



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

December 21, 2010

Mr. Rod Krich
Vice President Nuclear Licensing
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: REGULATORY PERFORMANCE MEETING SUMMARY– BROWNS FERRY
NUCLEAR PLANT, DOCKET NOS. 50-259, 50-260 AND 50-296

Dear Mr. Krich:

This refers to the meeting conducted on December 14, 2010, in Athens, AL. The purpose of this meeting, was to discuss corrective actions associated with the one White finding and one Yellow violation that were documented in NRC Inspection Report 05000259/2010007, 05000260/2010007, and 05000296/2010007. The findings dealt with inadequate safe shutdown instruction entry conditions for Appendix R fire events and failure to ensure one train of cables of systems necessary to achieve and/or maintain post-fire safe shutdown is free of fire damage. The information presented during the meeting is enclosed.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room (PDR) or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning this meeting, please contact me at (404) 997-4662.

Sincerely,

/RA/

Eugene F. Guthrie, Chief
Projects Branch 6
Division of Reactor Projects

Docket Nos.: 50-259, 50-260, and 50-296
License Nos.: DRP-33, DRP-52, and DRP-68

Enclosures: As Stated

cc w/encl: (See page 2)

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X PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE X NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: _____ SUNSI REVIEW COMPLETE

OFFICE	RII:DRP	RII:DRP					
SIGNATURE	JDH /RA/	EFG /RA/					
NAME	JHamman	EGuthrie					
DATE	12/20/2010	12/21/2010					
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

TVA

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cc w/encl:
K. J. Polson
Vice President
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Decatur, AL 35609

C.J. Gannon
General Manager
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Decatur, AL 35609

J. E. Emens
Manager, Licensing and Industry Affairs
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Decatur, AL 35609

E. J. Vigluicci
Assistant General Counsel
Tennessee Valley Authority
6A West Tower
400 West Summit Hill Drive
Knoxville, TN 37902

State Health Officer
Alabama Dept. of Public Health
RSA Tower - Administration
Suite 1552
P.O. Box 30317
Montgomery, AL 36130-3017

Chairman
Limestone County Commission
310 West Washington Street
Athens, AL 35611

James L. McNees, CHP
Director
Office of Radiation Control
Alabama Dept. of Public Health
P. O. Box 303017
Montgomery, AL 36130-3017

TVA

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Letter to R. M. Krich from Eugene Guthrie dated December 21, 2010

SUBJECT: REGULATORY PERFORMANCE MEETING SUMMARY– BROWNS FERRY
NUCLEAR PLANT, DOCKET NOS. 50-259, 50-260 AND 50-296

Distribution w/encl:

C. Evans, RII

L. Douglas, RII

OE Mail

RIDSNRRDIRS

PUBLIC

RidsNrrPMBrownsFerry Resource

Browns Ferry Public Meeting Attendee List

PARTICIPANTS:

NRC

L. Wert, Director, Reactor Projects
E. Guthrie, Chief, Reactor Projects Branch 6, DRP
K. O'Donohue, Chief, Construction Inspection Branch 2, DCI
T. Ross, Senior Resident Inspector, Browns Ferry Nuclear Plant
P. Neibaum, Resident Inspector, Browns Ferry Nuclear Plant
L. Pressley, Resident Inspector, Browns Ferry Nuclear Plant
R. Rodriguez, Senior Reactor Inspector, Division of Reactor Safety
J. Ledford, Region II Public Affairs Officer

Tennessee Valley Authority

K. Polson, Site Vice President, Browns Ferry Nuclear Plant
T. Marlow, Director of Safety and Licensing, Browns Ferry Nuclear Plant
C. Gannon, General Manager of Operations, Browns Ferry Nuclear Plant
J. Emens, Manager, Licensing and Industry Affairs,
Browns Ferry Nuclear Plant
H. Lee, Corporate Licensing Engineer
R. Golden, Senior Manager, Nuclear Communications
A. Reagan, Communications Specialist, Browns Ferry Nuclear Plant
J. Nesbit, Communications Specialist, Browns Ferry Nuclear Plant

Media

B. Jett, Reporter, WHNT
E. Fleischauer, Reporter, Decatur Daily
W. Freebairn, Senior Editor, Platts Nucleonics Week

Members of the Public

C. Beasley
S. Horn

Browns Ferry Nuclear Station Regulatory Performance Meeting

**Nuclear Regulatory Commission - Region II
Athens, AL
December 14, 2010**



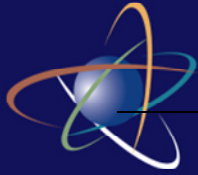
Purpose of Today's Meeting

- **A public forum for discussion of the licensee's performance.**
- **Discuss the results of the recent inspection, Inspection For One Degraded Cornerstone Or Any Three White Inputs In a Strategic Performance Area, 95002.**

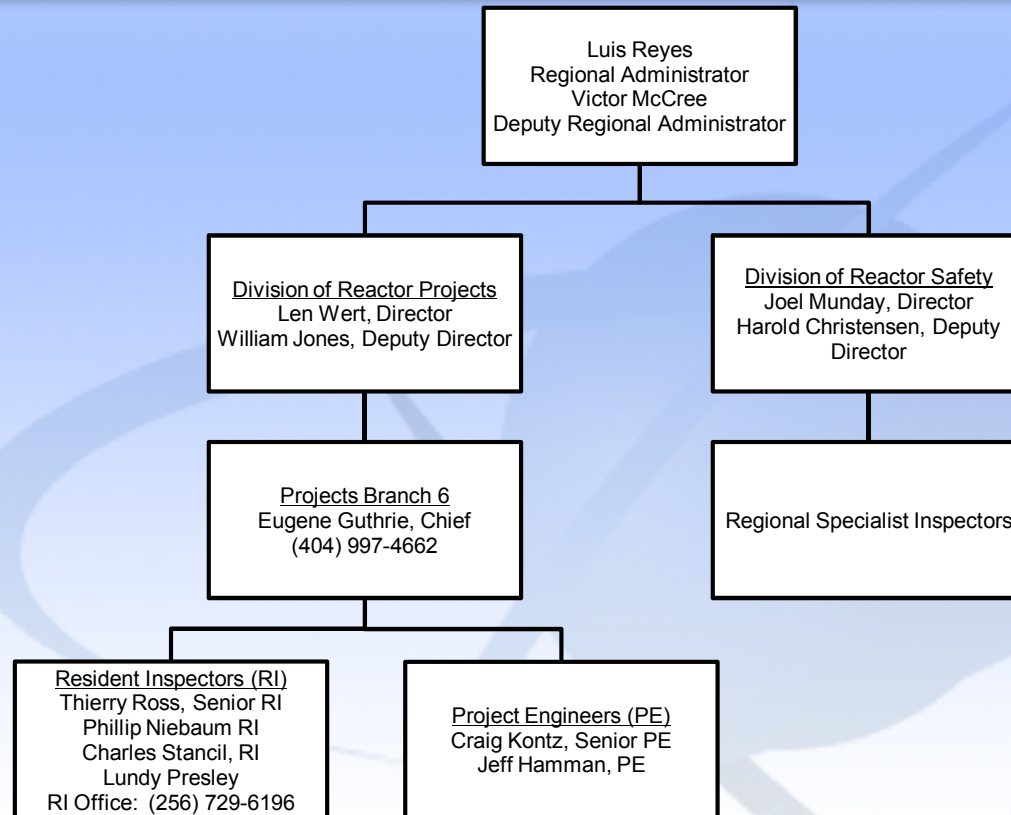


Agenda

- Introduction
- Overview of NRC Mission
- Review of Reactor Oversight Process
- Discussion of Plant Performance Results
- Licensee Discussion of Corrective Actions
- Supplemental 95002 Inspection Results
- TVA Comments
- NRC Closing Remarks
- NRC available to address public questions

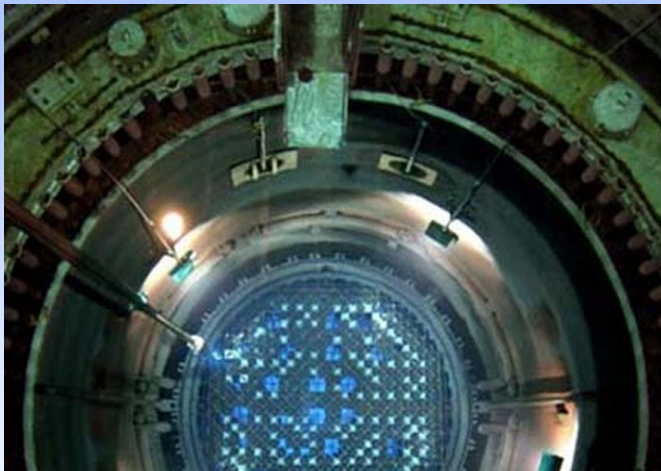


Region II Organization





Our Mission



- **To license and regulate the nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.**

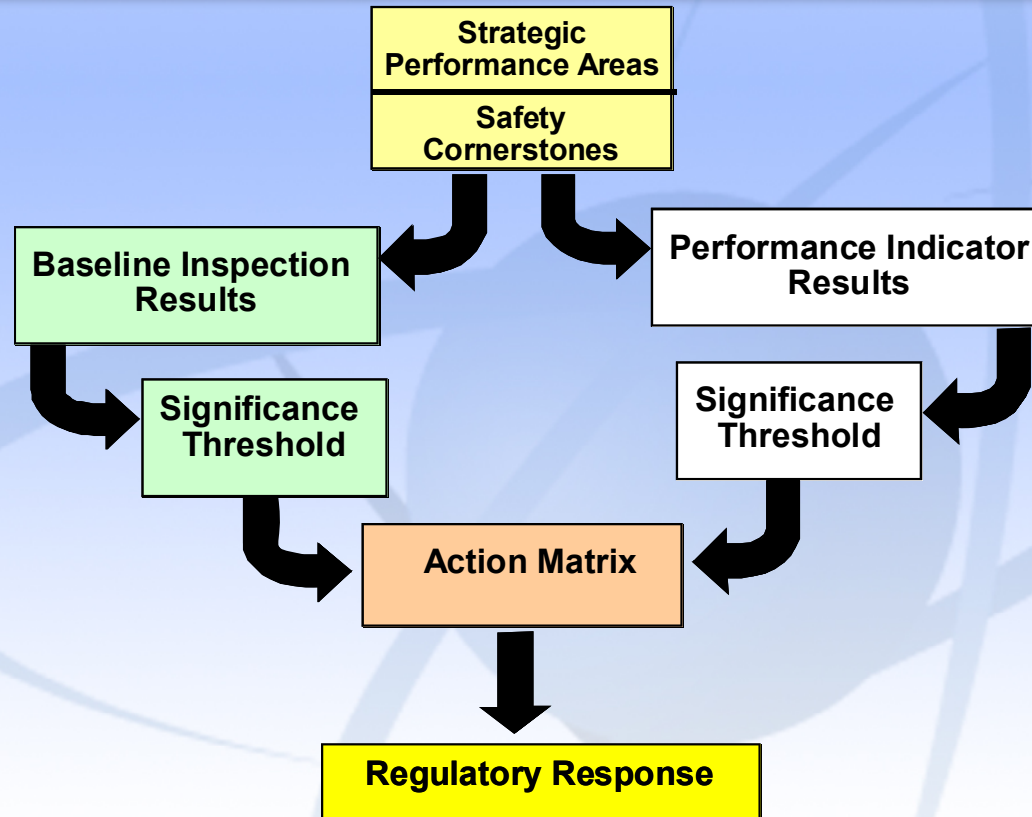


What NRC Regulates

- **Nuclear reactors** - commercial power reactors, research and test reactors, new reactor designs
- **Nuclear materials** - nuclear reactor fuel, radioactive materials for medical, industrial, and academic use
- **Nuclear waste** – transportation, storage and disposal of nuclear material and waste, decommissioning of nuclear facilities
- **Nuclear security** – physical security of nuclear facilities and materials from sabotage or attacks



Reactor Oversight Process





Significance Threshold

Performance Indicators

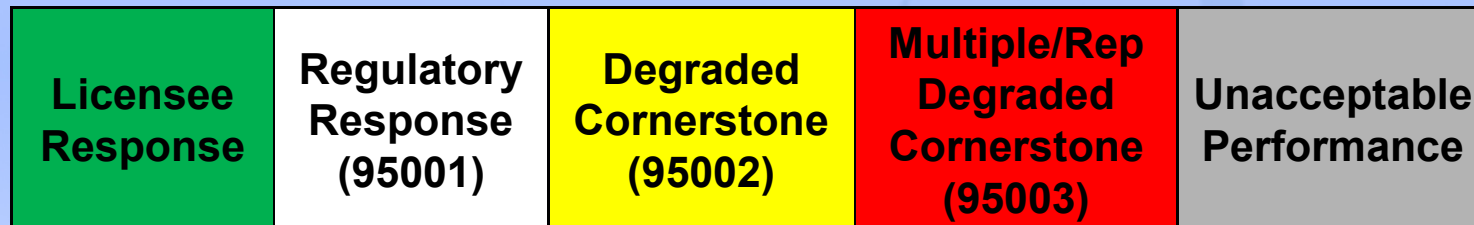
- Green:** Only Baseline Inspection
- White:** Increases NRC oversight
- Yellow:** Increases NRC oversight
- Red:** Increases NRC oversight

Inspection Findings

- Green:** Very low safety issue
- White:** Low to moderate safety issue
- Yellow:** Substantial safety issue
- Red:** High safety issue



Action Matrix Concept



Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Involvement

Increasing Regulatory Actions



Operating Assessment for Browns Ferry

	Q4 2009	Q1 2010	Q2 2010	Q3 2010	Q4 2010	
Unit 1	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Licensee Response
	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2		
Unit 2	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Licensee Response
	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2		
Unit 3	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Licensee Response
	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2	Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2		



Assessment Results - Units 1,2 & 3

- **4th Quarter 2009, 1st, 2nd & 3rd Quarters 2010 within Degraded Cornerstone Column**
 - One Yellow Violation in the Mitigating Systems Cornerstone
 - One White Violation in the Mitigating Systems Cornerstone
- **4th Quarter 2010**
 - Follow-up inspection per IP 95002 was completed in October 2010
 - Assessment following closure of One Yellow Violation and one White Finding in the Mitigating Systems Cornerstone determined that performance returned to the Licensee Response Column as of November 2010.



95002 Supplemental Inspection

IP 95002 Inspection Team

- **Kathleen O'Donohue, Branch Chief, Team Leader**
- **John Hanna, Sr. Reactor Analyst**
- **Molly Keefe, Human Factors Specialist**
- **Robert Monk, Sr. Resident Inspector, Watts Bar**
- **Reinaldo Rodriguez, Sr. Reactor Inspector**



95002 Supplemental Inspection

- **The 95002 was completed the week of October 22, 2010**
- **Total of 210 Direct Inspection Hours**

The inspection reviewed:

- **Yellow Violation of 10 CFR 50 Appendix R III.G.1 & III.G.2**
- **White Violation of Technical Specification 5.4.1.a.**



95002 Supplemental Inspection

IP 95002 Inspection Objectives

- **Assurance that the root and contributing causes are understood**
- **Assurance that the corrective actions are sufficient to:**
 - (1) address root causes and**
 - (2) prevent recurrence**



95002 Supplemental Inspection

IP 95002 Inspection Objectives, cont.

- **Independent inspection of licensee's root cause and extent of condition**
- **Independent assessment of possible collective risk-significant performance issues**
- **Independent determination of safety culture component contribution to performance issues**



95002 Supplemental Inspection

- **The NRC inspection team determined that the following inspection objectives were satisfied:**
 - **Assurance that the root and contributing causes were understood**
 - **Assurance that the corrective actions, both completed and planned, for the performance issues were sufficient to address the root and contributing causes and prevent recurrence**



95002 Supplemental Inspection

Assurance that the root and contributing causes were understood:

Yellow Violation of 10 CFR 50 Appendix R III.G.1 & II.G.2

#1 – Inadequate management and oversight of the BFN App R program

#2 – Ineffective use of the Corrective Action program

Contributing Cause: Ineffective turn-over from BFN Start-up Team to BFN Station Staff



95002 Supplemental Inspection

Assurance that the root and contributing causes were understood:

- **White Violation of Technical Specification 5.4.1.a.**

#1 – Inadequate preparation and review of procedure revision

Contributing cause: inadequate procedure revision guidance



95002 Supplemental Inspection

Assurance that the corrective actions for the performance issues were sufficient to address the root and contributing causes and prevent recurrence:

- **Corrective actions, both completed and in progress are sufficient to address the root and contributing causes and to prevent recurrence.**
- **Success depends on management oversight:
Organizational Restructure/Follow-up CA Team**



95002 Supplemental Inspection

- **Independent Assessment of extent of cause/condition**
 - **No issues identified for BFN**
- **Independent Assessment of Safety Culture at Browns Ferry Nuclear Plant**
 - **Safety Culture determined to be improving**



Assessment Summary

- **Overall, Browns Ferry performance was determined to be in the Degraded Cornerstone of the NRC's Action Matrix**
- **Given a satisfactory 95002 inspection and no additional inputs, all three Units have returned to the Licensee Response Column on the NRC's Action Matrix, during the 4th Qtr CY 2010**



TVA Comments

- **TVA Management
Comments/Presentation**



Open to the Public

- **NRC places a high priority on keeping the public and stakeholders informed of its activities.**
- **At 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
 - Select “What We Do” for Public Affairs



NRC Representatives

- **Leonard Wert, Division Director**
- **Eugene Guthrie, Branch Chief**
- **Thierry Ross, Senior Resident Inspector**
- **Charles Stancil, Resident Inspector**
- **Phillip Niebaum, Resident Inspector**
- **Lundy Presley, Resident Inspector**
- **Roger Hannah, Senior Public Affairs Officer**
(404) 997-4417



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)