NRC CY2006
Annual Assessment Meeting

McGuire Nuclear Station

Huntersville, NC

April 30, 2007

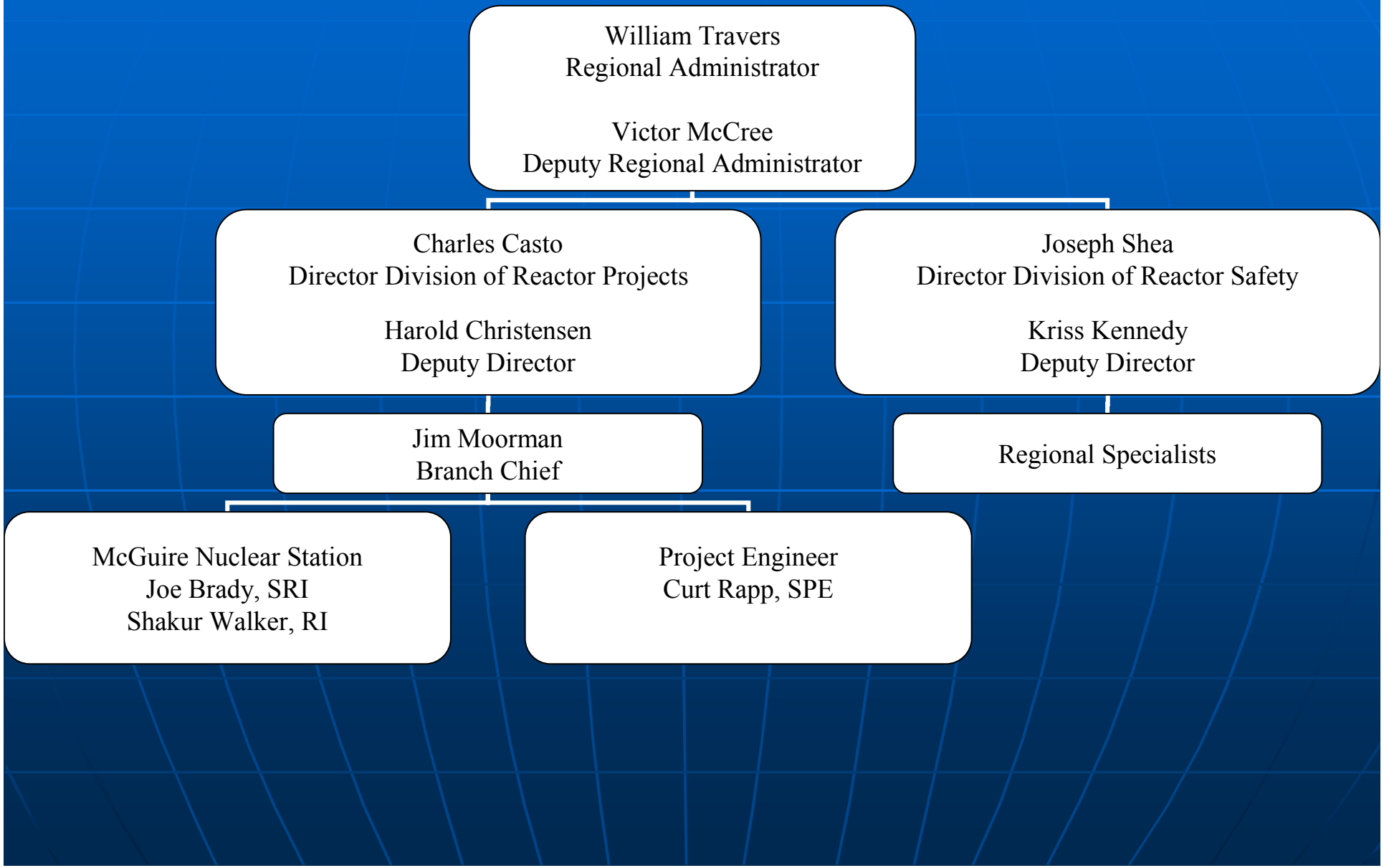
Purpose of Today's Meeting

- Provide a public forum for discussion of McGuire performance
- NRC will address McGuire performance issues identified in the annual assessment letter
- McGuire management 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

Agenda

- Introduction
- Review of Reactor Oversight Process
- National Summary of Plant Performance
- Discussion of McGuire Plant Performance Results
- McGuire Management Response and Remarks
- NRC Closing Remarks
- Break
- NRC Available to Address Public Questions

Region II Organization



NRC Performance Goals

PRIMARY GOALS

Ensure protection of the public health and safety and the environment

Ensure the secure use and management of radioactive materials

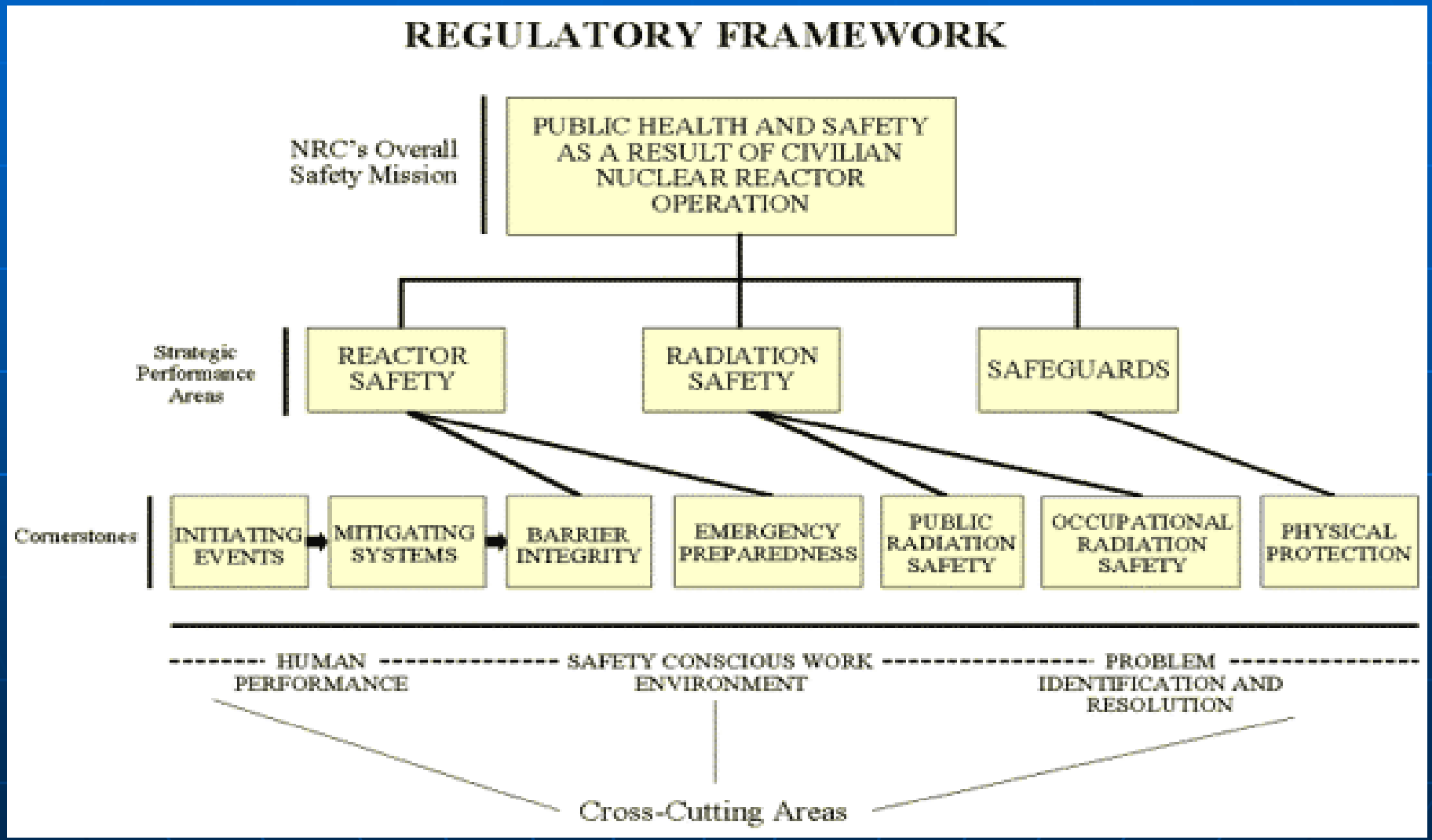
OTHER GOALS

- **Ensure openness in NRC regulatory process**
- **Ensure that NRC actions are effective, efficient, realistic, and timely**
- **Ensure excellence in NRC management to carry out the NRC's strategic objective**

Reactor Oversight Process

- The NRC monitors plant performance in three major areas:
  - **Reactor Safety** (avoiding accidents or transient & reducing their consequences if they occur)
  - **Radiation Safety** (both plant workers & the public during routine operations)
  - **Security** (protection of the plant against sabotage or other security threats) . . . . . Major changes in the post-9/11 environment

Reactor Oversight Process



Reactor Oversight Process

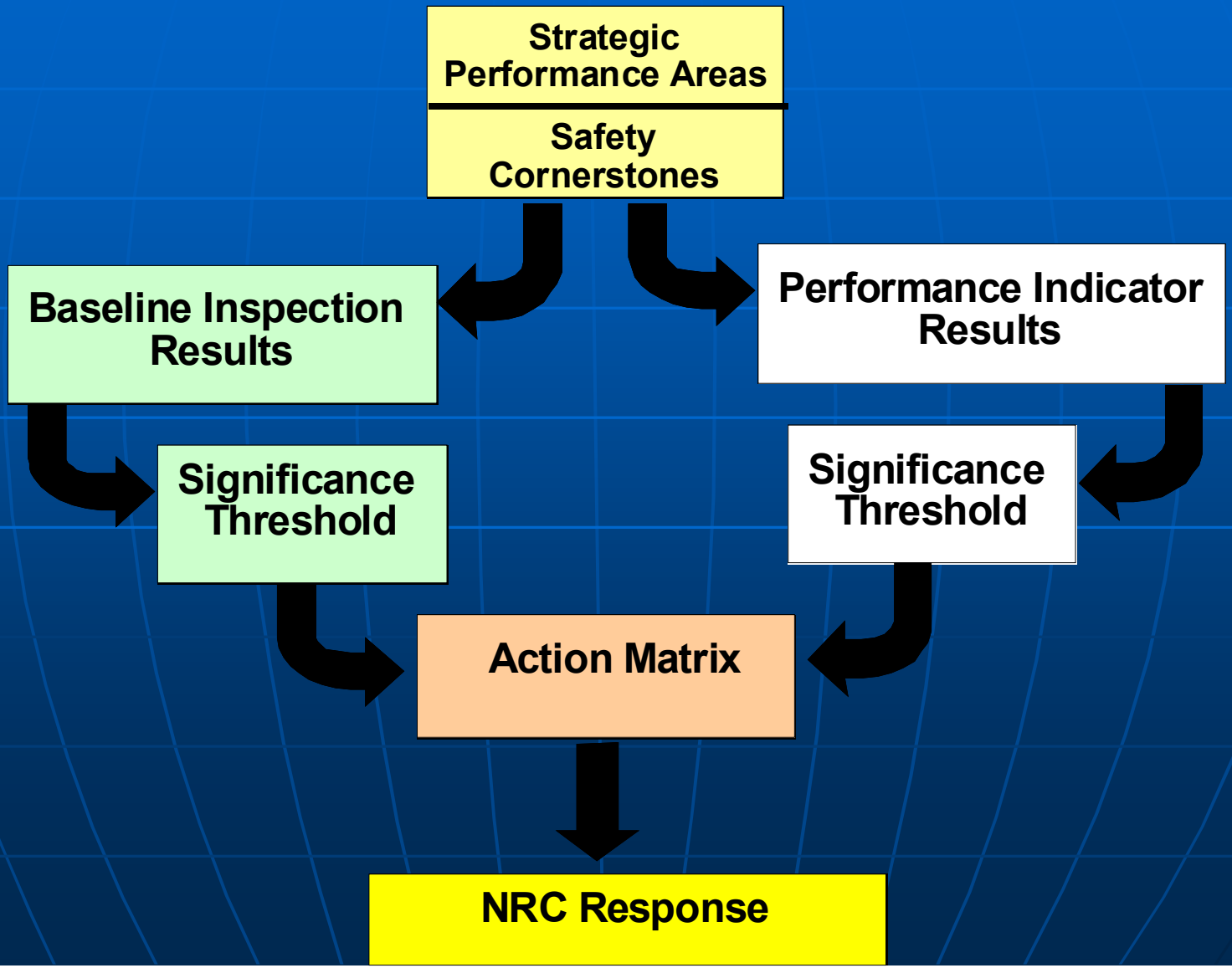
- The ROP includes two separate sources of information:
  - Inspections conducted by NRC personnel
  - Performance Indicators developed from data provided by licensees
- Inspectors can be Site-based or Region-based
- Together they provide a composite picture of how the plant is being operated

Examples of Baseline Inspections

• Equipment Alignment	~80 hrs/yr
• Triennial Fire Protection	~200 hrs every 3 yrs
• Operator Response	~125 hrs/yr
• Emergency Preparedness	~80 hrs/yr
• Rad Release Controls	~110 hrs every 2 yrs
• Worker Radiation Protection	~90 hrs/yr
• Corrective Action Program	~250 hrs every 2 yrs
• Corrective Action Case Reviews	~60 hrs/yr

CORNERSTONE	PERFORMANCE INDICATORS
Initiating Events	- Unplanned Scrams - Scrams with Loss of Normal Heat Sink - Unplanned Power Changes
Mitigating Systems	- Safety System Functional Failure - Mitigating Systems Performance Indicators
Barrier Integrity	- Reactor Coolant Activity - Reactor Coolant System Leakage
Emergency Preparedness	- Drill/Exercise Performance - ERO Drill Participation - Alert and Notification System
Occupational Radiation Safety	- Occupational Exposure Control
Public Radiation Safety	- RETS/ODCM Radiological Effluent
Safeguards	- Physical Protection (not publicly available)

Reactor Oversight Process



Thresholds

Safety Significance

Green: Very low safety issue

White: Low-to-moderate safety issue

Yellow: Substantial safety issue

Red: High safety issue

NRC Inspection Efforts

Green: Only Baseline Inspections

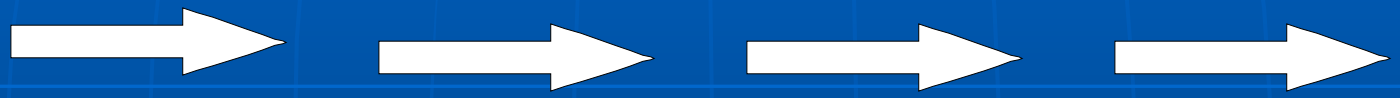
White: May increase NRC oversight

Yellow: Increased NRC oversight

Red: Increased NRC oversight and other NRC actions

Action Matrix Concept

Licensee Response	Regulatory Response	Degraded Cornerstone	Multiple/Rep. Degraded Cornerstone	Unacceptable Performance



Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Interaction and Involvement

Increasing Regulatory Actions

National Summary of Plant Performance

Status at End of CY 2006

Licensee Response	70
Regulatory Response	24
Degraded Cornerstone	6
Multiple/Repetitive Degraded Cornerstone	3
Unacceptable	0
Total	103

McGuire CY2006 Inspection Activities

- ~2200 hours of inspection related activities
- Resident inspector daily inspections
- Triennial Fire Protection Inspection
- Radiation Protection Inspections
- In-service Inspection (U2)
- Reactor Pressure Vessel &Vessel Head Penetration Nozzles (U2)
- Mitigating Systems Performance Indicator Initial Verification
- Component Design Basis Verification
- Licensed Operator Requalification Inspection
- Emergency Preparedness Inspection
- Independent Spent Fuel Storage Facility

McGuire CY2006 Assessment Results

- Plant performance was within the Licensee Response Column of the NRC's Action Matrix
- All inspection findings were classified as being of very-low safety significance (Green)
- All Performance Indicators (PI) were Green

McGuire CY2006 Assessment Summary

- Duke Power Company, LLC operated McGuire in a manner that preserved public health and safety
- All cornerstone objectives were met
- NRC plans to conduct baseline inspections at McGuire for the remainder of CY 2007.

McGuire CY2007
Scheduled Inspection Activities

- Resident Inspector Daily Inspections
- Biennial Problem identification and Resolution
- Modification (10CFR50.59) Inspections
- Heat Sink Performance
- Emergency Preparedness Exercise
- Reactor Pressure Vessel & Vessel Head Penetration Nozzles (U1)
- Radiation Protection Baseline Inspection
- Heat Sink Performance
- In-service Inspection (U1)
- Containment Sump Blockage TI (U1)
- Maintenance Effectiveness
- Reactor Operator Licensing Examinations

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McGuire Nuclear Station

McGuire Station Management
Response & Remarks

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
  - Public Web Site: www.NRC.gov
  - Select “What We Do” for Public Affairs

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)