

Limerick 1

2Q/2005 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate emergency operating procedure for the reactor core isolation cooling system maximum safe operating water level in the pump room

The NRC identified a Green NCV of TS 6.8.1, "Administrative Controls - Procedures," because Exelon did not maintain adequate procedures in that T-103, "Secondary Containment Control," contained an inappropriately high maximum safe operating flooding level for the Unit 1 RCIC room. Limerick revised the T-103 RCIC maximum safe operating flood level from 42 inches to a value of 27 inches.

This finding is more than minor because it affected the Mitigating Systems cornerstone objective of ensuring availability, reliability, and capability of the RCIC system. This finding is of very low safety significance because it did not represent a loss of safety system function, an actual loss of safety function of a single train for greater than its TS allowed outage time, or a total loss of any safety function that contributes to external event initiated core damage sequences. (IR06)

Inspection Report# : [2005003\(pdf\)](#)

Significance:  Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate procedures to ensure proper venting of air from RCIC/HPCI systems following drain and fill operations.

A self-revealing event resulted in a non-cited violation of Technical Specification section 6.8.1, "Administrative Controls - Procedures," because Exelon did not maintain adequate procedures to ensure the HPCI and RCIC systems were filled with water. After an unexpected RCIC turbine trip during a HPCI valve test, it was determined that both systems contained air in the pump suction piping.

This finding was greater than minor because it affected the Mitigating Systems cornerstone objective of ensuring operability and reliability of both the HPCI and RCIC systems. In accordance with IMC 0609, App. A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors determined that the finding was of very low safety significance (Green) using a Phase 3 SDP evaluation.

The inspectors identified that a contributing cause of the finding was related to problem identification and resolution cross-cutting area, in that, station personnel had prior opportunities to resolve known adverse system interactions and potential air voiding in the HPCI and RCIC system piping. (Section 4OA2)

Inspection Report# : [2004005\(pdf\)](#)

Barrier Integrity

Significance:  Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions for a Degraded Remote Shutdown Panel Switch

The NRC identified a Green NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because Limerick's staff did not promptly identify and correct a condition adverse to quality associated with failure of a remote shutdown panel switch during surveillance testing. Limerick replaced the defective remote shutdown panel hand switch and performed a satisfactory post maintenance test.

This finding is greater than minor because it was associated with the Barrier Integrity cornerstone attribute of Barrier Performance, and affected the cornerstone objective of ensuring the availability and reliability of components used for containment isolation. This finding is of very low safety significance because it did not represent a degradation of the radiological barrier provided by the control room, spent fuel pool, or

standby gas treatment system, did not represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere, and did not represent an actual open pathway from the containment or an actual reduction in defense-in-depth for atmospheric pressure control or hydrogen control.

The inspectors identified that a contributing cause of the finding is related to the problem evaluation subcategory of the Problem Identification and Resolution cross-cutting area, in that Limerick staff did not adequately assess and correct the cause of a December 2004 remote shutdown panel switch failure. (Section 4AO2)

Inspection Report# : [2005003\(pdf\)](#)

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Significance: Sep 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Unit 1 in Excess of Licensed Thermal Power Limit

A self-revealing condition resulted in a non-cited violation of Operating License No. NPF-39, Section 2.C.(1), because Unit 1 exceeded the licensed thermal power limit of 3458 MWth by approximately 0.1 - 0.3% for a period of approximately four months. Limerick reduced power to 99% to account for the increase until the cause could be determined and corrected.

The finding is more than minor because if left uncorrected, the finding would become a more significant safety concern, in that, reactor core thermal power could have exceeded the accident analysis initial power condition of 102%. In accordance with IMC 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," the inspectors determined that the finding was of very low safety significance (Green) using a Phase 1 Significance Determination Process evaluation, because there were no plant events that could have resulted in a breach of the fuel barrier during the overpower condition.

A contributing cause of this finding is related to the problem identification and resolution cross-cutting area, in that Exelon performed multiple reviews that did not identify the overpower condition. These reviews included an apparent cause evaluation and an engineering technical evaluation.

Inspection Report# : [2004004\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : August 24, 2005