



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

April 16, 2009

James R. Douet
Vice President Operations
Entergy Operations, Inc.
Grand Gulf Nuclear Station
P.O. Box 756
Port Gibson, MS 39150

**SUBJECT: SUMMARY OF ANNUAL PERFORMANCE ASSESSMENT MEETING FOR
GRAND GULF NUCLEAR STATION**

Dear Mr. Douet:

This refers to the meeting conducted in Port Gibson, Mississippi, on April 14, 2009, to discuss the safety performance at the Grand Gulf Nuclear Station between January 1 and December 31, 2008.

Topics discussed during the meeting included the Reactor Oversight Process and the safety performance at Grand Gulf Nuclear Station. Members of the public present at the meeting were allowed to ask questions and comment on the proceedings.

In accordance with Section 2.390 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be available electronically for public inspection in the NRC's Public Document Room 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 matter, we will be pleased to discuss them with you.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Miller".

Geoffrey Miller, Chief
Project Branch C
Division of Reactor Projects

Docket: 50-416
License: NPF-29

Enclosure:

1. Attendance List
2. Presentation Slides

cc w/enclosure:
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Environmental Compliance and
Enforcement Division
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State Health Board
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Entergy Nuclear Operations
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Baton Rouge, LA 70821-4312

Institute of Nuclear Power Operations (INPO)
Records Center
700 Galleria Parkway SE, Suite 100
Atlanta, GA 30339



**Grand Gulf Annual Assessment Meeting
CY2008 Reactor Oversight Program**



Port Gibson, MS
April 14, 2009

1

Purpose of Today's Meeting



- A public forum for discussion of the licensee's performance
- NRC will discuss the licensee performance issues identified in the annual assessment letter
- Licensee will be given the opportunity to respond to the information in the letter and inform the NRC of new or existing programs to maintain or improve their performance

2

Enclosure 2

Agenda



- Introduction
- About the NRC
- Review of the Reactor Oversight Process
- National Summary of Plant Performance
- Discussion of Grand Gulf Plant Performance
- Licensee Response and Remarks
- NRC Closing Remarks
- NRC available to address public questions

3

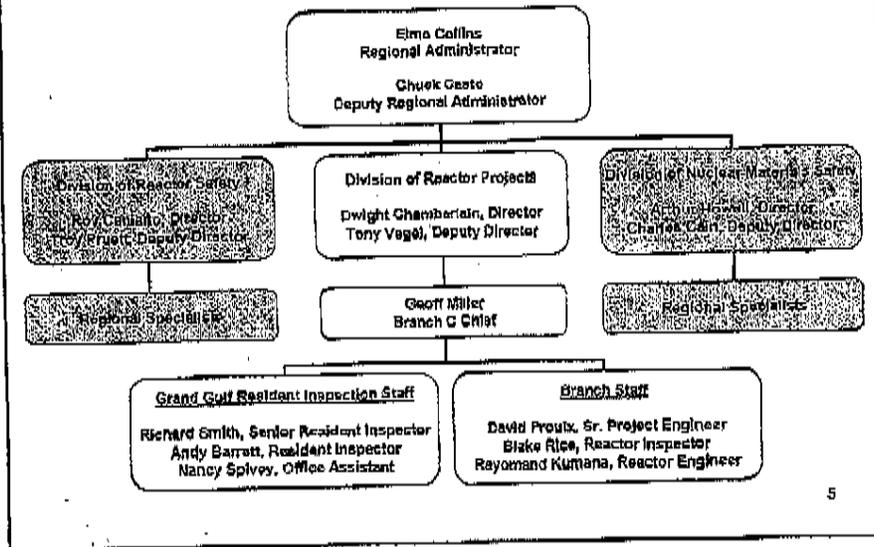
Who We Are



- The Atomic Energy Commission was established by Congress in 1946 to encourage the use of nuclear power and regulate its safety
- In 1974 Congress divided the AEC into two parts
 - U.S. Nuclear Regulatory Commission
 - Department of Energy
- The NRC is headed by a Chairman and four Commissioners, all appointed by the President and confirmed by the Senate for staggered five-year terms.

				Vacant
Commissioner Kristine L. Svinicki	Commissioner Gregory B. Jaczko	Chairman Dale E. Klein	Commissioner Peter B. Lyons	4

Region IV Organization



NRC Representatives

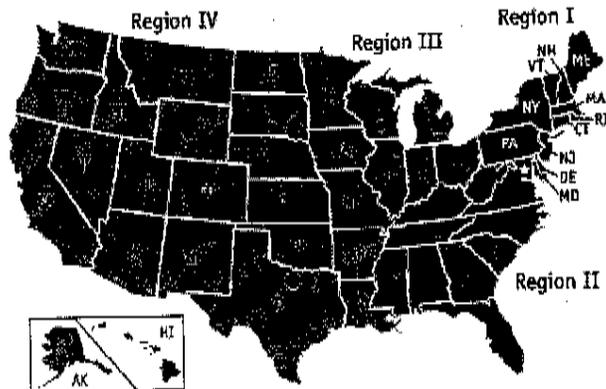


- Dwight Chamberlain, Director, Division of Reactor Projects
 - (817) 860 - 8180
 - Geoff Miller, Branch Chief
 - (817) 860 - 8144
 - Victor Dricks, Region IV Public Affairs Official
 - (817) 860 - 8128
 - Richard Smith, Senior Resident Inspector
 - Andy Barrett, Resident Inspector
 - Nancy Spivey, Site Secretary
 - Resident Inspector Office (601) 437- 4620
- 6

Who We Are



- The NRC employs approximately 3,500 people
- NRC inspectors are assigned full-time to each nuclear power plant and fuel cycle facility



7

Who We Are



The NRC 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.

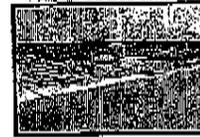


8

NRC Primary Functions



- Establish Rules and Regulations
- Evaluate license applications and issue licenses if appropriate
- Provide oversight through *inspection* of facilities, *enforcement* of regulatory violations, and *evaluation* of industry operational experience
- Conduct research to provide technical support for regulatory decisions
- Respond to events and emergencies at licensed facilities



9

NRC Regulatory Functions



What We Regulate

- Nuclear Reactors
 - Commercial power, research, test, and new reactor designs
- Nuclear Material
 - Reactor fuel, radioactive material for medical, industrial, and academic uses
- Nuclear Waste
 - Transportation, storage, disposal, and facility decommissioning
- Nuclear Security
 - Facility physical security

What We DON'T Regulate

- Nuclear Weapons
- Military Reactors
- Space Vehicle Reactors
- Naturally Occurring Radon or X-rays

These are regulated by other federal agencies

10

How NRC Regulates



- Oversight and Inspection
 - Full-time Resident Inspectors at each nuclear plant and fuel facility
 - Regional Inspection Specialists
- Assessment
 - Inspection results are assessed to provide a comprehensive picture of facility performance
 - NRC adjusts inspection effort
- Enforcement
 - NRC Issues Findings and Violations
 - Investigation of allegations of wrong-doing
- Emergency Response
 - NRC Inspectors are on-call 24/7 to respond to events at any nuclear plant and fuel facility

11

NRC Performance Goals



Safety

Ensure adequate protection of public health and safety and the environment

Security

Ensure adequate protection in the secure use and management of radioactive materials

12

Ensuring Nuclear Safety



- **Defense-in-Depth design philosophy**
 - Safety systems must be fully independent and redundant
 - Multiple physical barriers
 - Routine testing of licensee Emergency Plans
- **Ensure Compliance with Regulations and License**
 - NRC inspectors perform daily on-site inspections
 - Reporting requirements for certain plant issues and safety data
- **Maintenance Programs**
 - Equipment reliability, unavailability, and failures are tracked and verified
- **Continuing Training**
 - Nuclear Plant Operators are required to undergo continuing training to retain their Operating License

13

Ensuring Nuclear Security

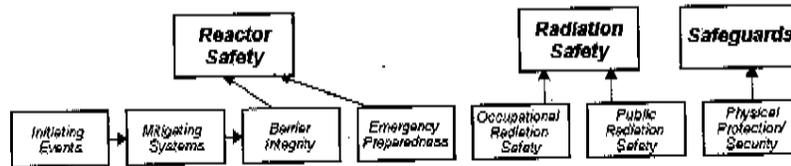


- Well-armed and well-trained security forces
- Surveillance and perimeter patrols
- State-of-the-art site access equipment and controls
- Physical barriers and detection zones
- Intrusion detection systems and alarm stations



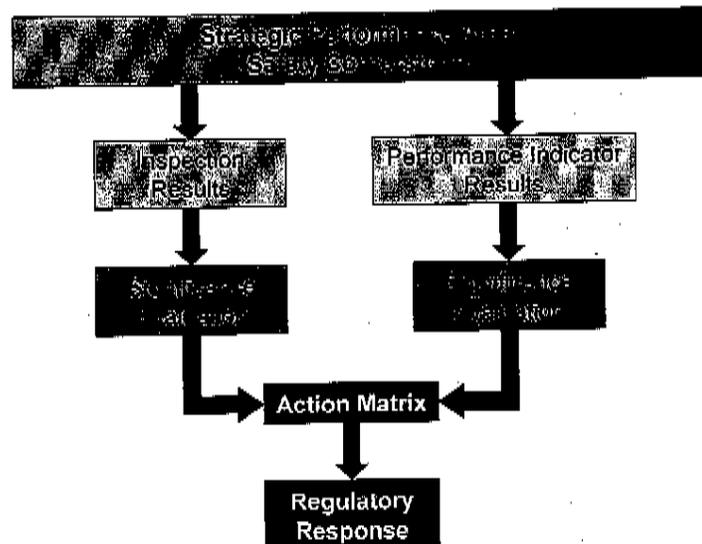
14

Reactor Oversight Process



- 3 Strategic Performance Areas are divided into 7 Cornerstones of Safety
- Inspection Findings and Performance Indicators are assigned to a Cornerstone
- Inspection Findings can be assigned a cross-cutting aspect (a causal factor for the issue)
 - Human Performance
 - Problem Identification and Resolution
 - Safety Conscious Work Environment
- Numerous findings with a common cross-cutting aspect results in a "Substantive Cross-Cutting Issue" 15

Reactor Oversight Process



Baseline Inspections



- Detailed inspection effort performed at all reactor sites
- Includes daily unannounced resident inspector activities and periodic regional team inspections
- Over 2,000 man-hours of direct inspection effort annually
- Major focus areas
 - Reactor safety
 - Radiation safety
 - Emergency preparedness
 - Security

17

Beyond Baseline Inspections



- ***Special Inspections***
 - Inspection response to unusual or unexpected plant issues
 - Conducted during an ongoing event or soon after
 - Focus on the licensee's evaluation and response to ongoing plant issues
- ***Supplemental Inspections***
 - Inspection response to White, Yellow, and Red inspection results and performance indicators
 - Conducted upon completion of licensee actions to address the issue
 - Focus on the licensee's evaluation of the issue and adequacy of corrective actions

18

National Plant Performance



Action Matrix Status at End of CY 2008

Licensee Response	86
Regulatory Response	14
Degraded Cornerstone	3
Multiple/Repetitive Degraded Cornerstone	1
Unacceptable Performance	0
TOTAL	104

21

National Plant Performance



Performance Indicator Results (end of CY 2008)

Green:	1762
White:	6
Yellow:	0
Red:	0

Total Inspection Findings (CY 2008)

Green:	776
White:	17
Yellow:	0
Red:	0

22

Grand Gulf Inspection Activities



January 1 - December 31, 2008

- Baseline Inspections
- Refueling Outage
- Tri-Annual Fire Inspection
- Conducted Supplemental Inspection per IP 95001
 - Inspection Report 2008009
 - Conducted in response to White performance indicator from 1st quarter of CY2008 (Unplanned scrams per 7000 critical hours)

23

Grand Gulf Assessment Results



1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Regulatory Response	Licensee Response	Licensee Response	Regulatory Response
All Green Findings One White PI	All Green Findings All Green PIs	All Green Findings All Green PIs	All Green Findings One White PI

- Grand Gulf Nuclear Station operated in a manner that preserved public health and safety
- NRC Action Matrix Regulatory Response Column:
 - 1st Quarter 2008 – White PI for unplanned scrams per 7000 hours
 - 4th Quarter 2008 – White PI for unplanned scrams per 7000 hours
 - Supplemental Inspection per IP 95001 was conducted in February 2009
- Baseline Inspection activities planned for remainder of 2009

24

January 1 - December 31, 2008

- Twelve findings in Human Performance Area:
 - Seven findings in the work practices component
 - Four of the seven findings in the work practices component had a common theme of failure to use self-checking and peer-checking techniques
 - GGNS has communicated a course of action to address the theme

25

- For general information or questions:
 - www.nrc.gov
 - Select "About NRC" then "Locations" to contact Region IV
- To report a safety concern:
 - (800) 695-7403
 - Allegation@nrc.gov
- To report an emergency:
 - (301) 816-5100 (collect calls accepted)

26

Reference Sources



- Reactor Oversight Process
 - Select "Nuclear Reactors" then "Operating Reactors" from NRC website menu
- Public Electronic Reading Room
 - Link on the left menu of NRC homepage
- Public Document Room
 - 1-800-397-4209 (Toll Free)
- Region IV Public Affairs
 - Victor Dricks (817) 860-8128
 - Bill Maier (817) 860-8267

27

Licensee Remarks



Entergy Representatives

28

Dwight Chamberlain
Director
Division of Reactor Projects

29

**Grand Gulf Annual Assessment Meeting
CY2008 Reactor Oversight Program**

**Questions and Comments from
members of the public**

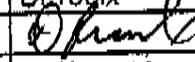
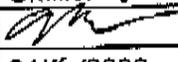
Information on the NRC and our assessment processes is available at this meeting. We encourage you to take copies of this information home with you.

30

Electronic distribution by RIV:

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- ROPreports

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RIV/DRP:R/C	SPE:DRP/C	C:DRP/C			
Brice	DProulx	GMiller			
					
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