
- 2.5.2.71, Drywell Floor Sump Verification - Reactor Coolant System Leakage, 10/21/04

The inspector reviewed the tests to verify that Entergy was identifying surveillance testing problems and entering them into the corrective action program. The inspector reviewed a sample of the items documented in the corrective action program to verify that Entergy had planned or taken appropriate corrective actions. The references used in this review are listed in the attachment to this report.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope (2 samples)

The inspector reviewed temporary modifications to verify that the licensing bases and performance capability of the associated risk significant systems had not been degraded through the modifications. The temporary modifications reviewed were:

- Temporary Alteration 04-1-047 to raise the alarm setting on safety relief valve SRV-3C after leakage past the pilot valve was noted in October 2004. The temporary modification provided a new alarm setpoint above the current tailpipe temperatures for the leaking valve to assure the operators are alerted to degrading leakage conditions. The inspector also reviewed Entergy's actions to address the issue in MR 04115025 and as described in Condition Reports 200403013 and 200403047.

- Temporary Procedure TP04-037 for Temporary Alteration TA 04-1-50, Administrative Controls for T930 Disconnect Jumper Installation. This temporary modification installed a jumper in the 345 KV switchyard to address a high resistance connection and hot spot in the main generator disconnect T930. (Reference CR 200403335, 200403946, 200403956).

The inspector reviewed the design and licensing basis assumptions and the administrative controls to determine the adequacy of the temporary modification. In addition, the inspector reviewed the associated safety evaluation screening to verify that the safety issue pertinent to the changes were properly addressed. The inspector reviewed the control room logs to verify that selected temporary modifications were properly recorded. The inspector reviewed condition reports (CRs) related to temporary modifications to verify that identified problems were appropriately resolved. Additional references used in this review are identified in the attachment to this report.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope (1 sample)

An in-office inspection that reviewed recent changes to emergency plan and implementing procedures was conducted on October 20, 2004. A thorough review was conducted for documents related to the risk significant planning standards (RSPS) and a general review was completed for non-RSPS documents. The review determined whether the changes satisfied the standards of 10 CFR 50.54(q), 10 CFR 50.47(b), the requirements of 10 CFR 50 Appendix E, the intent of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" and that the changes did not decrease the effectiveness of the plan. These changes are subject to future NRC inspections to ensure that as a result of these changes the emergency plan continues to meet NRC regulations.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope (2 samples)

The inspector observed portions of the November 3, 2004, emergency planning drill to assess Entergy's ability to identify and classify plant events in accordance with the Emergency Action Levels and complete the required notifications in a timely manner. Operator response, communications, and command and control in the simulator control room, technical support center, and emergency operations facility were also assessed during periods of observation. The drill critique was reviewed to verify the Entergy was identifying areas for improvement. This inspection activity represented one sample.

The inspector observed training of licensed operators on September 28, 2004, to evaluate the operators ability to properly classify plant events in accordance with the Emergency Action Levels and complete the required notifications for plant events. This inspection activity represented one sample.

The inspector also determined whether Entergy was entering issues related to emergency preparedness in the corrective action program. The inspector reviewed Entergy's actions to address the conditions described in CR 200403708, 200403759, 200403760, 200403651, 200403642, 200403315 and 200403970.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety (OS)

2OS1 Access Control to Radiologically Significant Areas (71121.01)

a. Inspection Scope (4 samples)

The inspector reviewed radiological work activities and practices and procedural implementation during observations and tours of the facilities and inspected procedures, records, and other program documents to evaluate the effectiveness of Pilgrim's access controls to radiologically significant areas. This inspection activity represents the completion of four (4) samples relative to this inspection area (i.e., inspection procedure sections 02.02.e, 02.06.a and b, and 02.07.b) and fulfills the annual inspection requirements.

Plant Walkdowns and RWP Reviews (02.02.e)

This inspection item requires a review and assessment of the adequacy of Entergy's internal dose assessment for any actual internal exposure greater than 50 mrems of committed effective dose equivalent (CEDE). The inspector evaluated this issue during

a previous inspection during the week of March 22, 2004 while performing another inspection requirement (i.e., Section 02.04(a)) of Attachment 3 of Inspection Procedure 71121.

Radiation Worker Performance (02.06.a and b)

The inspector observed radiation worker performance with respect to the stated radiation protection work requirements on Radiation Work Permit (RWP) No. 04-0219 which involved troubleshooting in the condenser bay at full reactor power and hydrogen injection. During a previous inspection in 2004, the inspector observed radiation worker performance in the drywell during a maintenance outage. The inspector assessed whether the radiation workers were aware of the significant radiological conditions in their workplace and of the RWP controls/limits in place and that their performance took into consideration the level of radiological hazards present.

During this and previous inspections in 2004, the inspector reviewed radiological problem reports that documented as a cause, radiation worker error, to determine if there was a pattern traceable to a similar cause and to determine if the corrective action approach taken by Entergy to resolve the reported problem was reasonable and adequate.

Radiation Protection Technician Proficiency (02.07.b)

During this and previous inspections in 2004, the inspector reviewed radiological problem reports that documented as a cause, radiation protection technician error, to determine if there was a pattern traceable to a similar cause and to determine if the corrective action approach taken by Entergy to resolve the reported problem was reasonable and adequate.

Related Activities

On November 3, the inspector observed a job-planning meeting for RWP 04-0219 which involved troubleshooting in the condenser bay at full reactor power and hydrogen injection and subsequently observed the pre-job briefing for this evolution. The briefing covered the permit controls and limits and the ALARA requirements for entry into a locked high radiation area with general area dose rates of several Roentgens (R) per hour.

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) to evaluate the adequacy of radiological controls. The review in this area was against criteria contained in 10 CFR 19.12, 10 CFR 20 (Subparts D, F, G, H, I, and J), Technical Specifications, and procedures.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02)

a. Inspection Scope (4 samples)

The inspector reviewed the effectiveness of Entergy's program to maintain occupational radiation exposure as low as is reasonably achievable (ALARA). This inspection activity represents the completion of four (4) samples relative to this inspection area (i.e., inspection procedure sections 02.02.d and e, 02.06, and 02.08.a) in partial fulfillment of the biennial inspection requirements.

Radiological Work Planning (02.02.d and e)

During the inspection, the inspector met with the ALARA supervisor and several ALARA specialists. During these meetings, the inspector discussed the interfaces between operations, radiation protection, maintenance, maintenance planning, scheduling and engineering groups for interface problems or missing program elements. Topics included the twelve-week work planning and scheduling process, the site ALARA committee, and outage task teams. The inspector also discussed and evaluated how ALARA requirements were integrated into work procedures and RWP documents.

Radiation Worker Performance (02.06)

During inspections in 2004, the inspector observed radiation worker and RP technician performance during work activities being performed in the condenser bay at full reactor power and hydrogen injection and in the drywell during a maintenance outage. The inspector assessed whether the workers demonstrated the ALARA philosophy in practice (e.g., the workers were familiar with the work activity scope and tools to be used and were utilizing ALARA low dose waiting areas) and whether the training/skill level was sufficient with respect to the radiological hazards and the work involved.

Problem Identification and Resolutions (02.08.a)

During the inspections in 2004, the inspector reviewed a quality assurance audit, several quality assurance surveillances, and several self-assessments, including the Summary of A-1 (Annual Program) 2003 Self-Assessment of the Radiation Protection (RP) Department, performed in January/February 2004. The inspector assessed whether Entergy's combined self-assessments, audit, and surveillances met the requirements of 10 CFR 20.1101(c).

Related Activities

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) for regulatory compliance and for adequacy of control of radiation exposure. The review was against criteria contained in 10 CFR 20.1101 (Radiation protection programs), 10 CFR 20.1701 (Use of process or other engineering controls), and procedures.

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation and Protective Equipment (71121.03)

a. Inspection Scope (1 sample)

The inspector reviewed the program for health physics instrumentation to determine the accuracy and operability of the instrumentation. This inspection activity represents the completion of one (1) sample relative to this inspection area (i.e., inspection procedure section 02.05) in partial fulfillment of the biennial inspection requirements.

Radiation Protection Technician Instrument Use (02.05)

The inspector reviewed the calibration expiration and source response check currency on radiation detection instruments staged for use. Also, the inspector observed radiation protection technicians in order to ascertain whether they were checking for appropriate instrument selection and for self-verification of the instrument's operability prior to use.

Related Activities

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) for regulatory compliance and adequacy in this area. The review was against criteria contained in 10 CFR 20.1501, 10 CFR 20 Subpart H, Technical Specifications, and procedures.

b. Findings

No findings of significance were identified.

Cornerstone: Public Radiation Safety (PS)

2PS2 Radioactive Material Processing and Transportation (71122.02)

a. Inspection Scope (6 Samples)

The inspector reviewed the radioactive material processing and transportation work activities and practices during tours of the facilities, discussed observations and issues with site representatives, and inspected procedures, procedural implementation, records, and other program documents to evaluate the effectiveness of performance in this area. This inspection activity represents the completion of six (6) samples relative to this inspection area in complete fulfillment of the biennial inspection requirements.

Inspection Planning and In-Office Inspection (02.01.a and b)(1 Sample)

The inspector reviewed the descriptions of the solid and liquid radioactive waste systems in the Updated Final Safety Analysis Report (UFSAR) and the most recent radiological effluent release report for information on the types and amounts of radioactive waste disposed. The inspector also reviewed the scope of the site's most recent audit of the radioactive waste processing and transportation function and the combined self-assessments, radiation protection audit, and surveillance reports to verify that the audit program met the requirements of 10 CFR 20.1101(c).

Radioactive Waste System Walkdown (02.02.a thru d)(1 Sample)

The inspector walked down selected accessible portions of the station's radioactive liquid and radioactive solid waste collection, processing, and storage systems/locations to verify that the current system configuration and operation agreed with descriptions contained within the UFSAR and the Process Control Program (PCP). The areas reviewed during the walkdowns included buildings/areas within the main radiologically-controlled area (RCA) and the protected area (including the radioactive waste building (elevations -1 and -13) and the radioactive waste truck lock off of elevation 23 of the turbine building). The inspector also reviewed areas outside the main RCA and protected area including the trash compaction facility and the low level radioactive waste storage facility.

During system walkdowns and during discussions with radioactive waste processing and shipping personnel, the inspector reviewed the status of nonoperational and/or abandoned-in-place radioactive waste process equipment and administrative and physical controls for the systems; the inspector also reviewed the adequacy of any changes to the radioactive waste processing systems since the last inspection in this area and the potential radiological impact and reviewed the current processes for transferring radioactive waste sludge and resin into shipping/disposal containers and for dewatering.

Waste Characterization and Classification (02.03.a and b)(1 Sample)

The inspection included a review of conformance with applicable waste characterization and classification regulations and with program procedures. This included a selective review of the radiochemical sample analysis results for each of the tracked radioactive waste streams (i.e., sludge, resin, and dry active waste) and the development of scaling factors for difficult-to-detect-and-measure radionuclides; the inspector also reviewed the programmatic elements in place to ensure the determination of waste classification (10CFR61.55) and waste characteristics (10CFR61.56) was adequate and that the waste stream composition data accounts for changing operational parameters.

Shipment preparation (02.04.a and b)(1 Sample)

Based on the scheduled radioactive waste processing and shipment activities, the inspector had the opportunity to observe the loading of a liner of spent-bead resin into a

shipping cask and the final preparations for shipment of the cask which was a low-specific-activity-two (LSA II) type shipment. Based on this observation, on the review of shipment records, radioactive waste program documents, shipment preparation procedures, and the technical instructions presented to workers during routine training, and on discussions with radioactive waste processing and shipping personnel, the inspector was able to assess the adequacy of shipment preparation activities from initial packaging to shipment readiness and to determine whether the shipping personnel were knowledgeable of NRC and DOT shipping regulations.

Shipping records (02.05)(1 Sample)

The inspector examined the shipping records for seven non-excepted packages including one Low-Specific-Activity-One (LSA I) type shipment, four Low-Specific-Activity-Two-type (LSA II) shipments, one Surface-Contaminated-Object-Two-type (SCO II) shipment, and one Type B (Yellow III) shipment. The inspector reviewed these records for compliance with NRC and DOT requirements, including shipment paper and description requirements, shipper's certification, proper use of forms, package marking and labeling, vehicle placarding, emergency response information, and packaging requirements.

Identification and resolution of problems (02.06.a thru c)(1 Sample)

The inspection included a selective review of audits, surveillance reports, self-assessments related to the radioactive waste processing and transportation and radiation protection programs performed since the last inspection in this area. The inspector also reviewed selected Condition Reports (CRs) and their corrective actions for issues related to the inspected area. Specifics regarding the corrective action program are addressed in Section 4OA2 of this report.

Related Activities

During the review of the areas, which are listed above under inspection scope, the inspector performed a selective examination of procedures, records, and documents (as listed in the List of Documents Reviewed section) for regulatory compliance and adequacy.

The above review was against criteria contained in: 10 Code of Federal Regulations (CFR) Part 20: Subpart F (Surveys and monitoring); 10 CFR 20.1902 (Posting requirements); Subpart I (Storage and control of licensed material); Subpart K (Waste disposal); Appendix G to Part 20 (Requirements for transfers of low-level radioactive waste intended for disposal at licensed land disposal facilities and manifests); 10 CFR 61.55, Waste classification; 10 CFR 61.56, Waste characteristics; 10 CFR 61.57, Labeling; 10 CFR 71, Packaging and transportation of radioactive material; 49 CFR 172 (Hazardous materials table, special provisions, hazardous-materials communications, emergency response information, and training requirements); 49 CFR 173 (Shippers-general requirements for shipments and packagings); 49 CFR 173 (Subpart I-Class 7

(radioactive) materials); 49 CFR 177 (Carriage by public highway); NRC Bulletin 79-19; and site procedures.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope (3 samples)

Mitigating systems cornerstone performance indicator (PI) data for reactor coolant system leakage, reactor coolant system specific activity, and safety system failures were reviewed to assess the completeness and accuracy of the reported information. The inspector reviewed condition reports, maintenance rule records, and NRC Inspection Reports. The inspector assessed whether Entergy had classified equipment unavailability in accordance with NRC endorsed criteria contained in NEI 99-02, "Regulator Assessment of Performance Indicator Guideline." The references used for this review are listed in the attachment to this report. This inspection activity represented three samples:

- Safety System Functional Failures from the third quarter of 2003 to the third quarter of 2004.

- Reactor Coolant System Leak Rate from the second quarter of 2003 to the third quarter of 2004.

- Reactor Coolant System Specific Activity from the fourth quarter of 2003 to the third quarter of 2004.

The inspector assessed whether Entergy was entering issues related to performance indicators in the corrective action program. The inspector reviewed Entergy's actions to address the conditions described in CR 200403195.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

Reactor Safety Cornerstone

.1 Review of Corrective Action Program Issues

a. Inspection Scope

As required by Inspection Procedure 71152, “Identification and Resolution of Problems”, the inspector 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 Annual Sample Review (1 sample)

a. Inspection Scope

The inspector reviewed in detail CR 2003-03394. This CR involved a loss of the 480V electrical bus B1 which was later attributed to a failure of a current transformer on an AK-50 breaker. The inspector reviewed the CR, the root cause determination, and the resulting corrective actions to ensure that the issues were correctly identified, extent of condition was determined, and that corrective actions taken were appropriate to prevent recurrence. The inspector observed that Entergy effectively used operating experience both to characterize and disseminate information about this issue. This inspection represented one sample.

b. Findings and Observations

No findings of significance were identified.

.3 Identification and Resolution of Problems - Occupational Radiation Safety

a. Inspection Scope

During this inspection, the inspector selected six issues/condition reports (CRs) identified in the Corrective Action Program (CAP) for detailed review (i.e., CR-PNP-2004-02622, -02985, -03014, -03055, -03210, and -03268). The issues were associated with a high radiation area status audit, dose due to redundant equipment installation, ALARA dose estimates, dose rate alarms, and job scope changes.

The documented reports for the issues were reviewed to determine whether the full extent of the issues were identified, appropriate evaluations were performed, and appropriate corrective actions were specified and prioritized.

b. Findings

No findings of significance were identified.

.4 Identification and Resolution of Problems - Public Radiation Safety

a. Inspection Scope

The inspector selected five issues identified in the Corrective Action Program (CAP) for detailed review (i.e., Condition Report (CR) Nos. 2003-01863, -02135, -02899, -03462, and 2004-03227). The issues were associated with a loose container during transport, the shipment of a contaminated dosimeter, the presence of asbestos in a waste shipment, delayed leakage surveys of on-site storage containers, and an error in a waste characterization calculation. The documented reports for the issues were reviewed to ensure that the full extent of the issues was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized.

b. Findings

No findings of significance were identified.

.5 Semi-annual trend review

a. Inspection Scope (1 sample)

As required by Inspection Procedure 71152, “Identification and Resolution of Problems”, the inspector performed the semi-annual trend review to identify trends, either Entergy or NRC identified, that might indicate the existence of a more significant safety issue. Included within the scope of this review were:

- condition reports generated from April 2004 through November 2004,
- corrective action program trend reports for the 2nd and 3rd quarter 2004,
- work orders identified as rework January through November 2004,
- adverse trend condition reports written over the past 4 quarters,
- daily plant status report listing of operations equipment problems, operability evaluations, and temporary alterations,
- equipment reliability watch list,
- third quarter 2004 system health reports and maintenance rule information.

The repetitive issues identified by the NRC review were recognized within Entergy’s corrective action program. The inspector noted a number of equipment issues involved loose wires or fasteners as in the past two years. The inspector reviewed the following

condition reports to verify the issues were appropriately addressed: CR 200401327, 200403674, 200403231, 200403234, 200400287, 200303483, 200402617,200402616, 200402615 and 200402614. No trends were noted that indicated the presence of a more significant safety issue.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (71153)

.1 Licensee Event Report Review and Closeout (2 samples)

a. (Closed) LER 50-293/2004-05, Standby Gas Treatment System Inoperable due to Pneumatic Accumulator Leakage Rate. The inspector reviewed Entergy's actions associated with Licensee Event Report (LER) 50-293/2004-05. Entergy's actions were addressed in Condition Reports 200402327, 200402346, 200402429 and 200402377. NRC Inspection Report 05000293/2004005 Section 1R15, "Operability Evaluations," describes this event and contains a non-cited violation of 10 CFR 50 Appendix B, Criterion III, Design Control. The LER provided an accurate description of the event and followup actions, taken or planned, were appropriate to address the event cause. This LER is closed.

b. (Closed) LER 50-293/1999-08-01, Automatic Scram at 100% Power due to Automatic Turbine Trip. The inspector reviewed Entergy's supplemental information associated with Licensee Event Report (LER) 50-293/1999-08-01. Entergy's actions were also addressed in NRC Inspection Report 05000293/1999005. The LER provided an accurate description of the event and root cause evaluation. This LER is closed.

4OA6 Meetings, Including Exit

On November 4 and December 3, 2004, the inspector presented the preliminary inspection results to Entergy managers who acknowledged the inspection results. On January 6, 2005, the inspector presented a summary of the inspection results to Mr. Michael Balduzzi and other members of the plant staff. The inspector confirmed that no proprietary information was disclosed in the inspection results.

4OA7 Licensee-Identified Violations

The following violation of very low safety significance (green) was identified by Entergy and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a Non-Cited Violation.

Pilgrim Technical Specification 5.7, High Radiation Area, requires that entries into such areas shall be controlled by a Radiation Work Permit (RWP). Pilgrim Procedure No. 6.1-014, High Radiation Area Control, requires that such entries be positively controlled by use of stay-time sheets or line-of-sight coverage. The RWP additionally

allowed use of closed-circuit television. Contrary to the above, on October 6, 2004, a radiation protection technician did not use any of the authorized methods for positive control over work activities on RWP 04-0129 in a high radiation area in the reactor water clean-up heat exchanger room. This violation is of very low safety significance because it did not result in an overexposure or a substantial potential for an overexposure, or the compromising of the ability to assess dose.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Entergy personnel:

D. Brugman	Senior Technical Training Instructor
W. Carroll	System Engineer
W. Coady	ALARA Specialist
J. Couto	Control Room Supervisor
P. Dietrich	General Manager - Plant Operations
P. Doody	Sr. Lead Engineer (Nuc)
D. Ellis	Sr. Engineer, Regulatory & Industry Affairs
B. Ford	Manager, Nuclear Licensing
L. Foreaker	Radiological Instruments Supervisor
M. Gatslick	Licensing Specialist
J. Griffin	Radiochemistry Technician
S. Hudson	Systems Engineering Sr. Lead Engineer (Nuc)
C. Julius	Manager, Intergrated Scheduling
J. Keene	Sr. Engineer (Nuc), Systems Engineering
J. Keyes	Corrective Actions & Assessment Supt., Nuclear
M. Landry	Engineering Support, Sr. Engineer (Nuc)
W. Lobo	Licensing Specialist
J. Martin	Systems Engineering, Sr. Engineer (Nuc)
W. Mauro	ALARA Supervisor
J. McClellan	Quality Specialist-Quality Assessment
B. McDonald	Radioactive Waste Specialist
J. Norris	Radiation Protection Technician
D. Noyes	Assistant Operations Manager
K. O'Brien	Electrical Maintenance
M. O'Kelley	Radioactive Waste Contracted Specialist
E. Olson	Operations Manager
D. Perry	Radiation Protection Manager
M. Santiago	Manager, Licensed Operator Training
J. Scheffer	Environmental Protection Superintendent
T. Sowdon	Manager, Emergency Preparedness
T. Tetzlaff	Radiation Protection Supervisor
E. Varmette	Radiation Protection Technician
J. Veglia	Manager, Programs and Components
J. Whalley	Operations/Radioactive Waste Supervisor
D. Willoughby	Operations Training Supervisor
C. Wilson	Radioactive Waste Shipping Supervisor
G. Zavaski	Radiation Protection Specialist, Projects

NRC personnel:

W. Raymond, Senior Resident Inspector
C. Welch, Resident Inspector
J. D'Antonio, Operations Engineer

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Open and Closed

50-293/2004-05	LER	SBGTS Inoperable due to Air Leak
50-293/1999-08-01	LER	Automatic Scram From 100% Power due to Turbine Trip

LIST OF DOCUMENTS REVIEWED

References for Section 1R01

Updated Final Safety Analysis Report Section 10.9.3
Completed surveillance 8.C.40, "Cold Weather Surveillance" dated October 4, 2004
System Health Report - System 24, Non-safety Related HVAC
Procedure 2.2.108, Diesel Generator Cooling and Ventilation System
Procedure 2.1.42, Operation During Severe Weather
Work Order 03110558, Cold Weather Surveillance
Condition Reports 200400127, 200400136, 200403033, 200403460, 200403494, 200403974

References for Section 1R04

2.2.22, RCIC System
2.2.21, HPCI System
Drawings M243 and M244 for HPCI system, and M245 and M246 for RCIC system
Procedure 2.1.12.1 Rev 52, "Emergency Diesel Generator Daily Surveillance"
Condition Report 200301413, Degraded A Train SBGTS Flowrate
Engineering Evaluations EE#03-027
Operability Evaluation OE#03-022
Technical Specification 3/4.7, Containment Systems
Procedure 8.7.3 dated 5/1/03
UFSAR 5.1.3, Secondary Containment System
Drawing M294, SBGTS Control Diagram
Drawing M283, Secondary Containment Isolation Control Diagram
Drawing M287, Plant Ventilation Diagram
Drawing M210, Air Ejection and Offgas System
Drawing M227, Containment Atmospheric Control System
Drawing M220, Compressed Air System
Procedure 2.2.78, Reactor Building Truck Lock Doors
Procedure 2.2.50, SBGTS
Procedure 5.4.6, Primary containment Venting and Purging Under Emergency Conditions
UFSAR Section 5.4, Control of Combustible Gas Concentrations in Containment
Engineering Request 04100767, Use of PASS Door in Inner Reactor Building Truck Lock Door
Condition Reports 200301413, 200403658, 200403664,
Maintenance Request 04107653, Replace Reactor Building Precast Panel Caulking
ER03120058, Reactor Building Precast Panel Caulking
Tracking LCO 1-03-0125, Tracking LCO for Secondary Containment Deficiency

References for Section 1R05
FSAR Section 10.8, Fire Protection System
Procedure 5.5.2 Rev 28, "Special Fire Procedure"
Procedure 8.B.4.7 Rev 7, "Fire Panel C221, Control Room, Functional Test"
Procedure 8.B.4.9 Rev 6, "Fire Panel C223 Functional Test"
Procedure 8.B.4.13 Rev 7, "Fire Panel C94 Zones 6 and 8 Functional Test"
Drawing E 718 Sheet 3 Rev E4, "Conduit Layout - Fire Protection System"
Condition Report 200403292, 200403295, 200403511, 200403506, 200403529

References for Section 1R06
Plant Design Change 97-13, Install Sump Pump in Switchyard Manhole No 2
Procedure 2.1.42, Operation During Severe Weather
Procedure 5.2.2, High Winds (Hurricane)
Procedure 1.4.56, Preparation of Non-process Buildings for Severe Weather
Procedure 8.C.22, Startup Transformer and 345KV Switchyard Surveillance
UFSAR Section 2.4.4, Storm Flooding Protection
IPEEE Section 5.2, Floods
Condition Reports 200400169, 200400535, 200401107, 200401171, 200402484, 200402760, 200403673, 200403633, 200403912, 200403933

References for Section 1R07
8.5.3.14.2, A RHR Heat Exchanger Thermal Performance Test, 4/21/01
Procedure 2.2.32, Salt Service Water System Attachment 5 for September 2004
Procedure 2.2.32, Salt Service Water System Attachment 6 for September 2004
Procedure 2.2.32, Salt Service Water System Attachment 7 for September 2004
UFSAR Section 10.7, Salt Service Water System
Condition Reports 200402792, 200403251, 200403340

References for Section 1R12
System Health Reports
FSAR Section 10.8 and 10.16
Procedure 8.B.21, "Emergency Lighting Units"
Procedure 3.M.3-49, "Emergency Lighting Battery Maintenance/Preventive Maintenance"
CR 200212442, 200300820, 20031021, 200402110, 200301413
March 2003 (a)(1) Action Plan for Emergency Lighting System
Surveillance 8.7.3 dated May 2003

References for Section 1R13
Condition Reports 200403495, 200403499, 200403505, 200403657, 200403231, 200403234, 200403275, 200403238
Maintenance Requests 04115800, 04111480, 04115815
Procedure 8.Q.3-3, 480V AC Motor Control Center Testing and Maintenance

References for Section 1R15
Condition Reports 200212454, 200304541, 200403333, 200403368, 200403668, 200403659, 200403664, 200403832, 200404027

Maintenance Request 04107653, Replace Reactor Building Precast Panel Caulking
GE SC 02-18, "TIP System Ball and Shear Valve Radiation Specification"
GE SC 03-01, "Additional Material Consideration for TIP System Ball and Shear Valve Qualification"
GE 10CFR50.46 Notification Letter 2004-1, dated 9/24/04. (Proprietary Information)
Core Operating Limits Report (Cycle 15) Rev 15B
NRC Letter dated 12/23/2004 - Issuance of License Amendment No. 208 for Engineering Evaluation Submitted per Technical Specification 3.6.D.3 and 3.6.D.4

References for Section 1R16

Procedure 1.3.34.4, Compensatory Measures (CM)
Operator Compensatory Measure Log
CM Evaluation #303, Monitor SRV 3C Tailpipe Temperature
CM Evaluation #304, Pump Drywell Floor Sump Every 8 hours
CM Evaluation #307, Check Switchyard Insulators for Arcing Every Shift
CM Evaluation #309, AOG Steam Pressure Reducers
Maintenance Request 04105084, Clean & Inspect ACB 102 Insulator Bushings
Condition Report 200403088, Drywell Floor Sump Low Level
Condition Report 200403288, Corona Discharge and Arcing of Switchyard Insulators
Condition Report 200403047, SRV 3C Elevated Tailpipe Temperature
ODMI for CR 200403288, Corona Discharge and Arcing of Switchyard Insulators

References for Section 1R19

Procedure 3.M.1-15 "Vibration Monitoring for Preventive Maintenance and Balancing"
Procedure 8.5.5.1 Rev 53 "RCIC Pump Operability Flow Rate and Valve Test"
Procedure 8.5.5.4 Rev 31 "RCIC Motor Operated Valve Quarterly Operability Test"
Procedure 8.5.5.9 Rev 14 "RCIC Simulated Automatic Actuation, Flow Rate, and Cold Quick Start Test"
Drawing M245 Rev E35 "RCIC System"
Drawing M246 Rev E30 "RCIC System"
RCIC Vibration Data from 10/15/04
MR 04114383 and MR 02114141
Procedure 3.M.3-61.5 Attachments 1A, 1E, 1F, "EDG Two-year Overhaul Preventive Maintenance"
Procedure 8.9.1, "EDG and Associated Emergency Bus Surveillance"
Procedure 8.M.2-2.10.8.3, "Diesel Generator 'A' Initiation by Core Spray Logic"
Procedure 8.M.2-2.10.8.7, "Diesel Generator 'A' Logic System Functional Test"
Procedure 8.7.3, Secondary Containment Leak rate Test, completed 12/10/04
Condition Report 200403918, 200403216

References for Section 1R22

Procedure 7.2.35 Rev 10 "Reactor Water Sample Rack C121 Operation"
Procedure 7.3.11 Rev 28 "Reactor and Hotwell Water Analyses Preparation"
Procedure 8.5.3.18, RBCCW System Biennial Comprehensive Operability Loop B
Technical Specification 3/4.5.B.3, RBCCW Operability
UFSAR Section 10.5.5.3, RBCCW System Accident Operation

Condition Reports 200403668, 200403918
Reasonable Expectation of Operability for CR 200403918

References for Section 1R23

Condition Reports 200403013, 200403047, 200403525, 200403946, 200403956
Entergy Letter 2.04.095 to NRC dated October 12, 2004
NRC Letter to Entergy dated October 14, 2004
Technical Specification 3.6.D.4
TP-4-037, Special Test for Administrative Controls for T930 Disconnect Jumper Installation
Procedure 1.4.4, PNPS 345 KV System and Ring Bus
Temporary Alteration 04-1-050, T930 Disconnect Jumper
Vendor Procedure T930 Bypass Barehand Work Procedure
Addendum E-Barehand General Work Rules
Onsite Safety review Committee Meeting 2004-18, 12/9/04
1.5.22 Risk Assessment

References for Section 1EP4: Emergency Action Level and Emergency Plan Changes

Pilgrim Nuclear Power Station Emergency Plan, Rev 28
EP-IP-100 Emergency Classification and Notification, Rev 23
EP-IP-100.1 Emergency Action Levels (EALs), Rev 1
EP-IP-250 EOF Activation and Response, Rev 10
EP-IP-251 Offsite Radiation Protection, Rev 7
EP-IP-254 Communications Support, Rev 5
EP-IP-400 Protective Action Recommendations, Rev 10
EP-IP-420 Search and Rescue, Rev 4
EP-IP-501 Transportation of Contaminated Injured Personnel, Rev 3 - Retired

References for Section 2OS1, Access Control to Radiologically Significant Areas

RWP No. 04-0129, Rev. 01, Cut out and replace MO-1201-133 valve and associated work in a posted locked high radiation area
ALARA requirements sheet for RWP No. 04-0129
Radiological surveys for RWP No. 04-0129 on September 27, October 1, and October 20, 2004
Procedure No. ENN-RP-102, Rev. 0, Radiation Protection Program
Procedure No. 6.1-014, Rev. 15, High radiation area control
Procedure No. 6.1-031, Rev. 17, Radiation work permits
Procedure No. RP-STD-02, Rev. 10, Radiation Protection Department Assessments
Condition Report No. CR-PNP-2004-03053 and apparent cause analysis for high radiation area controls
Self-assessment of radiological surveys and documentation, LO-PNPLO-2004-00020, September 27-30, 2004
Summary of A-1 (Annual Program) 2003 Self-Assessment of RP Department, January/February 2004

References for Section 2OS2, ALARA Planning and Controls:

Procedure No. NOP83RC1, Rev. 16, ALARA program
Procedure No. 6.10-020, Rev. 9, ALARA work reviews
Procedure No. 6.10-021, Rev. 6, Station ALARA performance
Procedure No. 6.10-022, Rev. 8, ALARA engineering controls
Procedure No. 6.10-023, Rev. 3, ALARA planning assessments
Preliminary listing of RWPs for refueling outage 15
Refueling outage 15 shielding worksheet
Station daily dose reports for November 1 thru 4, 2004
Five-year ALARA plan for 2004 - 2008, updated as of November 2, 2004
ALARA committee meeting minutes for October 26 and September 13, 2004

References for Section 2OS3, Radiation Monitoring Instrumentation and Protective Equipment:

Procedure No. 6.6-114, Rev. 14, Issue and control of RP survey instruments

Inspection Planning and In-Office Inspection
Updated Final Safety Analysis Report for Pilgrim Station, Section 9, Radioactive waste systems
Annual radioactive effluent release report for 2003
Self-assessment of radiological surveys and documentation, LO-PNPLO-2004-00020, September 27-30, 2004
Summary of A-1 (Annual Program) 2003 Self-Assessment of RP Department, January/February 2004
Quality assurance audit report no. 03-05, Process control programs, August 19, 2003
Quality assurance surveillance report no. 03-031, CHEMTREC phone drill, October 29, 2003
Quality assurance surveillance report no. 03-040, Radioactive material shipment record (RSR) 03-0139, December 15, 2003
Quality assurance surveillance report no. 04-023, Radioactive material shipment record (RSR) 04-112, June 29, 2004

Radioactive Waste System Walkdown
Procedure No. ENN-RW-101, Rev. 0, Radioactive waste management program
Procedure No. 6.9-218, Rev. 17, Operation and control of the trash compaction facility (TCF) and the hazardous materials' storage area
Procedure No. 6.9-303, Rev. 4, Operation of the interim low level radwaste storage facility
Procedure No. 6.9-303.1, Rev. 0, Control and management of hazardous and regulated wastes generated at Pilgrim Station
Procedure No. 6.9-304, Rev. 6, Operation and control of the station services red line (SSR) facility and associated decontamination equipment

Waste Characterization and Classification

Procedure No. 1.15.3, Rev. 6, Process Control Program
Procedure No. 6.9-211, Rev. 13, 10 CFR 61 sampling
Procedure No. 6.9-222, Rev. 6, Control of radioactive material management software and data bases
Procedure No. 6.9-222.1, Rev. 3, Operation of the radioactive materials management software
10 CFR 61 classification and scaling factor data for waste streams for 2004 (i.e., sludge (reactor water clean up and fuel pool demineralizers), resin (condensate deminerlizers), and dry active waste)

Shipment Preparation

Procedure No. ENN-RW-102, Rev. 0, Radioactive shipping procedure
Procedure No. ENN-RW-103, Rev. 0, Radioactive waste tracking procedure
Procedure No. 6.1-213, Rev. 20, Radiological controls of vehicles and materials
Procedure No. 6.9-061, Rev. 5, Receipt of radioactive material
Procedure No. 6.9-160, Rev. 37, Radioactive material shipment administrative package process
Procedure No. 6.9-174, Rev. 14, Packaging radioactive material for shipment
Procedure No. 6.9-185, Rev. 3, Handling and loading procedure for PAS-1 shipping cask
Procedure No. 6.9-194, Rev. 10, Loading transport vehicle for radioactive shipments
Procedure No. 6.9-210, Rev. 15, Laundered anti-contamination protective clothing and reusable items
Procedure No. 6.9-212, Rev. 10, Handling and loading type A shipping casks
Procedure No. 6.9-213, Rev. 7, Handling and loading procedure for type B shipping casks
Procedure No. 6.9-221, Rev. 5, Seal integrity leak test for the 10/142 and HN-142 type B shipping cask
Certifications for shipping casks
- Model 10-142B, Package ID No. USA/9208B( )
- Model 14-210 Type A
- CNS 14-215H Type A USA/9176/A

Training records for:
- Radioactive waste packaging, transportation, and disposal course (Department of Transportation regulations)
- Radioactive waste handling course (NRC Bulletin 79-19)
- Hazardous waste management and manifesting course (49 CFR 172 Subpart H)
- RADMAN certification course (DOT shipping software)

Shipping Records

RSR-04-03L,	radioactive waste,	bead resin,	>A LSA II
RSR-04-04,	radioactive waste,	bead resin,	A LSA II
RSR-04-17L,	radioactive waste,	powder resin,	Type B (Yellow III)

RSR-04-19,	radioactive waste,	bead resin,	A LSA II
RSR-04-22,	radioactive material,	bead resin,	A LSA II
RSR-04-204,	radioactive material,	laundry,	LSA I
RSR-04-311,	radioactive material,	filter unit,	SCO II

Identification and Resolution of Problems

Quality assurance audit report no. 03-05, Process control programs, August 19, 2003

Quality assurance surveillance report no. 03-031, CHEMTREC phone drill, October 29, 2003

Quality assurance surveillance report no. 03-040, Radioactive material shipment record (RSR) 03-0139, December 15, 2003

Quality assurance surveillance report no. 04-023, Radioactive material shipment record (RSR) 04-112, June 29, 2004

References for Section 4OA1

Condition Reports 200403755, 200403783, 200403195

Procedure 2.5.2.71, Radwaste Collection system

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LIST OF ACRONYMS

ALARA	As Low As Reasonable Achievable
CAP	Corrective Action Program
CEDE	Committed Effective Dose Equivalent
CFR	Code of Federal Regulations
CR	Condition Report
DOT	Department of Transportation
HVAC	Heating Ventilation and Air Conditioning
LER	Licensee Event Report
LOCA	Loss of Coolant Accident
LSA	Low Specific Activity
NRC	Nuclear Regulatory Commission
OA	Other Activities

OS	Occupational Radiation Safety
PARS	Publicly Available Records
PCP	Process Control Program
PI	Performance Indicator
PI&R	Problem Identification and Resolution
PM	Preventive Maintenance
PNPS	Pilgrim Nuclear Power Station
PS	Public Safety
QASR	Quality Assurance Surveillance Report
R	Roentgen
RBCCW	Reactor Building Closed Cooling Water
RCA	Radiologically Controlled Area
RP	Radiation Protection
RHR	Residual Heat removal
RWP	Radiation Work Permit
SBGTS	Standby Gas Treatment System
SDP	Significant Determination Process
TBCCW	Turbine Building Closed Cooling Water
UFSAR	Updated Final Safety Analysis Report