

March 27, 2001

EA 01-069

Mr. Robert M. Bellamy
Site Vice President
Entergy Nuclear Generation Company
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, Massachusetts 02360-5599

SUBJECT: PILGRIM STATION - NRC INSPECTION REPORT NO. 05000293/2000-011

Dear Mr. Bellamy:

On February 17, 2001, the NRC completed an inspection at your Pilgrim reactor facility. The enclosed report presents the results of that inspection. The results were discussed on March 8, 2001, with Mr. R. Bellamy and other 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 the inspection, the inspectors identified two issues of very low safety significance (Green) associated with ineffective corrective actions and Maintenance Rule Implementation. These findings were determined to be violations of NRC requirements. However, because of their very low safety significance and because the findings were entered into your corrective action program, the NRC is treating the issues as non-cited violations, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these non-cited violations, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region 1; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-001; and the NRC Resident Inspector at the Pilgrim facility.

Robert M. Bellamy

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Sincerely,

/RA/

Robert J. Summers, Acting Chief
Projects Branch 6
Division of Reactor Projects

Docket No.: 05000293
License No.: DPR-35

Enclosure: Inspection Report 05000293/2000-011

Attachment: (1) NRC Revised Reactor Oversight Process

cc w/encl:

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-293

License No: DPR-35

Report No: 05000293/2000-011

Licensee: Entergy Nuclear Generation Company

Facility: Pilgrim Nuclear Power Station

Location: 600 Rocky Hill Road
Plymouth, MA 02360

Inspection Period: December 31, 2000, through February 17, 2001

Inspectors: R. Laura, Senior Resident Inspector
R. Arrighi, Resident Inspector
J. Furia, Senior Health Physicist

Approved By: Robert Summers, Acting Chief
Projects Branch 6
Division of Reactor Projects

SUMMARY OF FINDINGS

IR05000293-2000-011; on 12/31/2000-2/17/2001; Entergy Nuclear Generation Company; Pilgrim Nuclear Power Station. Maintenance Rule Implementation, Licensee Identified Violation.

The report covered a seven-week period of inspection conducted by the resident staff and a regional radiation specialist. The inspection identified two Green findings, which were non-cited violations. The significance of most/all findings are indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process" (SDP). The significance of findings for which the SDP does not apply are indicated by "no color" or by the severity level of the applicable violation.

A. Inspector Identified Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a non-cited violation for the failure to include the safety-related 125 V DC swing bus automatic transfer switch, 83-1 (Y-10), within the scope of the maintenance rule. The failure to scope Y-10 in the maintenance rule is a violation of 10 CFR 50.65 (b)(1), "Maintenance Rule."

The finding was of very low significance because, although the transfer switch may not have functioned, this condition alone would not have prevented the LPCI system from performing its design function. (IR12.1)

- Green. The inspector identified a non-cited violation for the failure to take prompt corrective actions to correct the sticking of the Y-10 relay, nor was it cycled at a frequency to ensure a high degree of reliability. The failure to take prompt corrective actions is a violation of 10 CFR 50, Criterion XVI, "Corrective Actions."

The finding was of very low significance because, although the transfer switch may not have functioned, this condition alone would not have prevented the LPCI system from performing its design function. This finding has as a direct cause an aspect involving the cross-cutting area of Problem Identification and Resolution. (IR12.1)

B. Licensee Identified Violations

Violations of very low significance, which were identified by the licensee, have been reviewed by the inspector. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in section 4OA7 of this report.

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Report Details

SUMMARY OF PLANT STATUS

Pilgrim Nuclear Power Station began the period at 100 percent core thermal power. On February 5, 2001, power was reduced to 90 percent to perform a rod pattern adjustment. The unit returned to 100 percent power on February 6, 2001, where it remained for the remainder of the period.

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

1R04 Equipment Alignment

a. Inspection Scope

The inspector performed a partial system walk down of the salt service water (SSW) system. The walk down included verification of proper valve position by observing control room pump and valve status lights, and also based on visual observation of system components located in the intake structure and auxiliary bays. The inspector confirmed that the system was properly aligned to support normal emergency plant operations.

A complete walk down was performed on the accessible portions of the high pressure coolant injection (HPCI) system, which is a risk significant system. Also, HPCI system open operability evaluations, temporary modifications, operator work arounds and work requests were reviewed. For example, the inspector verified that the HPCI system flow controller, which had been identified as degrading, was scheduled to be replaced during the next planned HPCI system outage. All system components were verified for proper alignment to support system operability.

b. Findings

No significant findings were identified during this inspection.

1R05 Fire Protection

a. Inspection Scope

The inspector toured selected plant areas important to safety in order to assess Pilgrim's control of transient combustibles and ignition sources, as well as the material condition and operating status of fire protection system equipment and barriers. The following areas were toured: (1) emergency diesel generator building, (2) salt service water pump rooms located in the intake structure, and (3) the residual heat removal (RHR) quadrant rooms located in the reactor building.

A sampling review was also performed for fire protection system valve line-ups and the condition of fire hoses and fire extinguishers.

b. Findings

No significant findings were identified during this inspection.

1R07 Heat Sink Performance

a. Inspection Scope

The inspector reviewed the RHR heat exchanger test performance data per procedure 8.5.3.14.2, "RHR Heat Exchanger Thermal Performance Test." Test acceptance criteria were reviewed against calculations, M-663, "RHR Heat Exchanger Performance," M-710, "Heat Exchanger Thermal Performance Testing," and the Updated Final Safety Analysis Report. The inspector reviewed the data for adverse trends and verified that the test frequency was consistent with Generic Letter 89-13, "Service Water System Problems Affecting Safety-related Equipment," and sufficient to detect degradation prior to loss of heat removal capability below the design basis values.

b. Findings

No significant findings were identified during this inspection.

1R12 Maintenance Rule Implementation

.1 Y-10 Relay Failures

a. Inspection Scope

The inspector reviewed the licensee's implementation of the maintenance rule regarding the failure of the 125 V DC, swing bus, automatic transfer switch, 83-1 (Y-10). This failure was documented on December 22, 2000, in problem report (PR) 00.9517. Specifically, the issue was reviewed to determine if: (1) this safety-related component was included in the scope of the maintenance rule; and, (2) the licensee appropriately classified the condition as a maintenance preventable functional failure (MPFF). The inspector also reviewed PRs issued since May 1999, that documented Y-10 failures, to review the licensee's corrective actions and to ensure the component failures were properly classified.

b. Findings

The inspector identified that the 125 V DC, swing bus, automatic transfer switch (Y-10) was not properly scoped per the maintenance rule. In addition, the licensee failed to take prompt corrective actions, consistent with its safety-significance, to address continued problems with the Y-10 relay.

A review of completed surveillance, 3.M.3-45, "125 V DC Distribution panel "C" (D6) Automatic Transfer Switches Functional Testing and Relay Calibration," from May 1999 to December 2000 revealed that the surveillance test failed six out of the eight times. During the test, the Y-10 relay was found stuck in the energized state or slow to operate. As part of the corrective actions, the surveillance frequency was changed from yearly to monthly. Although the surveillance failed subsequent testing, the frequency was extended two additional times.

A review of the prior failures of the Y-10 transfer switch, as documented in PRs 99.1133, 99.9524 and 00.2553, revealed that the licensee had not considered these failures to be MPFFs. After the failure of the Y-10 transfer switch on December 22, 2000, the licensee conservatively declared the low pressure coolant injection (LPCI) system inoperable and performed a formal root cause investigation due to repetitive failures of the Y-10 relay. A temporary modification was performed to replace the Y-10 relay due to the unavailability of original parts. As part of the root cause investigation, the inspector requested that the licensee review the condition for a MPFF since Y-10 provides control power (through panel D6) to safety-related 480 V AC, swing bus B6, transfer breakers. Bus B6 provides power to the low pressure coolant injection (LPCI) injection valves.

The licensee stated that the 125 V DC, swing bus, automatic transfer switch 83-1 (Y-10) was not included in the scope of the maintenance rule as part of the 125 V DC system. The "A" and "B" trains of the 125 V DC system were scoped into the rule; however, due to an oversight, the 125 V DC swing bus (the "X" train) was not. As a result of this finding, the licensee issued PR 01.0908. Discussions with the licensee revealed that the failure on December 22, 2000, and the prior failures of the Y-10 transfer switch should be considered MPFFs. As a result, the 125 V DC system (bus D6) should have been placed in status (a)(1) in September 1999.

These findings, if left uncorrected, could have a credible impact on safety. In the event that power from the 125 V DC, Bus "A" (D16) was lost, it was highly probable that transfer switch, Y-10, would not have automatically switched to its alternate power supply, 125 V DC Bus "B" (D17). This condition alone would not have prevented the LPCI system from performing its design function; however, it does result in the plant being in a condition that is outside its design basis. The degraded performance of the Y-10 relay had the potential to render the LPCI system inoperable, if the 125 V DC, Bus "A" was lost.

The inspector evaluated the failure of the 125 V DC transfer switch using the NRC's Significance Determination Process (SDP). Due to the very low safety significance of the condition, this issue screened as Green in the phase 1 SDP (mitigation systems), since there was no loss of safety function. This is of very low risk significance because the LPCI system is only important for a large break LOCA, which is a very infrequent event, and the independent failure of a highly reliable DC bus simultaneous with a large break LOCA would be extremely unlikely.

Criterion XVI, "Corrective Action," of 10 CFR 50, Appendix B, in part requires that conditions adverse to quality be promptly identified and corrected. The cause of significant conditions adverse to quality must be identified and corrective actions taken to preclude recurrence. Contrary to the above, between May 16, 1999, and December 22, 2000, the licensee failed to promptly correct a significant condition adverse to quality involving the sticking of the 125 V DC, swing bus, automatic transfer switch (Y-10). The licensee failed to correct the sticking of the Y-10 relay, nor did they cycle it at a frequency to ensure a high degree of reliability. The failure to take prompt corrective actions is being treated as a non-cited violation of Criterion XVI, "Corrective Action," of 10 CFR 50, Appendix B, consistent with Section VI.A of the Enforcement Policy, issued on May 1, 2000 (65FR 25368), in that the associated condition was of very low safety

significance, and was entered in the licensee's corrective action program as PR00.9497. **(NCV 50-293/2000-011-01)**

10 CFR 50.65(b)(1), in part requires that holders of an operating license shall include, within the scope of the monitoring program specified in 10 CFR 50.65(a)(1), safety-related structures, systems or components that are relied upon to remain functional during and following design basis events to ensure the integrity of the reactor coolant pressure boundary, the capability to shut down the reactor and maintain it in a safe shutdown condition, and the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the 10 CFR, Part 100 guidelines. Contrary to the above, as of July 10, 1996, the licensee failed to include within the scope of the monitoring program specified in 10 CFR 50.65 (a)(1), the safety-related, 125 V DC, swing bus, automatic transfer switch 83-1 (Y-10). The 125 V DC system provides an uninterruptable power source for normal operation, and for safe reactor shutdown following transient or accident conditions. The failure to include the 125 V DC, swing bus in the maintenance rule is being treated as a non-cited violation of 10 CFR 50.65 (b)(1), consistent with Section VI.A of the NRC Enforcement Policy, issued on May 1, 2000 (65 FR 25368). This violation is documented in the licensee's corrective action program as PR 01.0908. **(NCV 50-293/2000-011-02)**

.2 Maintenance Effectiveness

a. Inspection Scope

A review of the licensee's implementation of the maintenance rule was performed including: (1) scope; (2) characterizing failed structures, systems and components; (3) safety significance classification; (4) 10 CFR 50.65 (a)(1) or (a)(2) classification; and (5) the appropriateness of performance criteria. The following were reviewed:

- Salt service water (SSW) pump 208E vibration in the alert range - the SSW system remained in the (a)(1) status and corrective actions were planned to strengthen the pump baseplate to lessen vibrations.
- Augmented Off Gas (AOG) retention efficiency below minimum system level performance criteria - the AOG system remained in the a(1) status and corrective actions were developed and scheduled for implementation to be completed by the end of RFO13. The (a)(1) plan included modifications to reduce moisture entry to charcoal absorbers to improve hold-up time.
- There were several maintenance requests open on plant radiation monitors including: MR 01100883, Main Steam 1705-2B, and MR 9703126, AOG Post Treatment 1705-5B. As a result, the radiation monitoring system was treated as an (a)(1) system with corrective actions planned to be completed by the end of RFO13.

b. Findings

No significant findings were identified during this inspection.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspector reviewed the licensee's work plan for the weeks of January 24, and February 4, 2001, to assess the adequacy of the licensee's risk assessment process. The inspector reviewed the plan against the criteria contained in licensee procedures, 1.5.21, "Integrated Scheduling Guidelines," and 1.5.22, Risk Assessment Process." The inspector verified that important, risk significant work activities were entered into the risk profile, and that the risk assessment program was rerun when changes were made to the work plan to manage the change in plant risk.

The inspector also verified that work activities were discussed during the licensee's morning meeting, and that any increase in plant risk or necessary protected equipment was discussed.

b. Findings

No significant findings were identified during this inspection.

1R15 Operability Evaluations

a. Inspection Scope

The inspector reviewed the following operability evaluations to verify that continued operability was justified. The Pilgrim Updated Final Safety Analysis Report, technical specifications, and licensee procedure, 1.3.34.5, "Operability Evaluations," were used as references to assess the adequacy of the operability evaluations. The inspector also verified that the identified corrective actions to correct the noted degraded conditions were adequate and scheduled in the licensee's work control process.

OE 99-069, Low Pressure Coolant Injection System inoperability (B6 relay)
OE 99-073, Feedwater regulating valve retrofit.

b. Findings

No significant findings were identified during this inspection.

1R16 Operator Work-Aroundsa. Inspection Scope

The inspector reviewed the list of operator work-arounds, lifted lead and jumper log, and licensee procedure, 1.3.34.4, "Compensatory Measures," for determining the impact of the aggregate effect of work-arounds on the operators ability to implement abnormal or emergency operating procedures. The inspector also reviewed the licensee's August 22, 2000, post-scrum report to identify equipment that didn't respond as expected during the scram to ensure compensatory measures were properly captured and documented in the licensee's work-around list.

b. Findings

No significant findings were identified during this inspection.

1R17 Permanent Plant Modificationsa. Inspection Scope

The inspector reviewed a permanent modification made to the control room high efficiency air filtration system (CRHEAFS), which was implemented per Plant Design Change (PDC)No. 99-18 and Test Procedure 00-008. The licensee began planning and installing the modification during this inspection period. The purpose of the modification was to install manually operated dampers in each of the main control room supply and exhaust ducts that penetrate the control room pressure boundary. These new isolation dampers ensure that CRHEAFS system remains operable under any design basis accident conditions, including a seismic event. The inspector verified that the 30 minute manual isolation time assumed in PDC 99-18 was consistent with assumptions used in design calculations.

b. Findings

No significant findings were identified during this inspection.

1R19 Post-Maintenance Testinga. Inspection Scope

The inspector reviewed and observed portions of the following post-maintenance tests to ensure that the test activities were adequate to verify operability and functional capability of the system/component following maintenance:

- "B" Control Rod Drive Pump Overhaul
- "A" Control Rod Drive Pump Discharge Pressure Gage
- "B" Reactor Recirculation System Motor-Generator Set Scoop Tube Control Circuitry Upgrade
- "B" Reactor Building Close Loop Cooling Pump Coupling Maintenance

b. Findings

No significant findings were identified during this inspection.

1R22 Surveillance Testing

a. Inspection Scope

The inspector reviewed the following surveillance tests:

- Standby Liquid Control Pump 207B Operability and Flow Rate Test
- Core Spray Pump 215A Automatic Start Logic System Functional Test
- High Pressure Coolant Injection Steam Line High Flow Functional Test

The inspector verified that the system requirements were correctly incorporated into the test procedures and that the test acceptance criteria was consistent with the technical specifications, the licensee's Inservice Test Program and the Updated Final Safety Analysis Report requirements. The review also included an evaluation of the completed surveillance test data to verify that the selected systems and components were capable of performing their intended safety functions and operational readiness.

b. Findings

No significant findings were identified during this inspection.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspector reviewed the following temporary plant modifications to ensure they do not affect the safety function of important safety systems. The inspection included reviewing the temporary modification and associated preliminary evaluation checklist (10 CFR 50.59 screening) against the Updated Final Safety Analysis Report and plant technical specifications. The inspector also verified that the configuration control of the modification was adequate by verifying that drawings and procedures were properly updated.

- TM 97-63, Appendix R Concern with motor operated valves, 1001-47 & 50
- TM 00-53, Y-10 relay replacement
- TM 01-02, Defeat accumulator trouble alarm for rod 18-35

b. Findings

No significant findings were identified during this inspection.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (7112101)

a. Inspection Scope

The inspector reviewed the access control program (as required under Plant Technical Specifications and 10 CFR 20.1601) by examining the controls established for exposure significant areas, including postings, markings, control of access, dosimetry, surveys and alarm set points. Controls reviewed included: key control for locked high and very high radiation areas; use of radiation work permits to control access to radiologically significant areas; and, pre-job radiological briefings. The inspector toured areas throughout the radiologically controlled area (RCA) and verified the postings, barricades and locks (where applicable) for some of the accessible high (13), locked high (9) and very high (1) radiation areas in the reactor and turbine buildings.

The inspector reviewed recent notifications written by the licensee for radiological issues related to control of access to radiologically significant areas. The review focused on observable patterns traceable to similar causes. Problem report (PR) 00.2916 documented an instance of improper control of a locked high radiation area. (Reference Section 40A7)

b. Findings

No significant findings were identified during this inspection.

2OS2 ALARA Planning and Controls (7112102)

a. Inspection Scope

The inspector reviewed the results achieved in occupational exposure reductions during the calendar year 2000, and reviewed exposure goals established for 2001. In accordance with 10 CFR 20.1101(b), areas reviewed included: a review of the use of low dose waiting areas; review of on-job supervision provided to workers; and a review of individual exposures from selected work groups. An evaluation of engineering controls utilized to achieve dose reductions, and analysis of licensee source term reduction plans was also conducted. For the calendar year 2000, total occupational exposure was approximately 50 person-rem, the lowest yearly exposure total in station history. For 2001, the annual goal of 190 person-rem includes 40 person-rem for operations and 150 person-rem for the upcoming refueling outage (RF013).

The inspector reviewed the recently completed annual Quality Assurance oversight program review for the radiation protection program (QAOPR 00-04). The review focused on observable issues and findings patterns traceable to similar causes.

b. Findings

No significant findings were identified during this inspection.

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 conducted a review of instruments observed in the reactor and turbine buildings, involving specifically, a verification of proper function and a certification of appropriate source checks for these instruments, which are utilized to ensure that occupational exposures are maintained in accordance with 10 CFR 20.1201.

The inspector reviewed self-contained breathing apparatus (SCBA) equipment used and maintained by the licensee. This review included: surveillance records; capabilities for filling and transportation of bottles; and, training and qualification of users.

b. Findings

No significant findings were identified during this inspection.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspector reviewed licensee event reports and NRC inspection reports for the period of January 1999 to December 2000 to determine the accuracy and completeness for the reported Pilgrim performance indicator safety system functional failures.

b. Findings

No significant findings were identified during this inspection.

4OA2 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed the corrective actions associated with the degraded performance of the 125 V DC, swing bus, automatic transfer switch, 83-1 (Y-10), that was documented in problem reports (PRs) 99.1133, 99.9524, 00.2553 and 00.9517. Automatic transfer switch, Y-10, provides control power (through panel D6) to safety-related 480VAC, swing bus B6, transfer breakers. Bus B6 provides power to the LPCI injection valves.

b. Findings

The NRC found that the licensee did not implement timely corrective actions in that, automatic transfer switch, Y-10, was slow to operate and erratic during surveillance testing. A review of completed surveillance procedure, 3.M.3-45, "125 V DC Distribution panel "C" (D6) Automatic Transfer Switches Functional Testing and Relay Calibration," from May 1999 to December 2000 revealed that the surveillance test failed six out of the eight times it was performed. During the test, the Y-10 relay was found stuck in the energized state or slow to operate. (Section 1R12.1)

4OA3 Event Follow-up

(Closed) LER 50-293/2000-03: 125 V DC Swing Bus Automatic Transfer Switch Degraded Performance

This LER identified a condition that could have prevented the fulfillment of a safety system to mitigate the consequence of an accident. Specifically, the low pressure coolant injection (LPCI) system was declared inoperable due to degradation of the 125 V DC, swing bus, automatic transfer switch, 83-1 (Y-10). This condition was resolved under problem report (PR) 00.9517, by replacing the Y-10 relay by temporary modification (TM) 00-53. The root cause results and corrective actions will be provided in a supplement to this LER. Continued degraded performance of Y-10 is discussed in Section 1R12. This LER is **closed**.

4OA5 Other

The inspector reviewed the INPO report that documented the results of the 2 week INPO inspection conducted during November 2000.

4OA6 Meetings, including Exit

The inspectors presented the inspection results to Mr. R. Bellamy, VP Operations, and other members of licensee management at the conclusion of the inspection on March 8, 2001. 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.

4OA7 Licensee Identified Violations. The following findings of very low significance were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as Non-Cited Violations (NCV).

- (1) NCV 293/2000-011-04 On October 26, 2000, during a test of the reactor core isolation cooling (RCIC) system, an area in Bay No. 1 of the torus room was found to have a contact dose rate of 3000 millirem/hr and 1500 millirem/hr at 30 centimeters, but was not immediately controlled as a locked high radiation area in accordance with Plant Technical Specification 5.7.2. At the time, the area was already posted and barricaded as a high radiation area, since previous survey data indicated greater than 100 millirem, but less than 1000 millirem/hr. Upon identification of the higher radiation fields, the area remained unlocked and unguarded for approximately six minutes before the required physical and administrative controls for the condition were implemented. Subsequently, the licensee entered this issue into the facility's problem identification and corrective action system as Problem Report 00.2916; and reported the condition as an Occupational Radiation Safety Performance Indicator item for the fourth quarter, 2000. No actual or potential safety consequence resulted and no unintended occupational exposure occurred, due to this condition.

ITEMS OPENED, CLOSED, AND DISCUSSEDClosed

LER 2000-03	125 V DC Swing Bus Automatic Transfer Switch Degraded Performance
NCV 2000-011-01	Ineffective Corrective Actions-125 V DC Swing Bus Automatic Transfer Switch
NCV 2000-011-02	Failure to Place Bus D6 in an (a)(1) Maintenance Rule Status
NCV 2000-011-03	Improperly Posted Locked High Radiation Area

LIST OF ACRONYMS USED

ALARA	As Low As is Reasonably Achievable
AOG	Augmented Off Gas
CFR	Code of Federal Regulations
CRHEAFS	Control Room High Efficiency Air Filtration Failure
HPCI	High Pressure Coolant Injection
LER	License Evaluation Report
LOCA	Loss of Coolant Accident
LPCI	Low Pressure Coolant Injection
MPFF	Maintenance Preventable Functional Failure
MR	Maintenance Request
PR	Problem Report
RCA	Radiologically Controlled Area
RHR	Residual Heat Removal
SDP	Significant Determination Process
SSW	Salt Service Water
UFSAR	Updated Final Safety Analysis Report

ATTACHMENT 1

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none"> ● Initiating Events ● Mitigating Systems ● Barrier Integrity ● Emergency Preparedness 	<ul style="list-style-type: none"> ● Occupational ● Public 	<ul style="list-style-type: none"> ● Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And

RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.