

Watts Bar 1

4Q/2007 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct an Identified Procedural Deficiency Prior to Subsequent Maintenance

Green. The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, was identified. The licensee failed to correct, in a timely manner, a procedural deficiency associated with the setup of HFA relays. As a result, the B-train safety injection pump (SIP) was inoperable in excess of the time limits prescribed by the associated technical specification limiting condition for operation. The licensee has entered the issue into their corrective action program and revised the associated maintenance procedure.

The finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affects the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because of the duration that the B Train SIP was unavailable and the availability of the A Train SIP. The finding directly involved the cross-cutting area of Problem Identification and Resolution under the appropriate and timely corrective actions aspect of the Corrective Action Program component; in that, prior to subsequent maintenance on safety-related equipment, the licensee failed to revise a maintenance instruction that had been previously determined to be inadequate (P.1(d)). (Section 1R12)

Inspection Report# : [2007004](#) (*pdf*)

Significance:  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct the Failure of Safety Injection Relief Valves to Reseat after Actuation

Green. The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, was identified. The licensee failed to identify incorrect as-found nozzle ring settings on safety injection relief valves. The as-found settings were significantly incorrect as to effect the proper reseal pressure for the relief valves. The licensee has identified a long-standing condition of safety injection relief valves failing to reseat while the Safety Injection Pumps (SIPs) are running. Failure of the relief valves to reseat has required the licensee to reduce the assumed margin in the peak cladding temperature by 120° Fahrenheit. The licensee has entered the failure to identify nozzle ring configuration control into the corrective action program for resolution.

The finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affects the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events and, if left uncorrected, could have a more significant impact on core peak cladding temperature. The inspectors evaluated this finding using IMC 0609, Appendix A, and determined it to be of very low safety significance (Green). The finding directly involved the cross-cutting area of Problem Identification and Resolution under the implementation and institutionalizing of Operating Experience aspect of the Operating Experience component; in that, the licensee failed to properly implement and institutionalize operating experience through changes to station procedures (P.2(b)).(Section 4OA2.3)

Significance:  Jun 30, 2007

Identified By: NRC

Item Type: FIN Finding

Inadequate Risk Assessment for Work In Progress (Section 1R13)

Green. The inspectors identified a finding associated with 10 CFR 50.65 (a)(4), Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, for the licensee's failure to perform an adequate risk assessment which resulted in an underestimation of the risk associated with performing a planned maintenance activity on the 1B residual heat removal pump. The licensee entered the issue into their corrective action program for resolution as Problem Evaluation Report (PER) 124269.

The finding is more than minor because, when assessed correctly, the planned maintenance would put the plant into a higher licensee-established risk category. The inspectors determined that the finding was of very low safety significance because of the duration of the inadequate risk assessment. The inspectors concluded the cause of the finding had no definitive cross-cutting aspect that was reflective of current licensee performance. (Section 1R13)

Inspection Report# : [2007003](#) (pdf)

Significance:  Jun 15, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Safe Shutdown Procedure for Portions of FA 8 Not Consistent With Underlying Analysis

The team identified a non-cited violation of Technical Specification 5.7.1, Procedures, in that post-fire safe shutdown procedure AOI-30.2, Revision 23, was not consistent with the underlying circuit analysis for a portion of Fire Area 8.

The finding is more than minor because it is associated with the reactor safety, mitigating systems, cornerstone attribute of protection against external factors (i.e. fire) and it affects the objective of ensuring reliability and capability of systems that respond to initiating events. The finding was of very low safety significance due to the low likelihood of fires which could cause the type of cable damage that would challenge the procedure weaknesses. The licensee took immediate corrective action and initiated additional longer term corrective actions.

Inspection Report# : [2007007](#) (pdf)

Significance:  Jun 15, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Feeder Cables for Vital Inverter not Protected with One-Hour Fire Barrier

The team identified a non-cited violation of Unit 1 License Condition 2F and 10 CFR 50, Appendix R, Section III.G.2, for not enclosing vital inverter power supply cables in Fire Area 20 in a one-hour fire barrier.

The finding is more than minor because it is associated with the reactor safety, mitigating systems, cornerstone attribute of protection against external factors (i.e. fire) and it affects the objective of ensuring reliability and capability of systems that respond to initiating events. The finding was of very low significance because it was a minor degradation of the safe shutdown capability and mitigating systems were not affected. The licensee took immediate compensatory measures and initiated permanent corrective actions.

Inspection Report# : [2007007](#) (pdf)

Significance:  Jun 15, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Provide Emergency Light at Location of Local Operator Action Important to Safe Shutdown

The team identified a non-cited violation of Unit 1 License Condition 2F and 10 CFR 50, Appendix R, Section III J, for not providing an emergency light to illuminate the interior of a panel in which a local operator action to pull fuses was directed by the post-fire shutdown procedure for a fire in Fire Area 48.

The finding is more than minor because it is associated with the reactor safety, mitigating systems, cornerstone attribute of protection against external factors (i.e. fire) and it affects the objective of ensuring reliability and capability of systems that respond to initiating events. The finding was of very low significance because it was a minor degradation of the safe shutdown capability. The licensee took immediate compensatory measures and initiated installation of an emergency light at the problem location

Inspection Report# : [2007007](#) (*pdf*)

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Significance: Mar 31, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct an Identified Equipment Malfunction

A finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, was identified by the inspectors. The licensee failed to investigate and correct, in a timely manner, an interlock failure associated with the containment sump to B-train containment spray pump suction flow control valve's control circuit. As a result, the B-train containment spray pump was inoperable in excess of the time limits prescribed by the associated Technical Specification Limiting Condition for Operation. The licensee entered the issue into their corrective action program and repaired the control circuit interlock.

The finding is more than minor because it was associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affects the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance because the containment spray system's mitigating system function was available from the A-train and the finding was not a contributor to large early release frequency. The cause of the finding is related to the thorough evaluation of identified problems aspect of the problem identification and resolution cross-cutting area, in that, the licensee failed to properly classify, prioritize, and evaluate the condition for impact on equipment operability.

Inspection Report# : [2007002](#) (*pdf*)

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Significance: Mar 16, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Violation of Technical Specification 5.7.1 for TVA's failure to develop a procedure that will provide tornado depressurization protection of the DGB

The team identified a [Green non-cited] violation of Technical Specification 5.7.1 associated with failure to develop a procedure that will provide tornado depressurization protection of the emergency diesel generator building. The finding involves a tornado in which the Emergency Diesel Generator ventilation system would not be properly aligned to prevent inoperability of the Diesel Generators. Abnormal Operating Instruction - 8 does not provide guidance on how to provide pressure equalization for mitigating atmospheric depressurization associated with tornadic conditions during weather when temperatures are below 68 degrees Fahrenheit.

[This finding was more than minor because it is associated with the Mitigating Systems Cornerstone attribute of Procedure Quality. It impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. A Significant Determination Process Phase 3 analysis determined that the finding was of very low safety significance primarily due to the low likelihood of an onsite tornado.]

Inspection Report# : [2007006](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Sep 14, 2007

Identified By: NRC

Item Type: FIN Finding

Problem Identification and Resolution

The team determined that the licensee was identifying plant deficiencies at an appropriately low level and effectively entering them into their corrective action program. The team also determined that the licensee was prioritizing and evaluating issues properly. Overall, the licensee was generally providing effective corrective actions.

On the basis of interviews conducted during this inspection, the team determined that workers at the site felt free to enter safety concerns into the corrective action program. The inspectors concluded that the employee Concerns Resolution program was functioning as intended.

Inspection Report# : [2007008](#) (*pdf*)

Last modified : February 04, 2008