

## Watts Bar 1

### 3Q/2004 Plant Inspection Findings

---

## Initiating Events

**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

**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\(pdf\)](#)

**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\(pdf\)](#)

**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\(pdf\)](#)

G

**Significance:** Dec 27, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Inadequate Operability Evaluation Results in Exceeding the OR Time Limit for Returning Electric Driven Fire Pumps to Operable Status**

The inspectors identified that the Fire Protection Report Operating Requirement (OR) bases were incorrectly interpreted to allow the electric-driven fire pumps (EDFPs) to be considered operable with the automatic start circuit disabled. As a result, the licensee failed to return the EDFPs to an operable status within the time specified by the FPR.

This finding is a more than minor non-cited violation of OR 14.2.3 because it affected the mitigating systems cornerstone by degrading fire suppression equipment capability. The EDFPs would have to be manually started by the control room operators to respond to a fire. The finding is of very low safety significance (Green) because the diesel-driven fire pump was available, the fire detection system was not degraded, and fire brigade performance has been effective. In addition, the main control room operators were aware that the automatic start feature was disabled and the EDFPs could be manually started from the main control room. The cause of the finding is related to the cross-cutting element of human performance.

Inspection Report# : [2003005\(pdf\)](#)

G

**Significance:** Dec 27, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Seal Not Installed in a Cable Conduit Penetrating a Fire Barrier**

The inspectors identified that a seal was not installed in a conduit penetrating a fire barrier in the Fifth Vital Battery Room.

This finding is a non-cited violation of Fire Protection Report Operating Requirement 14.2.8. It is more than minor because it affected the mitigating system cornerstone by adversely impacting the capability of the wall to provide the required fire resistance. It was of very low safety significance (Green) because the Fifth Vital Battery was not continuously used, the fire detection and suppression systems were not degraded and fire brigade performance has been effective.

Inspection Report# : [2003005\(pdf\)](#)

---

## **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\(pdf\)](#)

**G**

**Significance:** Dec 27, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

**Failure to Meet TS 3.0.4 Requirements for an Inoperable 1B-B Containment Spray System**

The licensee changed plant modes from Mode 5 to Mode 1 with the 1B-B containment spray (CS) pump inoperable, contrary to Technical Specification (TS) requirements.

This finding was a self-revealing non-cited violation for failing to comply with the requirements of Technical Specification 3.0.4. It is more than minor because if the 1B-B CS pump would not have started if called upon to fulfill its safety functions. The finding therefore affected the mitigating system and barrier integrity cornerstones. This finding was of very low safety significance (Green) because the opposite train CS pump was available and operator action to rack in the breaker could be credited. Additionally, because the net change in core damage frequency was low, the Large Early Release of Fission Products (LERF) change was of very low safety significance. The cause of the finding is related to the cross-cutting element of human performance.

Inspection Report# : [2003005\(pdf\)](#)

---

## Emergency Preparedness

---

## Occupational Radiation Safety

---

## Public Radiation Safety

---

## Physical Protection

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

---

## Miscellaneous

**Significance:** SL-II Jun 16, 2001

Identified By: NRC

Item Type: VIO Violation

**EMPLOYEE PROTECTED ACTIVITY**

On February 7, 2000, a Severity Level II violation with a proposed civil penalty was issued to the licensee. The violation related to corporate activities and involved employment discrimination contrary to the requirements of 10 CFR 50.7, "Employee Protection," in that the licensee did not select a former employee to a competitive position in the corporate chemistry organization in 1996, due, at least in part, to his engagement in protected activities. On January 22, 2001, the licensee denied the violation and on May 4, an Order was issued sustaining the violation and imposing the civil penalty. On June 1, TVA requested an enforcement hearing on the Order.

Inspection Report# : [2001002\(pdf\)](#)

Last modified : December 29, 2004