

***Browns Ferry Nuclear  
95003 Part 2 Inspection  
Public Exit Meeting***

---

**Browns Ferry Nuclear Station  
Athens, Al  
January 26, 2012**



# ***Agenda***

- **Introduction**
- **Inspection Results**
- **TVA Comments**
- **NRC Closing Remarks**
- **NRC available to address public questions**



# ***Finding of Red Risk Significance***

## **Background**

- **Residual heat removal (RHR) system flow control valve failure was discovered October 23, 2010**
- **The residual heat removal system is primarily used for low pressure coolant injection during accident conditions and cooling while the reactor is shutdown**

## **Basis for Red Significance**

- **TVA's fire mitigation strategy**
- **Specific fire scenarios assumed unavailability of both low pressure coolant injection loops**
- **Automatic valve function was lost**



# ***Finding of Red Significance***

## **Processing the Red Finding:**

- **Feb 9, 2011 - NRC issued an apparent violation**
- **April 4, 2011 - Regulatory Conference was held with Tennessee Valley Authority (TVA)**
- **May 9, 2011 - NRC issued a Final Significance Determination letter and Notice of Violation**
- **June 8, 2011 - TVA submitted an appeal of the Red finding**
- **June 22, 2011 - Region II established an independent panel to review TVA's concerns**
- **August 16, 2011 - NRC issued a final response following completion of the independent review. TVA was informed that the RED finding was substantiated.**



# Performance Assessment for Browns Ferry during last year

	Q1 2011	Q2 2011	Q3 2011	Q4 2011
Unit 1	<b>Multiple Repetitive/ Degraded Cornerstone</b> Low Pressure Coolant Injection Valve Failure			
Unit 2	<b>Licensee Response</b>			
Unit 3	<b>Licensee Response</b>			



# ***Increased Oversight Inspections***

- **Supplemental Inspections Conducted in Three Parts (IP 95003)**
  - ❑ **Part 1 - Component Testing Programs**
    - Completed Sept 2011 - IR 05000259/2011011
  - ❑ **Part 2 - Maintenance Programs**
  - ❑ **Part 3 - Formal 95003 Procedure Completion**
    - Includes review of third-party safety culture assessment



# ***Overview of Part 2 Inspection***

- **Three weeks of on-site inspections:**

- October 3 through 7, 2011
- November 7 through 11, 2011
- November 28 through December 2, 2011

- **Team Members:**

**John Jandovitz**

**PE Region III**

**Zelig Falevits**

**Sr Electrical Insp**

**Eric Michel**

**Sr Construction Insp**

**Shane Sandal**

**Sr Mech Inspector**

**Tom Morrissey**

**Senior Resident**



# ***Overview of Part 2 Inspection***

## **Inspection Scope:**

- **Identify and evaluate past equipment maintenance issues**
- **Field observations of scheduled maintenance**
- **Review and evaluate adequacy of the maintenance program**
  - **Evaluate programmatic support of station equipment reliability**
- **Verify systems are capable of performing their safety function**
- **Assess safety culture aspects associated with maintenance activities**





# ***Part 2 Inspection Results***

## **Issues**

- One issue was identified for not entering and evaluating a condition adverse to quality in the corrective action program (CAP)

## **Safety Culture**

- **Ongoing 95003 inspection**
  - NRC is reviewing results from safety culture surveys performed by the plant in 2011
- **Inspection Insights**
  - Use of the corrective action program
  - Enforcement of procedure usage
  - Standards and expectations



# ***Part 2 Inspection Results***

- **Observations**

- Site demonstrated low standards for procedure implementation and adherence
- Identified weaknesses in the implementation of the maintenance program
- Ineffective actions to improve equipment reliability
- Equipment Reliability performance objectives were not aligned with site corrective actions
- Management did not implement existing standards for improving equipment reliability



# ***Part 2 Inspection Results***

- **Summary**
  - **No immediate safety concerns were identified**
  - **Equipment Reliability**
    - Maintenance backlog
    - Work prioritization and scheduling
  - **Significant Repetition / Rework Maintenance**
    - Identification and trending
    - Program implementation

# ***TVA Comments***



# *Open to the Public*

- **NRC places a high priority on keeping the public and stakeholders informed of its activities.**
- **At [www.nrc.gov](http://www.nrc.gov), you can:**
  - Find public meeting dates and transcripts;
  - Read NRC testimony, speeches, press releases, and policy decisions; and
  - Access the agency's Electronic Reading Room to find NRC publications and documents.



# ***Contacting the NRC***

- **Report an emergency**
  - (301) 816-5100 (call collect)
- **Report a safety concern**
  - (800) 695-7403
  - Allegation@nrc.gov
- **General information or questions**
  - [www.nrc.gov](http://www.nrc.gov)
  - Select “What We Do” for Public Affairs



# ***NRC Representatives***

- **Len Wert, Deputy Regional Administrator for Operations**
- **Jimi Yerokun, Deputy Division Director, Division of Construction Inspection**
- **Eugene Guthrie, Branch Chief, Special Project, Browns Ferry**
- **Thierry Ross, Senior Resident Inspector**
- **John Jandovitz, Project Engineer, RIII**



# Reference Sources

- **Reactor Oversight Process**  
<http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>
- **Public Electronic Reading Room**  
<http://www.nrc.gov/reading-rm.html>
- **Public Document Room**  
1-800-397-4209 (Toll Free)