Seabrook 1
1Q/2005 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Maintain 4.16 KV Breaker Maintenance Procedure
A non-cited violation of Technical Specification (TS) 6.7.1.a, "Procedures and Programs," was self-revealed when the reserve auxiliary transformer supply breaker to the 'A' emergency bus failed to remain closed on demand. The licensee failed to properly address grease hardening in Seabrook's 4.16 kilovolt breaker maintenance program which resulted in the failure. The breaker was inoperable from February 14 to February 22, 2005.

This finding was more than minor because it affected the Initiating Events cornerstone objective to limit the likelihood of events that upset plant stability due to unreliable equipment performance. The finding was determined to be of very low safety significance since, while there was an increase in the probability of an initiating event, it did not impact mitigating systems resulting in a total loss of safety function, reactor coolant system leakage, or external event initiators.
Inspection Report# : 2005004*(pdf)*

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Comply with Technical Specification LCO Action Statement 3.8.1.1.a Electrical Distribution During On-Line Maintenance
The inspectors identified a non-cited violation of TS 3.8.1.1, "AC [Alternating Current] Sources - Operating." In March 2005, Seabrook failed to properly implement TS Limiting Condition for Operation (LCO) action statement 3.8.1.1.a during a period when one of two AC power sources was removed from safety-related electrical bus six to support on-line maintenance of a Unit Auxiliary Transformer. Based on a historical review, the inspectors identified that on August 21, 2003, Seabrook had also failed to properly apply TS LCO action statement 3.8.1.1.a and had exceeded the allowed outage time of 72 hours by approximately 12 hours.

This issue was more than minor because it affected the equipment performance attribute of the Initiating Events Cornerstone and the objective to limit the likelihood of those events that upset plant stability. Reducing the availability of offsite power to the Class 1E electrical distribution system resulted in a greater likelihood that the components powered by the Class 1E electrical distribution system would not be able to perform the intended safety function during an event. This finding was determined to be of very low safety significance since, while there was an increase in the likelihood of the loss of an emergency bus, it did not impact mitigating systems resulting in a total loss of safety function, reactor coolant system leakage, or external event initiators.

Inspection Report# : 2005004*(pdf)*

Significance: G Dec 31, 2004
Identified By: NRC
Item Type: FIN Finding
Untimely Corrective Maintenance Resulting in a Frozen Main Steam Transmitter Sensing Line
The inspectors identified a finding for failure to properly classify and correct a failed heat trace circuit in a timely manner which resulted in a main steam header pressure transmitter failure and a potential challenge to the plant. This finding was associated with the cross-cutting area of problem identification and resolution in that the degraded condition was not appropriately identified, classified or corrected.

This finding was more than minor because it affected the Initiating Events cornerstone objective to limit the likelihood of events that upset plant stability due to unreliable equipment performance. The finding is of very low safety significance since there was an increase in the probability of an initiating event but it did not impact mitigating systems, reactor coolant system leakage, or external event initiators.
Inspection Report# : 2005003*(pdf)*

Significance: G Dec 31, 2004
Identified By: NRC
Item Type: FIN Finding
Inadequate Procedure Resulting in Unplanned Opening of a Switchyard Breaker
The combination of an inadequate procedure and the failure of Seabrook's technicians to take appropriate actions during preventative

maintenance activities was a self-revealing finding. This performance deficiency resulted in an inadvertent switchyard breaker opening, creating a potential challenge to plant stability. This finding was associated with the cross-cutting area of human performance in that once both heaters were removed from service, the technicians became distracted with unrelated administrative tasks such that gas pressure decreased and the breaker tripped open. The issue was entered into the licensee's corrective action program (CAP) as CR 04-11141, Switchyard Breaker 163.

The finding was more than minor because it affected the Initiating Events cornerstone objective to limit the likelihood of events that upset plant stability due to factors such as switchyard activities. This finding was determined to be of very low safety significance since there was an increase in the probability of an initiating event but no impact on mitigating systems, reactor coolant system leakage, or external event initiators.

Inspection Report# : 2005003*(pdf)*

Significance: N/A Dec 17, 2004
Identified By: NRC
Item Type: FIN Finding
Identification and Resolution of Problems
The team determined that Seabrook was generally effective at identifying problems and placing them in the corrective action progam. Once entered into the system, these items were screened and prioritized in a timely manner using established criiteria, and they were properly evaluated commensurate with their safety significance. Overall, the evaluations reasonably identified the causes of the problem, assessed the extent of condition, and developed appropriate corrective actions. However, the team did identify some minor instances where problem evaluation could have been strengthened. Corrective actions were typically implemented in a timely manner, but the team found that in some cases, corrective actions were not effectively used to resolve and prevent recurrent problems. The inspectors found that Seabrook's self-assessments and audits were self-critical and consistent with the team's observations.
Inspection Report# : 2004008*(pdf)*

Significance: G Dec 17, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Take Effective Corrective Action for Underground Utility and Equipment Damage During Excavation
The team identified a non-cited violation of 10CFR 50, Appendix B, Criterion XVI, "Corrective Action," because Seabrook failed to take adequate corrective actions to prevent damage to underground utilities and equipment during site excavations. Following a series of issues where contract personnel hit buried cables and pipes while excavating, Seabrook failed to take effective corrective actions and later hit a safety-related control building ventilation line. This finding was associated with the cross-cutting area of problem identification and resolution.

This finding was more than minor because it affected the Initiating Events Cornerstone objective of limiting events that upset plant stability and challenge critical safety functions. Specifically, an underground utility or buried equipment could be damaged and result in an initiating event. The finding was determined to be of very low safety significance since it did not contribute to both an increased likelihood of a reactor trip and an increased likelihood that mitigating equipment would be unavailable.
Inspection Report# : 2004008*(pdf)*

Significance: G Sep 30, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Implement Dig Safe Procedure
The inspectors identified a non-cited violation of Technical Specification (TS) 6.7.1.a, "Procedures and Programs." Seabrook failed to properly implement their "Dig Safe" procedure which resulted in three incidents where underground utilities were damaged during site excavations. This finding, which involved Seabrook's failure to properly implement a procedure on multiple occasions, was associated with the cross-cutting areas of human performance and problem identification and resolution (PI&R).

The finding was more than minor because if left uncorrected the potential exists that an underground utility could be damaged and result in an initiating event. The finding is of very low safety significance since the damaged utilities did not actually impact plant operations.
Inspection Report# : 2004004*(pdf)*

Significance: G Jun 28, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Non-Timely Corrective Actions for Degraded Instrument Tubing Adapter to Transmitter Connecting Bolts
The inspector identified a Green, non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action" for failure to implement prompt corrective actions for a condition adverse to quality involving the torque of instrument tubing adapter to transmitter connection bolts.

This finding is more than minor because the licensee failed to promptly evaluate (or correct) an adverse condition that had the potential to result in a RCS leak. The significance of this problem was evaluated using the "Significance Determination of Reactor Inspection Findings for At Power Situations" (SDP) Phase I worksheet and determined to be of very low significance (Green) since a loss of the instrument bolt

integrity would not result in a primary or secondary system loss of coolant accident (LOCA), contribute to the likelihood of a reactor trip combined with the loss of a mitigating equipment function and did not increase the likelihood of a fire or flood.
Inspection Report# : 2004006*(pdf)*

Mitigating Systems

Significance: G Mar 31, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Implement Equipment Tagging and Isolation Procedure
A non-cited violation of TS 6.7.1.a, "Procedures and Programs," was self-revealed when Seabrook failed to properly implement an equipment tagging and isolation procedure resulting in the unplanned and rapid loading of the 'A' emergency diesel generator, an event which could have damaged the engine. This finding was associated with the cross-cutting area of organizational human performance since not only was the tagging procedure improperly implemented and licensed operators continued to load the EDG despite not having received the expected response; but other licensee programs, including the work control process, failed to prevent the emergency diesel generator transient.

The finding was more than minor because failure to properly implement the tagging program, if left uncorrected, would result in a more safety significant safety concern. The finding was determined to be of very low safety significance since there was no loss of function of safety-related equipment.
Inspection Report# : 2005004*(pdf)*

Significance: G Jan 27, 2005
Identified By: NRC
Item Type: FIN Finding
Inadequate Operability Determination of the TDEFW Pump Relative to SBO
The team identified a finding regarding the license's failure to perform an adequate operability determination for a degraded outboard thrust bearing on the turbine-driven emergency feedwater (TDEFW) pump. Specifically, the licensee did not identify how this bearing would have affected the TDEFW pump's ability to provide core cooling during a Station Blackout (SBO). As a result, the TDEFW pump operability and the need for corrective action were based upon a non-conservative technical basis.

The finding is more than minor because it is asociated with the Mitigating Systems Cornerstone attribute of Equipment Performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. Specifically, the licensee did not ensure the reliability of the TDEFW pump to perform its design function during a station blackout. This finding is of very low safety significance since it was a design or qualification deficiency that was confirmed not to result in a loss of function per Generic Letter (GL) 91-18.
Inspection Report# : 2005002*(pdf)*

Significance: G Dec 31, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Design Inadequacy Resulting in Potential Loss of Both Charging Pumps During a Fire
The inspectors identified a non-cited violation of Seabrook's Facility Operating Licensee, Section 2.F, "Fire Protection." The violation involved a design deficiency in which a single fire could result in a loss of both charging pumps.

This finding is more than minor because it affected the Mitigating System cornerstone and could impact the availability of equipment needed to ensure a safe shutdown of the plant during a fire. The finding was determined to be of very low safety significance based on a detailed review of the fire areas against Appendix F, "Fire Protection Significance Determination Process" of Manual Chapter 0609.
Inspection Report# : 2005003*(pdf)*

Significance: G Dec 31, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Controls on Oil Storage
The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion XIII, "Handling, Storage, and Shipping" when Seabrook personnel may have used contaminated oil in a safety-related pump due to inadequate oil storage controls. This finding was associated with the cross-cutting areas of human performance and problem identification and resolution in that contaminated oil was potentially added to safety-related equipment, operability assessments were delayed, and extent-of-condition reviews were not documented.

This finding was more than minor because it affected the Mitigating System cornerstone and could impact the availability and reliability of safety-related equipment. The finding was determined to be of very low safety significance since there was no actual loss of equipment due to the contaminated oil.
Inspection Report# : 2005003*(pdf)*

Significance: G Sep 30, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Take Prompt Corrective Actions for a Trip Circuit Relay
The inspectors identified a non-cited violation of 10 CFR 50, Appendix B Criterion XVI "Corrective Action." Seabrook failed to promptly identify and correct a deficiency of a safety-related trip circuit relay. This failed safety-related trip circuit relay was identified to be degraded approximately 15 months before corrective actions were taken. This finding, which involved Seabrook's failure to promptly identify and correct a deficiency, was associated with the cross-cutting area of PI&R.

This finding is more than minor because it affected the Mitigating Events cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. Seabrook's failure to promptly identify and correct a deficiency of a safety-related trip circuit relay for DC Bus 11C could impact the plant's ability to respond to an initiating event. The finding is of very low significance since the delayed time response of the trip circuit relay did not result in an actual loss of the safety function of a train or system.
Inspection Report# : 2004004*(pdf)*

Significance: G Sep 30, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Prevent Repetitive Failures of the Pressurizer Level Recorder
The inspectors identified a non-cited violation of 10 CFR 50, Appendix B Criterion XVI "Corrective Action." Seabrook failed to take adequate corrective actions following pressurizer level recorder failures on June 7, and July 27, to preclude a repeat failure on September 20, 2004. The pressurizer level recorder was determined to have failed more than 10 times since 2002. This finding, which involved Seabrook's failure to take adequate corrective actions, was associated with the cross-cutting area of PI&R.

This finding is more than minor because it affected the Mitigating Events cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. To ensure the reliability of systems, operators must take the preplanned manual actions that are required for safety systems to accomplish their safety function. The pressurizer level recorder is an instrument that is used by control room operators to take the preplanned manual actions. The finding is of very low significance since additional instrumentation was available to allow operators to take the appropriate preplanned manual actions.
Inspection Report# : 2004004*(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : June 17, 2005