

Nine Mile Point 1

2Q/2003 Plant Inspection Findings

Initiating Events



Significance: 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Procedural Non-Compliance Resulted in Control Rods Being Withdrawn at Greater than Nominal Speed.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: 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: 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: 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: 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\(pdf\)](#)

Significance: N/A Aug 23, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to report the correct unavailability hours associated with the High Pressure Coolant Injection (HPCI) system

A Severity Level IV violation of 10 CFR Part 50.9(a) (Completeness and Accuracy of Information), dispositioned as a non-cited violation, was identified for failure to report the correct unavailability hours associated with the High Pressure Coolant Injection (HPCI) system. The information submitted to the NRC by the licensee in the first quarter of

2001, to fulfill requirements of the NRC Performance Indicator Program, was not correct. Specifically, while performing testing on the HPCI system on April 21, 2001, the system's controller was found inoperable. The licensee reported no unavailability hours related to this fault because the system was not required to be operable, due to the plant configuration, during the test period. This is contrary to the requirements of the program in which the fault exposure time (the time between last successful operation of the system and determination of the fault) must be accounted for in the unavailability report. This finding is more than minor because the actual unavailability hours of the HPCI system changed the NRC Performance Indicator color from Green to White. As a result the licensee's mitigating systems cornerstone did not properly reflect its status as a degraded cornerstone for 9 months. Additionally, the performance of a Supplemental Inspection by the NRC related to the controller failure was not conducted until 16 months after the occurrence.

Inspection Report# : [2002009\(pdf\)](#)

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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