

Watts Bar 1

4Q/2004 Plant Inspection Findings

Initiating Events

G**Significance:** Mar 27, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Follow Procedure for Reactor Protection System Testing

Licensee technicians failed to follow a reactor protection system surveillance instruction and caused a reactor trip.

This finding was a self-revealing non-cited violation of Technical Specifications (TS) 5.7.1. This finding was more than minor because it affected the initiating events cornerstone by causing a reactor trip. It was of very low safety significance because it did not contribute to the likelihood of a primary or secondary system loss of coolant accident (LOCA) initiator, did not contribute to a loss of mitigation equipment functions, and did not increase the likelihood of a fire or internal/external flood. The cause of the finding is related to the cross-cutting element of human performance.

Inspection Report# : [2004002\(pdf\)](#)

Mitigating Systems

G**Significance:** Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Provide Complete and Accurate Information to the NRC which Impacted a Licensing Decision.

The inspectors identified a non-cited Severity Level IV violation (NCV) of 10 CFR 50.9 for failure to provide complete and accurate information for one licensed operator on his initial license application. The applicant did not meet the American Nuclear Standards Institute /American Nuclear Society (ANSI/ANS) 3.4, 1983, standard for visual acuity without corrective lenses and had a pre-existing medical condition, both of which required a license restriction. The licensee submitted his NRC Form 396, Certification of Medical Examination by Facility Licensee, along with supplemental medical information, without recommending these restrictions. The NRC imposed a no-solo restriction on the operator's license after reviewing the supplemental information. The failure to certify the need for corrective lenses resulted in an incorrect licensing action by the NRC because a license was issued without a restriction to wear corrective lenses.

Because this issue affected the NRC's ability to perform its regulatory function, it was evaluated using the traditional enforcement process. This finding is of very low safety significance because there was no evidence that the operator endangered plant operations as a result of impaired visual acuity while performing licensed duties since the original issuance of his license. However, the regulatory significance was important because the incorrect information was provided under sworn statement to the NRC and impacted a licensing decision for the individual. The facility licensee took prompt corrective action and submitted NRC Form 396 requesting to have the operator's license amended with the appropriate restriction. This issue is documented in the facility licensee's corrective action program as Problem Evaluation Report (PER) 72386.

Inspection Report# : [2004005\(pdf\)](#)**G****Significance:** Dec 31, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedure for Surveillance of Remote Shutdown System Instrumentation.

The inspectors identified a non-cited violation of Technical Specification (TS) 5.7.1, which requires that written procedures be implemented covering the activities in the applicable procedures recommended by Regulatory Guide 1.33, including procedures for surveillances. The surveillance procedure for remote shutdown system instrumentation was inadequate because it failed to give guidance for determining instrument operability when an instrument was at the top of scale and at the maximum allowed channel deviation. The performance deficiency resulted in an unexpected TS Limiting Condition for Operation entry.

This finding is greater than minor because it affects the ability of the licensee to monitor the status of the reactor following a control room evacuation and is associated with the Mitigating Systems cornerstone and the respective attribute of procedure quality. This finding is of very low safety significance because it did not result in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function, and is not potentially risk-significant due to external events. A contributing cause of the finding is related to the cross-cutting element

of human performance.

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

Significance: TBD Dec 31, 2004

Identified By: NRC

Item Type: AV Apparent Violation

Inadequate Corrective Action to Identify and Correct Silt Blockage of ERCW Piping.

The inspectors identified an apparent violation of 10 CFR 50, Appendix B, Criterion XVI, having a potential safety significance greater than very low safety significance. The licensee's corrective actions for occurrences of silt blockage in essential raw cooling water (ERCW) lines were inadequate and resulted in not promptly identifying and correcting a complete blockage in the backup cooling water line to a high head injection pump. In addition, the inspectors identified that the licensee's corrective actions for the blockage of the backup cooling water line were inadequate.

This finding is unresolved pending completion of a significance determination. The finding is more than minor because it adversely affected the Mitigating System and Barrier Integrity cornerstones by causing a loss of high head injection and reactor coolant pump seal cooling during a loss of component cooling system (CCS) event. The finding was determined to have potential safety significance greater than very low safety significance because of the importance of the backup ERCW cooling to the 1A-A centrifugal charging pump (CCP) during a loss of CCS event and the low probability of operator action successfully restoring the backup cooling water. The cause of the finding is related to the cross-cutting element of problem identification and resolution.

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

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Significance: Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify Unsatisfactory Performance of a Fire Brigade Crew

The inspectors identified a non-cited violation of Section 9.1 of the Watts Bar Fire Protection Report because the licensee's assessment of a fire brigade drill was inadequate. Fire brigade performance deficiencies were not accurately characterized and drill performance was incorrectly deemed satisfactory, therefore not requiring the scheduling of additional training.

This finding is more than minor because it had a high negative impact or degradation on the ability of the fire brigade to effectively carry out its manual fire fighting control and suppression function. This finding was of very low safety significance because the observed crew was only one of four crews of the site fire brigade team, and that the overall condition of the fire detection and suppression systems had been satisfactory. The cause of the finding is related to the cross-cutting element of problem identification and resolution.

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

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Significance: Apr 16, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Evaluation Process for Design Changes Which Could Affect Safe Shutdown in the Event of a Fire.

A non-cited violation (NCV) of Operating License Condition 2.F was identified for inadequate implementation of the approved fire protection program (FPP). Specifically, the licensee's process for evaluating the impact of design changes on the FPP (in this case a change to local manual operator actions) was not adequate to ensure that the change would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire. Upon identification, the licensee entered this issue into its corrective action program.

The finding is greater than minor because it is associated with the protection against external factors attribute and degraded the reactor safety mitigating systems cornerstone objective. This finding was determined to be of very low safety significance because the local manual operator action which prompted this violation was considered within the capability of the operator to perform and could be reasonably accomplished within the 15-minute time specified in the Fire Protection Report. This determination was based on inspector walkdowns.

Inspection Report# : [2004006\(pdf\)](#)

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Significance: Mar 27, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Surveillance Instruction Resulting in Gas Accumulation in ECCS Piping

The inspectors identified an inadequate procedure involving the control of emergency core cooling system (ECCS) venting. The performance deficiency resulted in an unexpected accumulation of gas in the RHR system.

This finding was a non-cited violation of TS Surveillance Requirement (SR) 3.5.2.3. It is more than minor because it degraded the residual heat removal injection function of the mitigating system cornerstone by allowing a significant accumulation of gas in the injection lines. This finding is of very low safety significance because it did not result in a loss of function per Generic Letter 91-18, did not represent an actual loss of safety function, and was not potentially risk-significant due to external events.

Inspection Report# : [2004002\(pdf\)](#)

G**Significance:** Mar 27, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Action to Control ECCS Venting

The inspectors identified that the licensee's corrective actions for previous venting ECCS problems were inadequate.

This finding is a non-cited violation of 10 CFR, Part 50, Appendix B, Criterion XVI, Corrective Action. This finding is more than minor because it affected the mitigating system cornerstone. A resultant accumulation of gas adversely impacted the capability of the B safety injection pump to perform its accident mitigation function. This finding is of very low safety significance because it did not result in an actual loss of safety function, and was not potentially risk-significant due to external events. The cause of the finding is related to the cross-cutting element of problem identification and resolution.

Inspection Report# : [2004002\(pdf\)](#)

Barrier Integrity

G**Significance:** Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Adequate Oversight During Rod Drop Event

A self-revealing non-cited violation of Technical Specification 5.7.1, which requires that written procedures be implemented covering the activities in the applicable procedures recommended by Regulatory Guide 1.33, including procedures for authorities and responsibilities for safe operation and shutdown of the plant, was identified because shift management failed to maintain an appropriate level of oversight during a rod drop event. Shift management became overly involved with stabilizing the secondary transient and did not maintain a broad perspective. This resulted in a 3½-minute delay in tripping the reactor due to multiple dropped control rods.

This finding is more than minor because it affected the human performance attribute of the barrier integrity cornerstone. Shift management's failure to maintain a broad perspective and becoming involved in the stabilization of the secondary system resulted in a delay in manually tripping the reactor, which could affect the fuel cladding barrier. This finding is of very low safety significance because it affected only the barrier integrity cornerstone. The cause of the finding is related to the cross-cutting element of human performance.

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

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : March 09, 2005