Nine Mile Point 1
3Q/2003 Plant Inspection Findings

Initiating Events

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Procedural Non-Compliance Resulted in Control Rods Being Withdrawn at Greater than Nominal Speed.
Green. The inspectors identified a non-cited violation of Technical Specification 6.8.1 at Unit 1 for procedural non-compliance, in that drive water differential pressure was not returned to normal after unsticking three stuck control rods and prior to continued rod withdrawal, as specified by operating procedure N1-OP-5, "Control Rod Drive System."

The finding is greater than minor because it could reasonably be viewed as a precursor to a significant event. Specifically, inadequate control of the addition of positive reactivity to the reactor could lead to a plant transient and could challenge the integrity of the fuel cladding. The finding was determined to be of very low safety significance in accordance with Phase 1 of the Reactor Safety SDP because the actual control rod speeds were only slightly greater than nominal and the rod withdrawals did not produce a plant transient. This finding was an example of a cross-cutting issue in human performance. (Section 1R19)
Inspection Report# : 2003002*(pdf)*

Mitigating Systems

Significance: G Sep 27, 2003
Identified By: NRC
Item Type: FIN Finding
Operability Determination Not Performed for CS With Keep-Full System Out of Service
The inspectors identified a finding when the number 12 core spray (CS) keep-full system was taken out of service for maintenance without determining the effect of its removal on the operability of the CS train number 12.

The finding is greater than minor because it is associated with the configuration control attribute of the mitigating system cornerstone and adversely affects the cornerstone objective. Specifically, the reliability of the 12 CS train was reduced due to the increased susceptibility for water hammer that would potentially cause piping damage and affect the capability of the 12 CS train to respond to an initiating event. The finding is of very low safety significance, because it is not a design or qualification deficiency and it does not represent an actual loss of the CS safety function or of a single CS train that contributes to internal or external event (e.g., seismic, fire, flooding, or severe weather) core damage accident sequences. Additionally, there was no evidence of significant draining of the number 12 CS train piping during the time period that the keep-full system was removed from service.

A contributing cause of the finding was related to the human performance cross-cutting area. Operators removed a core spray keep-full subsystem from service without determining the effect of its removal on the core spray system. (Section 1R17)

Inspection Report# : 2003005*(pdf)*

Significance: G Sep 27, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide for Bypassing the HPCI Interlock in EOP-2
The inspectors identified a non-cited violation of technical specification (TS) 6.4.1.b because the licensee did not develop and validate an emergency operating procedure (EOP) to reflect current plant design. Specifically, EOP-2 "Reactor Pressure Vessel Control Flowchart's" did not direct the operators to bypass the high pressure coolant injection (HPCI) mode feedwater flow control valve low pump discharge pressure interlock to allow the use of the condensate system following a HPCI failure.

The finding is greater than minor because it is associated with the Mitigating Systems cornerstone attribute of procedure quality and affected the associated cornerstone objective of ensuring the capability of the condensate system, a preferred low pressure injection water source, to respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance, because it was not a design or qualification deficiency and it did not represent an actual loss of the low pressure injection safety function or of a single low pressure injection train that contributes to internal or external events (e.g., seismic, fire, flooding, or severe weather) core damage accident sequences. (Section 4OA5)

Inspection Report# : 2003005*(pdf)*

Significance: G Sep 12, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Implement Adequate Procedures for the RBCLC System Oxygen Injection System Temporary Modification
The inspector identified a non-cited violation of Technical Specification 6.8.1, "Procedures." Constellation Energy Group did not develop a procedure to ensure that the temporary oxygen injection system would be secured upon shutdown of the RBCLC system.
The finding is greater than more than minor because the failure to develop this procedure could have complicated recovery of the RBCLC system following initiating events that included loss of the RBCLC system. The inspector determined that this procedural problem would not affect the frequency for loss of RBCLC initiated events. The finding was determined to have very low safety significance (Green) using the Significance Determination of Reactor Inspection Findings for At-Power Situations process because it did not result in any actual loss of safety function of a system (Section 02.04).

Inspection Report# : 2003010*(pdf)*

Significance: G Jun 28, 2003
Identified By: NRC
Item Type: FIN Finding
Inadequate Operability Determination for High Pressure Coolant Injection System (Section 1R15)
The inspectors identified a finding for an inadequate operability determination regarding the Unit 1, 11 Feedwater Pump 2-inch minimum flow valve. The operability determination failed to adequately verify the function of the minimum flow valve. The valve subsequently failed which rendered the 11 high pressure coolant injection (HPCI) train

inoperable on May 17, 2003.

This finding is greater than minor because it affected the Mitigating System Cornerstone objective of equipment availability, in that an inadequate operability determination led to the conclusion that 11 HPCI train was operable, when in actuality, the 2-inch minimum flow valve failed on the next demand. The finding is of very low safety significance because the finding did not represent an actual loss of safety function of a single train for greater than its Technical Specification allowed outage time. The inadequate operability determination was an example of a cross-cutting issue in human performance. (Section 1R15)
Inspection Report# : 2003004*(pdf)*

Significance: G Jun 28, 2003
Identified By: NRC
Item Type: FIN Finding
Inadequate Operability Determination for Reactor Recirculation Pump Erratic System Flow (Section 1R15)
The inspectors identified a finding for an inadequate operability determination regarding intermittent erratic flow indication from Unit 1 reactor recirculation pump (RRP) 12. On May 18, 2003, 12 RRP flow indication was determined to be operable when, in actuality, an intermittent problem had developed which caused the indication to be unreliable. The original operability determination did not address the effect of the condition on the reactor protection system (RPS) because it did not take into account that the RRP flow instruments provided input to the RPS. When the condition later persisted, the adverse effect on RPS was recognized, and a half scram was manually inserted.

This finding is greater than minor because it affects the Mitigating System Cornerstone objective of equipment reliability, in that if the condition which led to equipment degradation is left uncorrected or not addressed, a more significant safety concern affecting RPS could develop. The finding is of very low safety significance because there was not an actual loss of safety function of the system. The inadequate operability determination was an example of a cross-cutting issue in human performance. (Section 1R15)
Inspection Report# : 2003004*(pdf)*

Significance: G Jun 28, 2003
Identified By: NRC
Item Type: FIN Finding
Inadequate Corrective Action Associated With Loss of 115 kV (Section 4OA2)
The inspectors identified a self-revealing finding concerning corrective actions related to the availability of the 115 kV offsite power sources. Administrative controls were not adequately implemented to assure that one 115 kV offsite power source would remain available during planned maintenance of the other offsite power source. Corrective actions implemented following a similar condition in 2001 did not prevent the problem from reoccurring during a November 2002 offsite power line maintenance activity.

The finding is greater than minor because it affects the Mitigating Systems Cornerstone objective of equipment availability in that the operability of offsite power Line 4 was not assured while Line 1 was taken out-of-service. This degraded the reliability of the offsite electrical system. The finding was determined to be of very low safety significance because the accident mitigating systems remained operable, there was no loss of electrical system safety function, and no technical specification limiting conditions for operation were exceeded. The finding was an example of a cross-cutting issue in problem identification and resolution. (Section 4OA2)

Inspection Report# : 2003004*(pdf)*

Significance: G Jun 28, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Post Maintenance Testing for the Control Rod Drive Pump Resulted in it Being Inoperable for Greater than the TS Allowed Outage Time (Section 4OA3)
The inspectors identified a self-revealing non-cited violation for failure to implement a procedure in accordance with Technical Specification 6.8.1, which resulted in a control rod drive (CRD) pump being inoperable for 25 days. The work order for post maintenance testing of the 12 CRD pump breaker did not require performance of the 12 CRD Pump surveillance, as required by the post maintenance testing administrative procedure, and the pump subsequently failed.

The finding is greater than minor because it affects the Mitigating Systems Cornerstone objective of equipment availability in that it had an actual impact of causing the CRD pump to be inoperable for greater than the Technical Specification allowed outage time. The finding is of very low safety significance because the exposure time for this condition was less than 30 days and all other mitigation capabilities described on the SDP Phase 2 worksheet were maintained. The finding was an example of a cross-cutting issue in human performance. (Section 4OA3)
Inspection Report# : 2003004*(pdf)*

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Procedural Non-Compliance Resulted in the Liquid Poison Tank Not Being Sampled as Required.
Green. The inspectors identified a non-cited violation of Technical Specification 6.8.1 at Unit 1 for procedural non-compliance, in that a sample was not taken from the liquid poison tank within eight hours of the test completion as specified by surveillance procedure N1-ST-Q8B, "Liquid Poison Pump 12 and Check Valve Operability Test."

The finding is greater than minor because it could reasonably be viewed as a precursor to a significant event in that the liquid poison tank Boron concentration could have been inadvertently diluted. The finding was determined to be of very low safety significance in accordance with Phase 1 of the Reactor Safety SDP because water was not added to the liquid poison tank and therefore the liquid poison concentration was not affected. This finding was an example of a cross-cutting issue in human performance. (Section 1R22)
Inspection Report# : 2003002*(pdf)*

Significance: W Mar 07, 2003
Identified By: NRC
Item Type: VIO Violation
Failure to Evaluate Significant Conditions Adverse to Quality Involving Degraded Piping in the Reactor Building Closed Loop Cooling (RBCLC) System.
On May 23, 2003 the Final Significance Determination for a White Finding and Notice of Violation Referenced in Correspondence EA-03-053 to the Licensee.

White. A violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified by the team associated with the failure to evaluate significant conditions adverse to quality involving degraded piping in the reactor building closed loop cooling (RBCLC) system. The failure to adequately identify and evaluate equipment problems, and corrective deficiencies, resulted in repetitive and continued degraded piping conditions in the RBCLC system. Specifically, a RBCLC system piping leak occurred on May 15, 2002, due to significant pipe corrosion, primarily as a result of inadequate piping design, application and operation. Additionally, numerous RBCLC system leaks occurred during several preceding years. However, the cause for these leaks was not determined and appropriate corrective

actions were not implemented. This led to further degradation of the RBCLC system piping such that additional significant leaks occurred on December 5, 2002, and again on December 12, 2002. These significant leaks in December 2002 were accompanied by a significant reduction in the pipe wall which degraded the structural integrity of the affected piping sections.

This finding has low to moderate safety significance, based on the results of the phase three SDP analysis, because the degraded RBCLC piping resulted in an increase in the likelihood of the loss of the RBCLC system due to piping failure, which directly affected the initiating events cornerstone. The loss of the RBCLC system would also result in the loss of cooling to several other risk significant systems (e.g., feedwater/condensate pumps, recirculation pumps, shutdown cooling heat exchangers, etc.) following a loss of coolant accident or a loss of all AC power event where AC power is recovered prior to core damage, which directly affected the mitigating systems cornerstone. (Section 4OA3.4;50-220/03-03-01)
Inspection Report# : 2003001*(pdf)*
Inspection Report# : 2003003*(pdf)*

Barrier Integrity

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: FIN Finding
Unit 1 Scaffolding Interfering with Operation of the Pressure Suppression Chamber to Reactor Building Vacuum Breaker Valve.
Green. The inspectors identified a finding at Unit 1 regarding scaffolding that was interfering with operation of the pressure suppression chamber to reactor building vacuum breaker valve (68-07). The scaffolding prevented the valve from fully opening.

This finding is greater than minor because the scaffolding restricted the vacuum breaker from fully opening, therefore degrading the system. The finding was determined to be of very low safety significance in accordance with Phase 1 of the Reactor Safety SDP because the valve would still partially open. With the valve in a partially open condition, the flow capacity would be reduced but the reduction in performance would not be substantial and therefore the valve remained operable. The scaffolding did not impact the valve closing function which is a containment isolation function. This finding was an example of a cross-cutting issue in human performance. (Section 1R04)
Inspection Report# : 2003002*(pdf)*

Emergency Preparedness

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Implement Radiation Emergency Procedure
Green. The inspectors identified a self-revealing non-cited violation of Technical Specification 6.8.1 at Unit 1 for procedural non-compliance, in that the Station Shift Supervisor (SSS) failed to implement a radiation emergency procedure for Reactor Building evacuation.

This finding is greater than minor because the performance deficiency prevented the SSS from carrying out his duties which could affect the response to an emergency. The finding was determined to be of very low safety significance in accordance with the Emergency Preparedness SDP because planning standards were met and the actual radiological conditions did not reach the unusual event threshold. This finding was an example of a cross-cutting issue in human performance. (Section 1R14)
Inspection Report# : 2003002*(pdf)*

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

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