Farley 1

Initiating Events

Significance: N/A Jun 30, 2001
Identified By: NRC
Item Type: FIN Finding
No Performance Monitoring criteria established for Maintenance Rule function C22A, Control of Steam Generator Level
No Color. The inspectors identified that the licensee did not develop Maintenance Rule unavailability performance criteria for steam generator water level control, a safety-related risk significant system function. This finding is of more than minor safety significance because performance monitoring criteria is necessary to balance the reliability and availability of this risk significant function. However, this finding is of very low safety significance because there have been no failures of this function.
Inspection Report# : 2001002*(pdf)*

Significance: N/A Jun 03, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Maintenance Rule Scoping
A Non-cited Violation of 10CFR50.65(b)(2)(iii) was identified for failing to include the function of the circulating water canal make-up valves in the Maintenance Rule program scope. The inspectors found that failures of these valves had resulted in cavitation of the Circulating Water pumps and loss of main condenser vacuum. This finding is of more than minor safety significance because failure of these valves has resulted in a loss of normal heat removal which could initiate a reactor trip. However, this finding is of very low safety significance because no actual reactor trips occurred from failures of these valves
Inspection Report# : 2001002*(pdf)*

Significance: N/A Nov 17, 2000
Identified By: NRC
Item Type: FIN Finding
WHITE PERFORMANCE INDICATOR (PI) FOR UNPLANNED POWER REDUCTIONS
SUPPLEMENTAL INSPECTION: this inspection, performed in accordance with NRC Inspection Procedure 95001, was completed to assess the licensee's evaluation and corrective actions associated with a white Unit 1 PI for Unplanned Power Changes. The PI crosses the green-white threshold if there are more than six unplanned power changes of greater than 20% per 7,000 hours of critical operation. The licensee initiated six unplanned Unit 1 power changes during the past year; four were due to plant cooling tower problems, one was due to a feedwater pump lubricating oil pressure switch failure, and one was due to a turbine extraction steam bellows failure in the Unit 1 main condenser. The licensee reported this white PI to the NRC on October 21, 2000, during the third quarter PI submittal. During this supplemental inspection the inspectors determined that the licensee performed a comprehensive investigation and evaluation of the issues which caused the PI on Unit 1 to become white. The licensee identified the commonalities in these six unplanned power changes to be component aging and end of service life, which are being addressed through improvements to the preventive and predictive maintenance programs. Additionally, the licensee identified that Farley management was not including the additional risk associated with power changes into their evaluation when responding to failed or degraded components. The licensee has modified their administrative procedures and will conduct formal training to assess the additional risk during power changes. The licensee has also scheduled a Safety Audit and Engineering Review effectiveness evaluation to assess the adequacy of the root cause and corrective actions.
Inspection Report# : 2000012*(pdf)*

Significance: G May 28, 2000
Identified By: Self Disclosing
Item Type: NCV NonCited Violation
OPERATOR FAILURE TO FOLLOW PROCEDURE RESULTED IN AN AUTOMATIC REACTOR TRIP
The inspectors identified a non-cited violation for failure to follow the turbine generator system operating procedure, as required by Technical Specification (TS) 5.4.1a, which resulted in a Unit 1 automatic reactor trip. TS 5.4.1a requires that procedures be established, implemented, and maintained. The issue was of very low safety significance because the trip was uncomplicated, all mitigation systems functioned properly or remained operable, and barrier integrity was not challenged. (Licensee Event Report 50-348/00-06)
Inspection Report# : 2000003*(pdf)*

Mitigating Systems

Significance: G Dec 13, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
Failure to follow procedure.
On December 13, 200[1], the licensee identified that the Unit 1 1B Service Water (SW) pump breaker was racked out to a disconnect position, but the breaker was not seismically qualified in this condition. This condition also affected the adjacent 1A and 1C SW pump breakers. Therefore, the Unit 1 train A SW system was considered inoperable while the 1B SW pump breaker was in the non-seismically qualified position. FNP-0-SOP-36.6 states that an ESF 4160 V bus 1L breaker cannot be left in the disconnect position unless the seismic modification has been implemented on both the breaker and cubicle. Contrary to this requirement, the Unit 1, 1B SW pump breaker was left in the disconnect position causing the Unit 1 A train SW system to be inoperable from December 12, 200[1] until December 13, 200[1]. This violation is of very low safety significance because only the Unit 1 A train was affected and it was for a short duration (approximately 24 hours). This issue was placed in the licensee's corrective action program as CR 2001003071.
Inspection Report# : 2001006*(pdf)*

Significance: G Oct 29, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
Technical Specification actions not taked for inoperable Unit 1 B train automatic load sequencer.
On October 29, 2001, the licensee identified that the Unit 1 B train automatic load sequencer did not respond to a LOSP test signal. This failure resulted in a loss of the automatic function to start safety related loads on the 1B emergency electrical bus during a LOSP. Technical Specification (TS) 3.8.1c requires that each emergency bus/electrical train have an operable automatic load sequencer. TS 3.8.1 action G requires restoration in 12 hours or be shut down if the sequencer has not been returned to service. Contrary to this requirement, the Unit 1 B train automatic load sequencer was inoperable from August 2, 2000 until October 29, 2001. This violation is of very low safety significance because the ability to manually start safety related loads was available and detailed procedures existed which would direct operators to start plant equipment. This issue was placed in the licensee's corrective action program as CR 2001002756.
Inspection Report# : 2001006*(pdf)*

Significance: G Oct 20, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions for the 1C EDG Failure
Green. A non-cited violation was identified for inadequate corrective actions, as required by 10 CFR 50 Appendix B, Criteria XVI, for failure to address a degraded condition of the 1C Emergency Diesel Generator (EDG). The licensee did not follow their Condition Report requirements to perform a root cause and broadness review. As a result, a different degraded condition of the 1B EDG occurred, which resulted in that EDG becoming inoperable. Both of these conditions were related to not following vendor guidance in the respective EDG vendor instruction manuals as required by plant procedures. However, this finding was of very low safety significance because the 1C EDG was determined to be degraded but operable and the 1B EDG failure occurred during the refueling outage, when it was not required to be operable.
Inspection Report# : 2001004*(pdf)*

Significance: N/A Jun 30, 2001
Identified By: NRC
Item Type: FIN Finding
Untimely or Ineffectively Implemented Corrective Actions for Maintenance Rule Issues
The inspectors identified that many corrective actions for Maintenance Rule issues have not been timely and effectively implemented. The finding was based on the inspectors review of the 2001 Maintenance Rule periodic assessment which identified several Maintenance Rule problems that have gone uncorrected for several years. This finding does have a credible impact on safety because Maintenance Rule issues left uncorrected could result in increased plant equipment problems, equipment unavailability, or initiating event frequency. This finding was considered to be of very low safety significance because no direct consequences have occurred due to the uncorrected problems.
Inspection Report# : 2001002*(pdf)*

Significance: G Mar 31, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE MAINTENANCE PROCEDURES FOR THE 1C AND 2C EMERGENCY DIESEL GENERATORS (EDGs)
The inspectors identified a Non-Cited Violation of Technical Specification Surveillance Requirement 13.8.3.1 for failure to assure that

maintenance performed on the 1C and 2C EDGs was in accordance with the vendor manual recommendations. The licensee had not followed the vendor manual's guidance for checking the vertical drive coupling and bearings of the 1C EDG which led to a degraded condition. Although the 1C EDG was determined to be in a degraded condition, an operability evaluation concluded it could have performed its required function. Because the 1C EDG remained operable and the 2C EDG vertical shaft was found not to be damaged, this finding was determined to be of very low significance.
Inspection Report# : 2000006*(pdf)*

Significance:  Jan 23, 2001
Identified By: Licensee
Item Type: NCV NonCited Violation
INADEQUATE MAINTENANCE PROCEDURES FOR THE INSTALLATION OF BUBBLER TYPE OILERS
Technical Specifications 5.4.1.a requires applicable written procedures be established, implemented, and maintained covering the activities recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. The licensee's procedures to install and adjust the Unit 1 Turbine Driven AFW Pump bubbler type oiler were inadequate. Consequently, on January 23, 2001, the outboard bearing failed from lack of oil. This issue is in the licensee's corrective action program as CR 2001000144.
Inspection Report# : 2000006*(pdf)*

Significance: N/A Oct 27, 2000
Identified By: NRC
Item Type: FIN Finding
MAINTENANCE RULE PROGRAM IMPLEMENTATION RESULTS IN ADVERSE PERFORMANCE TREND
SUPPLEMENTAL INSPECTION: This supplemental inspection was performed to assess the licensee's evaluation and corrective actions associated with a Unit 2 Degraded Mitigating Systems Cornerstone due to two White Performance Indicators (PIs) for Heat Removal System (auxiliary feedwater (AFW)) and Emergency Alternating Current (AC) Power System unavailability. This supplemental inspection, performed in accordance with inspection procedure (IP) 95002, was the final focused phase of NRC follow up to assess extent of condition and programatic implications of the licensee evaluation findings. This inspection also focused on corrective actions to prevent recurrence of any similar conditions. The initial inspection of the Unit 2 Degraded Mitigating Systems Cornerstone in accordance with IP 95001 and IP 95002 was documented in inspection reports 50-348,364/00-07 and 348,364/00-08, respectively. The purpose of this inspection was to accomplish further supplemental inspection of breaker and turbine driven (TD) AFW pump maintenance, and Maintenance Rule implementation, due to concerns raised during the initial IP 95002 inspection. The results of this inspection concluded that the corrective actions to prevent recurrence of breaker failures were adequate to address the extent of condition for those failures. Similarly, the corrective actions for the TDAFW pump failures were adequate to address the extent of condition for those failures. However, the corrective actions were not yet fully implemented. An inspection finding without color identified problems with the licensee's Maintenance Rule program implementation. This finding is supported by several observations which indicated an adverse performance trend, including the status of breakers and the auxiliary feedwater system in Maintenance Rule (a)(1) for an extended period of time. While the risk associated with each observation was very low, this was an apparent precursor to the Unit 2 Degraded Mitigating System Cornerstone. Due to the licensee's acceptable performance in addressing and developing corrective action for these issues, the NRC supplemental inspection effort for the Unit 2 Degraded Mitigating Systems Cornerstone is complete. The White PIs associated with both units' Emergency AC Power and the Unit 2 Heat Removal System availability will only be considered in assessing plant performance for a total of four quarters in accordance with the guidance in NRC Manual Chapter 0305. NEI-99-02, Regulatory Assessment Performance Indicator Guideline, revision 0, contains guidance for the removal of fault exposure hours contributing to unavailability totals. Section 2.2, Mitigating Systems Cornerstone - Safety System Unavailability, allows the removal of fault exposure hours after 4 quarters have elapsed provided, among other criteria, that supplemental inspection activities by the NRC have been completed. Since the supplemental effort is complete, the licensee may reset the fault exposure hours for the above White PIs when the other criteria are fulfilled. Implementation of the licensee's corrective actions will be reviewed during a future inspection.
Inspection Report# : 2000011*(pdf)*

Significance: N/A Jun 02, 2000
Identified By: NRC
Item Type: FIN Finding
EMERGENCY POWER UNAVAILABILITY RESULTS IN WHITE PERFORMANCE INDICATOR (PI)
SUPPLEMENTAL INSPECTION: IP 95001 was performed to assess the licensee's evaluation and corrective actions associated with White Performance Indicators (PIs) for both units' emergency AC power systems. Fault exposure unavailability hours for both the unit common 1-2A and 1C emergency diesel generators (A train) resulted in each unit's PI crossing the Green to White unavailability threshold (2.5%). The licensee identified the cause as breaker failures associated with the 600 volt load centers which supply AC power to the diesel auxiliaries. The 1-2A diesel auxiliary power supply breaker failure primary root cause was a broken internal wire due to flexing. The wire had been in contact with the closing spring which most likely occurred during the manufacturing process. The 1C diesel auxiliary power supply breaker failure primary root cause was a failed relay attributed to weak Preventive Maintenance (PM), poor engineering review, reduced stock levels, and a lack of operations knowledge regarding the auto transfer scheme. As corrective actions, the licensee implemented enhanced monitoring of the EDGs and emergency AC power by system engineering, operations, and maintenance.
Inspection Report# : 2000007*(pdf)*

Barrier Integrity

Emergency Preparedness

Significance: G Apr 09, 2000
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MAKE TIMELY NOTIFICATION OF AN UNUSUAL EVENT
The inspectors identified a non-cited violation of 10 CFR 50.47 and licensee procedure FNP-0-EIP-9.0, Emergency Classifications and Actions, for failure to initially classify and report a Unit 1 loss of offsite power condition as a Notification of Unusual Event. Personnel error by the operating shift and a weak procedure were the causes. The licensee made a late notification the following day. This issue was determined to be of very low safety significance because the unit was defueled at the time and because of the low classification level. (Licensee Event Report 50-348/00-05)
Inspection Report# : 2000003*(pdf)*

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Significance: G Aug 09, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Compensatory Measures for Suppressed Tamper Alarms
An NCV was identified in that compensatory measure for suppressed teamper alarms associated with vital area doors, alarm panel doors, and CCTV alarm panel doors wre not implemented in accordance with the Farley Physical Security Plan. While the risk was low in this case, this issue was identified as more than a minor finding because inoperable intrusion detection system tamper alarms leave the affected system component susecptible to malevolent manipulation.
Inspection Report# : 2001010*(pdf)*

Significance: G Aug 07, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform an Adequate Search of Personnel
A Non-Cited Violation (NCV) was identified when a security officer failed to properly search several individuals prior to allowing them unescorted access to the protected area (PA). Requirements violated were established in the Farely Physical Security Plan and implementing procedures. While the risk was low in this case, the issue was identified as more than a minor finding because granting site access to individuals who have not been properly searched can have a credible impact on safety. Additionally, the granting of access to improperly searched individuals can be viewed as a precursor to a significant event.
Inspection Report# : 2001010*(pdf)*

Significance: G Jun 21, 2001
Identified By: NRC
Item Type: NCV NonCited Violation
PSP changes that decreased the effectiveness of the Site Security Plan (5 Examples)

The inspector identified five apparent violations of 10CFR50.54(p) involving improper changes that the licensee had made to the Physical Security Plan. The Physical Security Plan changes were significant in that they decreased the effectiveness of the Security Plan. (See URI 50-348,364/00-09-03) By letter dated August, 17, 2001, based on the information developed during the inspection and the information presented by the licensee at the Regulatory Conference, the NRC has determined that a violation of NRC requirements occurred. In particular, 10 CFR 50.54(p)(1) states that licensees may make no change which would decrease the effectiveness of a security plan without prior approval of the Commission. Contrary to this requirement, the NRC concluded that the licensee made changes to the PSP, without prior Commission approval, that decreased the effectiveness of the PSP, by: (1) changing the response strategy to not engage an adversary prior to entrance into Vital Areas; (2) not preventing acts intended to cause a significant release of radioactivity; (3) reducing search requirements which provided a potential pathway for unauthorized items to be introduced into the protected area; (4) replacing an automatic switch over capability in the power supply for the two-way radio system and implementing a manual action for switch over; and (5) replacing supervision of alarm security data lines with cross monitoring. Because you stated that your response strategies and implementing procedures had not been revised substantively as a result of the PSP changes and the short duration that some of the changes were in effect, the impact of these changes to your PSP was minimal. Based on this, the NRC concluded that this violation with five examples should be characterized at Severity Level IV. Because of the low safety significance of the violation, PSP revisions already implemented or approved to restore compliance, and placement of the issue into the corrective action program (Farley Condition Report 22000005326), the NRC is characterizing this violation as a non-cited violation. (The complete document can be accessed in ADAMS with Pkg #ML012340165.)
Inspection Report# : 2001007*(pdf)*

Significance: Aug 25, 2000
Identified By: NRC
Item Type: FIN Finding
Response force for attempted intrusion
The Physical Security Plan, Section 7, requires that detected or attempted intrusion at the protected area barrier, will provide sufficient time for a security response force to engage an adversary force to preclude penetration of vital area barriers and any act intended to cause a significant relese of radioactivity. Licensee performance in this area will be reviewed. By letter dated August 17, 2001, FINAL SIGNIFICANCE DETERMINATION FOR A WHITE FINDING, the NRC concluded that [the licensee's] performance during the July 2000 force-on-force exercises resulted in a failure of a limited portion of [the] protective strategy and the loss of a complete target set during one exercise. The NRC considered the finding to be potentially predictable or occasionally repeatable, but could not conclude that [the licensee's] performance represented a broad, programmatic problem. Therefore, in accordance with the NRC's Interim Physical Protection Significance Determination Process, this finding is appropriately characterized as White. (The complete document can be accessed in ADAMS as Pkg #ML012340165.) Licensee compensatory measures were in place to address the deficiencies. SUPPLEMENTAL INSPECTION: IP 95001 was performed to assess the licensee's evaluation and corrective actions for the White inspection finding related to performance during the July 2000 Operational Safeguards Response Evaluation (OSRE). Inspection Report 2001-009 issued 12/20/2001 determined that the licensee had performed an adequate investigation and evaluation of the issues which either caused or contributed to the White inspection finding. The licensee identified the primary root cause as a less than adequate philosophy which did not seek all available inputs for improvement in the security area, including a lack of benchmarking performance against other plants or the use of outside consultants. The licensee further characterized it as a compliance versus a continuous improvement approach. The licensee's root cause also identified several contributing causes for the White inspection finding, including the lack of adequate target set development and related hardware vulnerabilities. The overall thoroughness of the root cause was adequate, but the inspector identified some possible contributing causes that had not been reviewed by the licensee, including security force workload and tracking of controller performance. The licensee implemented a variety of corrective actions to prevent recurrence including physical security (hardware), procedural, and training upgrades. The licensee established several monitoring provisions to identify and correct potential degraded performance prior to recurrence. These included a scheduled effectiveness evaluation by the Safety Audit and Engineering Review group to assess the adequacy of the root cause and the corresponding corrective actions. Training exercises incorporated significantly expanded target sets which enhanced the overall response capability of the security force. The inspection identified some areas for potential security program enhancements which were subsequently documented in the licensee's corrective action system, several of which involved a lack of structured, long term performance monitoring of security. Based on the overall satisfactory results of the inspection, the licensee's performance in completing the root cause assessment for the identified White inspection finding was considered adequate.
Inspection Report# : 2000003*(pdf)*
Inspection Report# : 2000009*(pdf)*
Inspection Report# : 2001007*(pdf)*
Inspection Report# : 2001009*(pdf)*

Miscellaneous

Significance: N/A Nov 30, 2001
Identified By: NRC
Item Type: FIN Finding
Results of PI&R Inspection

The inspectors determined that, in general, problems were properly identified, evaluated, and corrected. A low threshold for self-identification was demonstrated. Significant problems were adequately addressed. However, some minor problems were noted including the failure to initiate Condition Reports (CRs) for equipment problems, CRs with poor documentation quality, and action items (AIs) that were not clearly linked to the problem and were not clearly focused on addressing the identified causes. Since documentation was not always complete, in many cases, the inspectors had to clear and concise in addressing the corrective action. Some self-assessments were programmatic in scope and did not assess the output or implementation of the program being assessed. Operating experience (OE) items were sometimes not evaluated, reviewed for applicability, or incorporated into site procedures, and corrective actions to determine root causes for some negative trends identified from trend analysis were not always timely.
Inspection Report# : 2001004*(pdf)*

Significance: N/A Sep 08, 2000
Identified By: NRC
Item Type: FIN Finding
PROBLEM IDENTIFICATION AND RESOLUTION
The licensee was effective at identifying problems and entering them into the corrective action program. Generally, problems entered into the corrective action program were adequately evaluated and appropriate corrective actions were identified. Formal root cause evaluations and corrective actions for significant issues were thorough and detailed. Corrective actions were implemented in a timely manner commensurate with their safety significance. Licensee audits and self-assessments adequately identified deficiencies in the corrective action program and audit findings were consistent with the NRC's observations. Based on interviews conducted during this inspection, plant employees were not reluctant to report nuclear safety issues. However, some negative observations were identified for failing to enter some issues into the corrective action system and for issues that did not receive adequate investigation and development of corrective actions or that were not assigned the appropriate severity level classification. These negative observations involved issues that were of very low safety significance.
Inspection Report# : 2000010*(pdf)*

Last modified : July 22, 2002