Kewaunee
4Q/2005 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: FIN Finding
Inadequate controls for loose material in substation
A finding of very low safety significance was identified by the inspectors for failure to control loose materials in the protected area and substation. No violation of NRC requirements occurred. Once identified, the licensee initiated a condition report (CAP) to develop a surveillance procedure to remove loose materials before summer months where potential adverse weather was apparent.

The issue was more than minor because, if left uncontrolled, the loose items adjacent to the auxiliary transformers and in the substation would become a more significant safety concern. The issue was of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator; the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available; and the finding did not increase the likelihood of a fire or internal or external flooding. The issue was not considered a violation of regulatory requirements because it did not affect safety-related structures, systems, or components.
Inspection Report# : 2005008*(pdf)*

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to manage risk duing periods where the grid condition was defined as unstable.
A finding of very low safety significance was identified by the inspectors for a Non-Cited Violation (NCV) of Title 10 CFR Part 50.65(a)(4). The licensee failed to adequately assess shutdown risk during degraded grid conditions. Once identified, the licensee initiated a CAP to modify shutdown safety assessment and operating procedures to include grid conditions in risk assessments. The finding was more than minor because the licensee's risk assessment had incorrect assumptions that had the potential to change the outcome of the assessment. The inspectors determined that the finding could not be evaluated using the Significance Determination Process because the finding was associated with an inadequate qualitative risk assessment. The inspectors determined that this issue was of very low safety significance which was verified by the regional branch chief.
Inspection Report# : 2005008*(pdf)*

Significance: G Feb 18, 2005
Identified By: NRC
Item Type: FIN Finding
Safety Buses Relay Sensitivity to External Electrical Distubrances
The team identified a finding of very low safety significance for a failure to provide adequate relay setpoint calibration tolerances on safety buses 1-5 and 1-6 loss of voltage relays. The existing relay setting calibration tolerances would have allowed the loss of voltage relays to actuate spuriously during certain offsite electrical system disturbances and un-necessarily separate the safety buses from the offsite power system and result in a plant transient. The licensee implemented corrective actions to revise the appropriate loss of voltage relay surveillance procedures.

The finding was more than minor because the failure to provide adequate relay setting tolerances could result in an unnecessary separation of the safety buses from the electrical grid and an ensuing plant transient. The finding was of very low safety significance because the issue would not preclude the safety buses from being re-energized by the emergency power sources. The finding was a not a violation of regulatory requirements.
Inspection Report# : 2005002*(pdf)*

Significance: G Feb 18, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Operator Actions Following Station Blackout - Lack of Procedure Guidance
The team identified a Non-Cited Violation of 10 CFR 50.63, "Loss of All Alternating Current Power," for a failure to maintain procedural steps that minimized the likelihood and duration of a Station Blackout (SBO) event. The deleted procedural steps allowed for the cross-connection of the plant's two redundant safety buses should both the Reserve Auxiliary Transformer and the 1B Emergency Diesel Generator fail. These

procedural steps, as originally employed, served to lessen the likelihood of the SBO occurring, and/or reduce the time of the SBO. The licensee implemented corrective actions to revise the appropriate operations procedure.

This finding was more than minor, because it was associated with the likelihood of an initiating event and the reliability of a safety bus that responds to an initiating event. The finding was of very low safety significance, because multiple sources of both onsite and offsite power remained available to supply the two safety buses.
Inspection Report# : 2005002*(pdf)*

Mitigating Systems

Significance: G Dec 16, 2005
Identified By: NRC
Item Type: FIN Finding
No Trending of Adverse Conditions Identified During Outages
The inspectors identified a finding of very low safety significance for the licensee not reviewing corrective action program documents (CAPs) during outages for potential trends of conditions adverse to quality. As part of the screening process of CAPs, the licensee assigned, as possible, CAPs to various "hot buttons." Hot buttons were searchable categories in the corrective action program computer system that had been established for various problems, such as equipment tagging errors, security door control, and reactivity management. For non-outage times, the licensee assigned a monthly number of hits for each hot button that, if exceeded for 3 months in succession, would result in the generation of a CAP to investigate a possible trend. However, as of December 16, 2005, the licensee did not use hot button action levels during outages when the number of CAPs written was much higher than during non-outage times.

This finding is greater than minor because if left uncorrected would become a more significant safety concern. This finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. No violation of regulatory requirements occurred. The cause of the finding is related to the cross-cutting element of problem identification and resolution, because of not identifying potential conditions adverse to quality through trending of CAPs during outages.
Inspection Report# : 2005005*(pdf)*

Significance: G Dec 16, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Correct Procedure Non-Adherence
The inspectors identified a finding of very low safety significance and a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to take corrective action for procedure non-compliance identified during the licensee's 2004 self-assessment of the corrective action program. As a result of the assessment, CAP025194, "Corrective Action Program Procedure and Guidance Document Use," was written and documented that plant workers were not following corrective action program procedures for apparent cause evaluations and root cause evaluations, effectiveness review content, priority and due date assignments, initiator feedback, and documentation of corrective action completion. To correct this problem, corrective action CA018094, "Corrective Action Program Procedure and Guidance Document Use," was written and specified one or 2 weeks of requiring "in-hand" use by the plant staff of the corrective action program administrative procedure. However, completion of this action was delayed several times and on July 25, 2005, CAP025194 and CA018094 were closed with the only documented action taken being a July 18, 2005, meeting of the station human performance steering committee at which the licensee decided not to take action because of the pending transition to the corrective action program documents of the plant's new owner.

This finding is greater than minor because if left uncorrected would become a more significant safety concern. This finding is not suitable for Significance Determination Process evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance. The cause of the finding is related to the cross-cutting element of problem identification and resolution, because of the failure to take corrective action for non-adherence to station procedures.
Inspection Report# : 2005005*(pdf)*

Significance: G Dec 16, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Adequately Correct Residual Heat Removal Pump Seal Leakage
A finding of very low safety significance that was a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for the licensee's ineffective corrective action to repair a leak on the seal of the "B" residual heat removal (RHR) pump. The leak was identified on November 2, 2005, when the pump was stopped following the performance of a required surveillance. The leak rate exceeded leakage control program limits. A similar leak was identified on June 16, 2004, for which the licensee replaced the seal in November 2004.

This finding is greater than minor because it was associated with the "RCS (reactor coolant system) equipment and barrier performance"

attribute of the barrier integrity cornerstone and does affect the cornerstone objective of providing reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. Although the RCS barrier was affected, the finding did not affect the mitigation capability of the RHR system and did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator or affect the containment integrity. Therefore, the finding is of very low safety significance.
Inspection Report# : 2005005*(pdf)*

Significance: Y Oct 06, 2005
Identified By: NRC
Item Type: VIO Violation
Potential Flooding in the Turbine Building Basement
A review of design drawings by the inspectors revealed a direct piping connection from the turbine building sump to the trench in safeguards alley. The inspectors determined that there were no check valves located in the piping to prevent water spills in the turbine building basement from backing up into the safeguards alley. The inspectors also noted that no flood barriers specifically designed to protect equipment in the safeguards alley from flooding in the turbine building basement were installed. The inspectors requested additional information from the licensee regarding potential flooding events occurring in the safeguards alley. The licensee documented its response to the inspectors' information request in Condition Evaluation (CE) 014653. This CE stated that it would take approximately 3 hours for flooding caused by AFW pump discharge to affect safety-related equipment, and such flooding could be mitigated by opening doors between the safeguards alley and the turbine building basement. The CE also stated that other sources of flooding in the turbine building basement need not be considered since such flooding events are outside the design basis of the plant.

The inspectors identified a finding that was preliminarily determined to be of substantial to high safety significance because the licensee failed to provide adequate design control to ensure that Class I equipment was protected against damage from the rupture of a pipe or tank resulting in serious flooding or excessive steam release to the extent that the Class I equipment's function is impaired. Specifically, the design of Kewaunee Power Station (KPS) did not ensure that the auxiliary feedwater (AFW) pumps, the 480-volt (V) safeguards buses, the safe shutdown panel, emergency diesel generators (EDGs) 1A and 1B, and 4160-V safeguards buses 1-5 and 1-6 would be protected from random or seismically induced failures of non-Class I systems in the turbine building. The finding is also an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for not ensuring that the design of KPS prevented turbine building flooding from impacting multiple safety related equipment trains needed for safe shutdown of the plant. The inspectors determined that a primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution, because there was an earlier opportunity to discover and correct this issue based on the licensee's 2003 experience when minor flooding from the turbine building had challenged safety equipment located adjacent to the turbine building basement.

The finding was more than minor because it impacted Mitigating Systems cornerstone attributes of design control (initial design and plant modifications) and protection against external factors (internal flood hazards and seismic events) and it impacted the Mitigating Systems cornerstone objective to ensure availability, reliability and capability of multiple trains of safety related equipment to respond to events to prevent core damage. A Significance Determination Process Phase 3 risk analysis determined that this finding was preliminarily of substantial to high safety significance. The licensee has taken significant corrective actions, including extensive system and structural modifications to address this issue.

After considering the information developed during the inspection, and the additional information you provided prior to, during, and in response to our questions at the Regulatory Conference, the NRC has concluded the inspection finding is appropriately characterized as Yellow (i.e., an issue with substantial importance to safety, that will result in additional NRC inspection and potentially other NRC action).
Inspection Report# : 2004009*(pdf)*
Inspection Report# : 2005002*(pdf)*
Inspection Report# : 2005011*(pdf)*
Inspection Report# : 2005018*(pdf)*

Significance: SL-IV Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Report in a Timely Manner an Unanalyzed Condition Involving a Potential Runout Concern With the CCW Pumps
The inspectors identified a Non-Cited Violation (NCV) when the licensee failed to make a written report, within 60 days, to the NRC in accordance with 10 CFR 50.73(a)(2)(ii)(B), when an unanalyzed condition that significantly degraded plant safety was identified. Specifically, the licensee did not recognize the significance of a previously identified condition involving a potential runout issue with the component cooling water (CCW) pumps, and did not report this condition until the inspectors identified the requirement. The concern related to the CCW pump capability to provide required flow under certain conditions. Specifically, during a loss of power, and with specific system configurations, the loss of power could lead to a CCW pump runout condition. The primary cause of this finding was related to the cross-cutting area of human performance.

Because this issue affects the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. The inspectors determined that this violation is of very low safety significance and because the licensee entered the issue into their corrective action program (CAP026528), this violation is being treated as an NCV consistent with Section VI.A.1 of the NRC Enforcement Policy. The licensee has taken actions to revise plant procedures to address this issue.
Inspection Report# : 2005012*(pdf)*

Significance: W Aug 16, 2005
Identified By: NRC
Item Type: VIO Violation
Potential Common Mode Failure of Auxiliary Feedwater
URI 05000305/2005002-05 is associated with the design of the AFW pump's discharge pressure switches. The inspectors identified the potential for air intrusion into operating AFW pumps, potentially resulting in a common mode failure of the AFW system. This could occur during certain events where the suction source is lost prior to being able to manually swap the source of water from the CST to the SW system.

The inspectors identified a finding that was preliminarily determined to be of low to moderate safety significance, because Kewaunee failed to provide adequate design control to ensure the AFW pumps would be protected from failure due to air ingestion during tornado or seismic events; as well as from failure during potential runout conditions. The finding is also an apparent violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for not effectively providing controls to check the adequacy of the design for protecting the AFW pumps during design and license basis events.

The finding was determined to be more than minor since it impacted Mitigating System cornerstone attributes of design control (initial design and plant modifications) and the cornerstone objective to ensure availability, reliability, and capability of the AFW system to respond to events to prevent core damage. A Significance Determination Process Phase 3 risk analysis determined that this finding was preliminarily of low to moderate safety significance. The licensee has taken significant corrective actions, including extensive modifications to the system.

After considering the information developed during the inspection, the NRC has concluded the inspection finding is appropriately characterized as White (i.e., an issue with low to moderate increased importance to safety, which may require additional NRC inspections).
Inspection Report# : 2005002*(pdf)*
Inspection Report# : 2005010*(pdf)*
Inspection Report# : 2005014*(pdf)*

Significance: G Jul 29, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Evaluate the Effect of Modification on Turbine Driven AFW Pump Performance with Reduced Steam Pressure
The inspectors identified a finding involving a Green Non-Cited Violation (NCV) of 10 CFR 50, Appendix B, Criterion III, "Design Control". The finding involved the revision of AFW pump discharge pressure trip setpoints. The licensee had not determined if the turbine driven AFW (TDAFW) pump was capable of providing the required flow under reduced steam pressure conditions prior to approving the modification. This issue could have affected the performance of the AFW system under post accident conditions.

This issue was greater than minor because it potentially affected the Mitigating System cornerstone objective of equipment capability. The issue screened as very low safety significance in Phase 1 of the SDP, because it was a design deficiency that was not found to result in a loss of function and the item was resolved prior to being in the plant conditions where the finding could have impacted the pump's performance. The licensee conducted post modification tests and revised permanent plant procedures to ensure the TDAFW pump was capable of providing the required flow under reduced steam pressure conditions.
Inspection Report# : 2005010*(pdf)*

Significance: G Jun 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to minimize prior identified and predictable explosive gas concentrations in the WGDTs
A finding of very low safety significance was identified by the inspectors for a NCV of Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." The licensee failed to consider the impact on plant fire protection when ineffective resolution of waste gas system issues repeatedly led to explosive mixtures in the Waste Gas Decay Tanks. The licensee entered these issues into their corrective action program. The primary cause of this violation was related to the cross-cutting area of Problem Identification and Resolution. The licensee repeatedly encountered explosive gas levels in the WGDTs and were aware of plant conditions that resulted in these levels but failed to take adequate corrective actions to prevent explosive gas mixtures from developing in the WGDTs. The issue is more than minor because uncontrolled explosive mixtures in the WGDTs could have led to a more significant safety concern. The issue was of very low safety significance because explosive mixtures were only present during plant shutdown conditions; an explosion would not have affected safe shutdown equipment (i.e. Residual Heat Removal System); the explosive mixture conditions were only present for short periods of time (<12 hours); and the tanks were isolated and vented per procedure when discovered.
Inspection Report# : 2005008*(pdf)*

Significance: G Feb 18, 2005
Identified By: NRC
Item Type: FIN Finding
Lack of 4160 Vac Bus 1-5 Ovewrcurrent and Loss of Voltage Relay Coordination
The team identified a finding of very low safety significance for a failure to provide adequate electrical coordination of protective devices

thereby ensuring that postulated electrical faults would be isolated upon detection. Specifically, the team identified that the lack of adequate electrical systems coordination between the undervoltage and overcurrent protection on 4160 Vac safety bus 1-5 would result in the loss of voltage relays actuating before the bus over-current relays. This design deficiency results in the failure to lock out safety bus 1- 5 upon postulated electrical faults and subjects the postulated faulted safety bus 1-5 to be re-energized via an alternate offsite source. This design introduced a challenge to the safety equipment availability and reliability. The licensee planned to develop changes to the affected relays.

The finding was more than minor because the failure to provide adequate electrical coordination of electrical devices provided an unnecessary challenge to safety-related equipment, and if left uncorrected, could become a more safety significant concern. The finding was of very low safety significance because it was a design deficiency that did not result in the loss of system function. The finding was a not a violation of regulatory requirements.
Inspection Report# : 2005002*(pdf)*

Significance: G Feb 18, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Short Circuit Duty of Buses Exceeded - Impact on Safe Shutdown Analysis
The team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion II, "Quality Assurance Program," for a failure to identify potentially adverse conditions to the plant's fire protection safe shutdown analysis caused by known overduty conditions on non-safety related buses 1-1, 1-2, 1-3, and 1-4. While the overduty condition was known to have existed at least since 1992, the licensee never entered the issue into the plant's corrective action program, where a proper evaluation should have addressed 10 CFR Part 50, Appendix R, safe shutdown related effects. The licensee planned to continue efforts to identify additional evaluations and corrective actions.

This finding was more than minor, because it was associated with the degradation of a fire protection feature. The finding was of very low safety significance because after extensive evaluation of the deficiency, the licensee was able to determine that the plant could still safely shut down the plant during a postulated fire event.
Inspection Report# : 2005002*(pdf)*

Significance: G Feb 18, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Battery Sizing Deficiencies
The team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for failure to implement adequate design controls of documents, inputs, and assumptions in the design of the two safety-related batteries. Specifically, the licensee did not perform and control battery sizing calculations, including consideration of temperature effects, to ensure that the batteries maintained sufficient capacity to perform the intended design function. The team determined that the failure to appropriately evaluate effects of battery room and cell temperatures also affected the cross-cutting area of Problem Identification and Resolution because the subject of battery capacity versus battery temperature had been previously identified in a 1992 NRC inspection. The licensee planned to perform battery sizing calculations as part of an overall electrical systems analysis improvement project.

This finding was more than minor because it affected the mitigating systems cornerstone objective of ensuring the availability and reliability of the 125 Volts direct current battery system to respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because the battery remained operable. The licensee planned to develop formal battery sizing calculations.
Inspection Report# : 2005002*(pdf)*

Significance: SL-IV Feb 18, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Evaluation of Procedure Changes to Address AFW Design Deficiencies
The team identified a finding involving a Non-Cited Violation of 10 CFR 50.59, "Changes, Tests, and Experiments." The finding involved a failure to perform an adequate review of operations procedure changes in accordance with 10 CFR 50.59 associated with the operation of motor-operated valves for the auxiliary feedwater suction source from the service water system. The team determined that the licensee's approval of changes to Procedure E-0-05, with the introduction of adverse effects, and a determination that 10 CFR 50.59 was not applicable was a violation of 10 CFR 50.59. The licensee subsequently performed additional evaluations of the procedure changes.

Because the issue affected the NRC's ability to perform its regulatory function, this finding was evaluated with the traditional enforcement process. The finding was determined to be of very low safety significance since the design basis safety-related function of the AFW system, to remove reactor decay heat following a loss of normal feedwater, was not adversely affected. This was determined to be a Severity Level IV NCV of 10 CFR 50.59.
Inspection Report# : 2005002*(pdf)*

Significance: G Feb 18, 2005
Identified By: NRC
Item Type: NCV NonCited Violation

Lack of Allowance for Manual Actions in Establishing Setpoint to Transfer AFW Pump Suction Source
The team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for failure to establish the condensate storage tank (CST) level setpoint to transfer the auxiliary feedwater (AFW) pump suction supply from the CST to service water. The team determined that the calculation setpoint did not include an allowance for the manual operator actions required by emergency operations procedures. The licensee revised the plant procedure to perform the operator actions earlier in the procedure.

This finding was more than minor because it affected the mitigating systems cornerstone objective of equipment reliability, in that failure to align the AFW pump suctions to service water prior to the CSTs being depleted could have resulted in damage to the AFW pumps. The finding was determined to be of very low safety significance because it was a design deficiency that did not result in a loss of function.
Inspection Report# : 2005002*(pdf)*

Significance: G Feb 18, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Ensure that Calculation Assumption was Based on Valid Times for Manual Operator Actions
The team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." The finding involved the condensate storage tank (CST) level setpoint to transfer the auxiliary feedwater (AFW) pump suction from the CSTs to service water. A calculation assumption stated that a flow would drain from the CSTs to the condenser for 10 minutes until the operators isolated the flow by closing manual valve MU-2A. The team determined that the actions could not be completed in the time assumed by the calculation. The licensee initiated corrective actions to revise the appropriate operations procedure and calculation.

This finding was greater than minor because it affected the mitigating system cornerstone objective of equipment reliability, in that failure to align the AFW pump suctions to service water prior to the CSTs being depleted could have resulted in damage to the AFW pumps. The finding was determined to be of very low safety significance because it was a design deficiency that was not found to result in a loss of function. The team concluded that it was unlikely that the operators would allow the CST level to reach the EOP setpoint without attempting to refill the tanks from other sources, and that the operators would be aware of the CST levels.
Inspection Report# : 2005002*(pdf)*

Significance: G Feb 18, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
TSC DG Target Reliability Methodology Inadequate
The team identified a Non-Cited Violation of 10 CFR 50.63, "Loss of All Alternating Current Power." The finding involved the failure to establish a target reliability for the plant's alternate power source consistent with the reliability approved by the NRC staff in the licensee's Station Blackout submittal for 10 CFR 50.63. The non-conservative target reliability employed by the licensee resulted in the failure of the licensee to increase efforts to restore the Technical Support Center (TSC) Diesel Generator (DG) to its approved target reliability at an earlier date. The licensee subsequently initiated a corrective action to change the TSC DG reliability methodology.

This finding was more than minor, because it affected the reliability of a support system required for the mitigation of an Station Blackout event. The finding was of very low safety significance, because the finding did not directly affect the immediate operability of the TSC DG.
Inspection Report# : 2005002*(pdf)*

Barrier Integrity

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Reactor Operation Above LIcensed Power Limit
A finding of very low safety significance associated with a Non-Cited Violation of the plant operating license was self-revealed during normal plant operations. The Kewaunee Nuclear Power Plant Facility Operating License, as amended stated, "The Nuclear Management Company (NMC) is authorized to operate the facility at steady-state reactor core power levels not in excess of 1772 megawatts (thermal)." Contrary to this, on January 31, 2005, the 8-hour average thermal power peaked at 1772.07 MWt before being restored to below 1772 MWt. Reactor power was allowed to rise above 1772 MWt because the 8-hr average reactor thermal power indicator on the plant process computer system was not reliable, and the site operating philosophy allowed the 1-minute average and the 15-minute average reactor thermal power indications to exceed 1772 Mwt. Once the 8-hour average was discovered to be in excess of that allowed in the Operating License, operators immediately lowered power to within the licensed limit and entered this issue into the corrective action program. This violation of the plant operating license was considered greater than minor, because it could affect the barrier integrity cornerstone objective of protecting the integrity of the fuel cladding and was associated with the barrier integrity cornerstone attributes of thermal limits and reactivity control. The finding also involved the crosscutting area of human performance. In accordance with Inspection Manual Chaper (IMC) 0609, Appendix A, Phase 1, the finding was of very low safety significance.

Inspection Report# : 2005003*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Post and Control Access Into a Locked High Radiation Area During Radiographic Activities
A self-revealed finding of very low safety significance and an associated Non-Cited Violation of NRC requirements were identified when a high radiation area boundary was breached by two workers during radiography. An unnecessary radiation exposure could have been received by the workers had they not been stopped by radiography personnel as they moved toward the exposed radiographic source.

The issue was more than minor because it was associated with the Program/Process attribute of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation. The issue represents a finding of very low safety significance because there was no overexposure or substantial potential for an overexposure given the actual radiological conditions in the area coupled with the duration of the radiographic operation and the presence of radiography personnel who provided surveillance of the area, nor was the licensee's ability to assess worker dose compromised. A Non-Cited Violation of Technical Specification 6.13(a) and 10 CFR 20.1601(b) was identified for the failure to comply with the RP requirements that govern the control of access into high radiation areas. Corrective actions taken by the licensee included enhanced administrative measures by revising the radiography procedure and counseling of involved staff. Since the cause of the problem included corrective action deficiencies from previous similar radiography boundary control events, the finding also relates to the cross-cutting area of problem identification and resolution.
Inspection Report# : 2005012*(pdf)*

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Control Access Into a High Radiation Area During Radiographic Activities
A self-revealed finding of very low safety significance and an associated Non-Cited Violation of NRC requirements were identified for an unposted/uncontrolled locked high radiation area in the turbine building during radiography activities. A radiography source created radiation levels such that a major portion of the whole body could have received in one hour a dose in excess of 1000 mrem in accessible areas of the turbine building, which were not posted or controlled in accordance with regulatory requirements. The areas with elevated dose rates were not positively controlled by locked door/gate, use of a barrier and flashing light, or maintained under continuous visual or electronic surveillance.

The issue was more than minor because it was associated with the Program/Process attribute of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation. The issue represents a finding of very low safety significance because there was no overexposure or substantial potential for an overexposure given the actual radiological conditions in the uncontrolled areas coupled with the duration of the radiographic shot. A Non-Cited Violation of Technical Specification 6.13(b) and 10 CFR 20.1601(b) was identified for the failure to comply with the RP requirements that govern the control of access into locked high radiation areas. Corrective actions taken by the licensee included enhanced administrative measures by revising the radiography procedure, and counseling and training of RP staff.
Inspection Report# : 2005012*(pdf)*

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Control Access Into a High Radiation Area While Moving a Radioactive Filter
A self-revealed finding of very low safety significance and two associated Non-Cited Violations of regulatory requirements were identified for an unposted and uncontrolled high radiation area in an auxiliary building elevator during the transfer of a radioactive seal water injection filter. As a result of this failure, workers could have unknowingly entered a high radiation area in the elevator without knowledge of the radiological conditions.

The issue was more than minor because it was associated with the Program/Process attribute of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation. The issue represents a finding of very low safety significance because there was no overexposure or substantial potential for an overexposure given the

circumstances and the actual radiological conditions in the area, nor was the licensee's ability to assess worker dose compromised. A Non-Cited Violation of Technical Specification 6.13(a) and 10 CFR 20.1601(b) was identified for the failure to comply with the RP requirements that govern the control of access into high radiation areas. This issue also represents a Non-Cited Violation of 10 CFR 20.1902(b)/20.1903 for failure to post a high radiation area. Corrective actions taken by the licensee included enhanced administrative measures (RP Job Guide) for change-out and transport of all radioactive filters.
Inspection Report# : 2005012*(pdf)*

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Post a High Radiation Area While Moving a Radioactive Filter
A self-revealed finding of very low safety significance and two associated Non-Cited Violations of regulatory requirements were identified for an unposted and uncontrolled high radiation area in an auxiliary building elevator during the transfer of a radioactive seal water injection filter. As a result of this failure, workers could have unknowingly entered a high radiation area in the elevator without knowledge of the radiological conditions.

The issue was more than minor because it was associated with the Program/Process attribute of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation. The issue represents a finding of very low safety significance because there was no overexposure or substantial potential for an overexposure given the circumstances and the actual radiological conditions in the area, nor was the licensee's ability to assess worker dose compromised. A Non-Cited Violation of Technical Specification 6.13(a) and 10 CFR 20.1601(b) was identified for the failure to comply with the RP requirements that govern the control of access into high radiation areas. This issue also represents a Non-Cited Violation of 10 CFR 20.1902(b)/20.1903 for failure to post a high radiation area. Corrective actions taken by the licensee included enhanced administrative measures (RP Job Guide) for change-out and transport of all radioactive filters.
Inspection Report# : 2005012*(pdf)*

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : March 03, 2006