

# **NRC CY2005 Annual Assessment Meeting**

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## **BRUNSWICK**



**Southport, North Carolina**

**April 12, 2006**

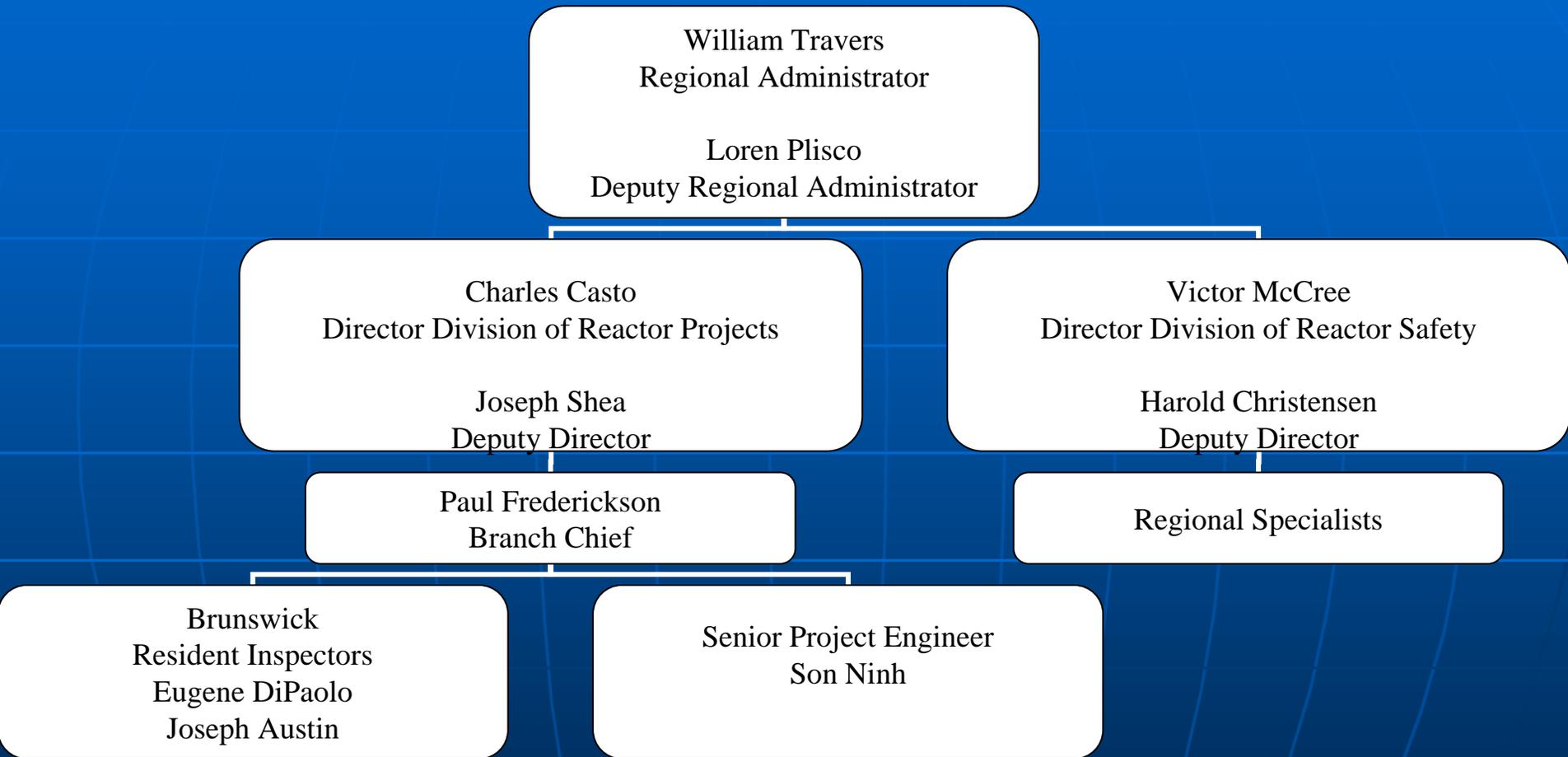
# Purpose of Today's Meeting

- A public forum for discussion of Brunswick performance
- NRC will address Brunswick performance issues identified in the annual assessment letter
- Brunswick 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 Brunswick Plant Performance Results
- Brunswick Management Response and Remarks
- NRC Closing Remarks
- Break
- NRC Available to Address Public Questions

# Region II Organization



# **NRC Performance Goals**

## **PRIMARY GOALS**

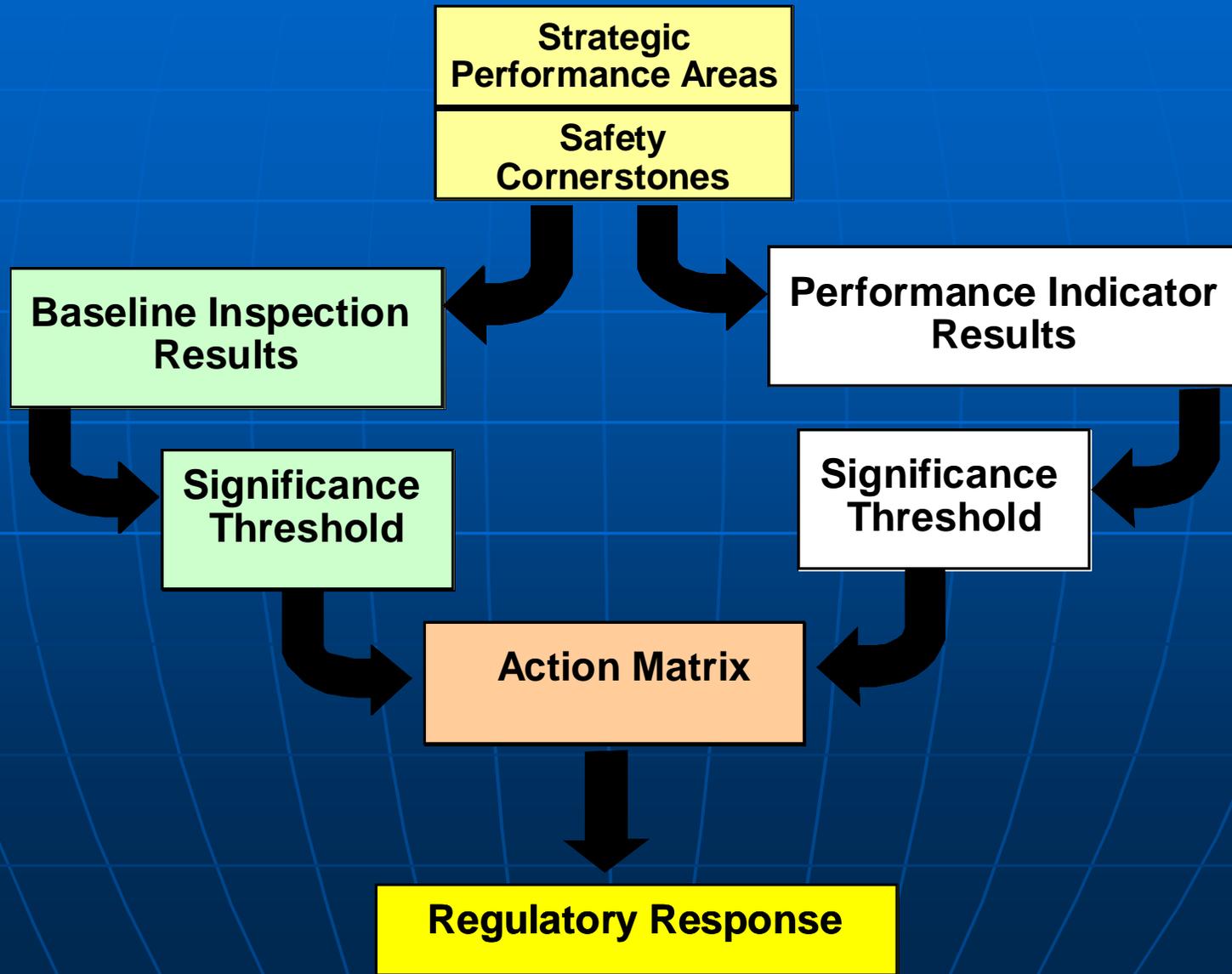
**Ensure protection of the public health and safety  
and the environment**

**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



# 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

# Performance 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



**Increasing Safety Significance**

**Increasing NRC Inspection Efforts**

**Increasing NRC/Licensee Management Involvement**

**Increasing Regulatory Actions**

# National Summary of Plant Performance

Status at End of CY 2005

Licensee Response	84
Regulatory Response	12
Degraded Cornerstone	4
Multiple/Repetitive Degraded Cornerstone	3
Unacceptable	0
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Total	103

# Brunswick CY2005 Inspection Activities

- 2124 hours of inspection related activities
- Resident inspector daily inspections
- Maintenance inspections
- Radiation protection inspections
- License renewal inspection
- Special Inspection (emergency diesel generators)
- Engineering design inspection
- Emergency preparedness inspection
- Problem identification and resolution inspection

# Brunswick CY2005 Assessment Results

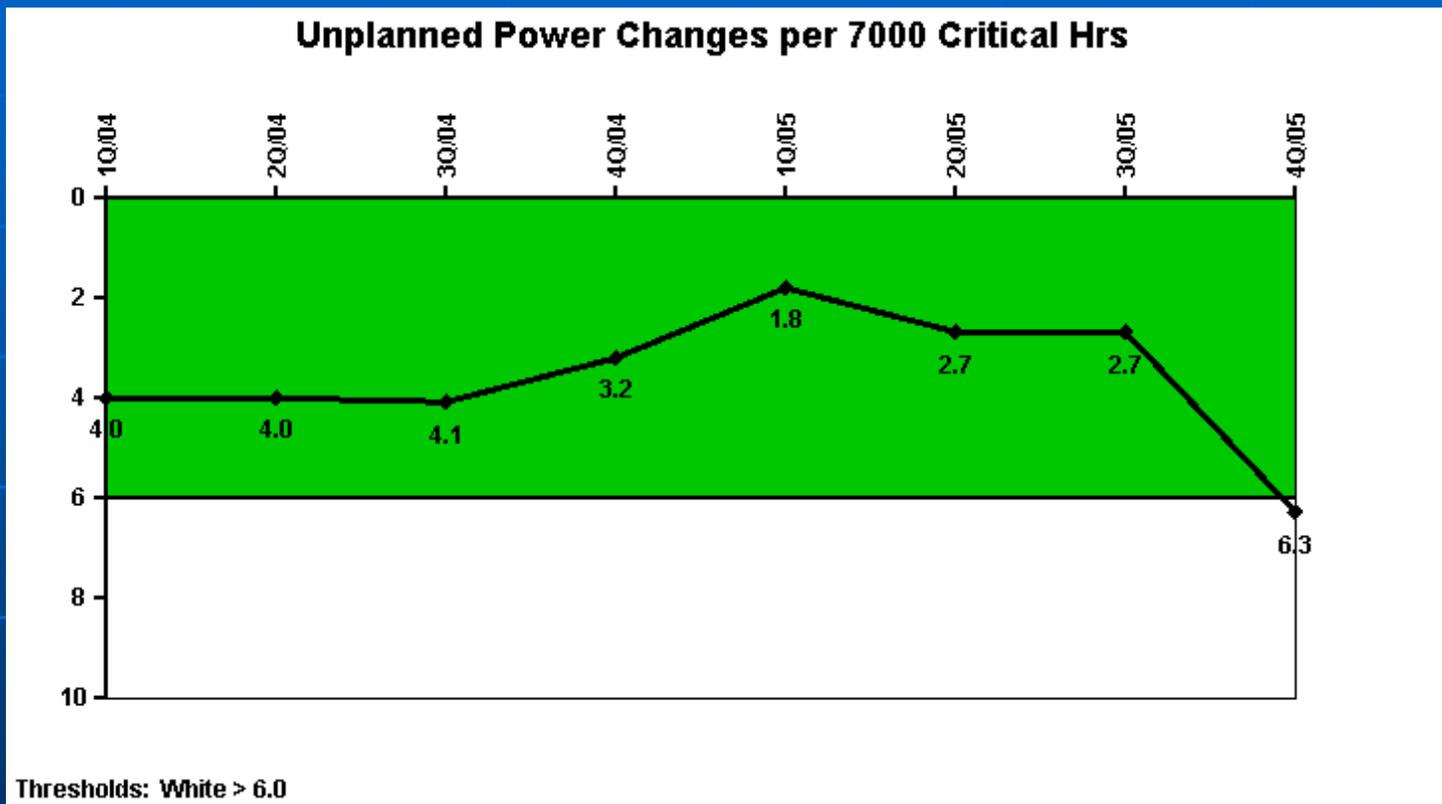
- Both units performance were within the Licensee Response Column of the NRC's Action Matrix for the first three quarters. Unit 1 remained in the Licensee Response Column for the fourth quarter but Unit 2 transitioned to the Regulatory Response Column.
- All inspection findings were classified as very low safety significance (Green)
- All performance indicators (PI) were Green with one exception - Unit 2 Unplanned Power Changes per 7000 Critical Hours PI crossed the Green/White threshold in the fourth quarter.

# CY05 White Performance Indicator

- Unit 2 Unplanned Power Changes PI crossed Green/White threshold in fourth quarter 2005
- Problem: Excessive amount of unplanned power reductions. PI defined as: The number of unplanned changes in reactor power of greater than 20% full-power, per 7,000 hours of critical operation
- Supplemental inspection scheduled in June 2006

# Brunswick 2

## Unplanned Power Change PI



Unplanned Power Changes per 7000 Critical Hrs	1Q/04	2Q/04	3Q/04	4Q/04	1Q/05	2Q/05	3Q/05	4Q/05
Unplanned power changes	2.0	1.0	1.0	0	0	2.0	1.0	4.0
Critical hours	2184.0	2134.2	2139.8	2209.0	1510.0	2026.2	2064.8	2209.0
Indicator value	4.0	4.0	4.1	3.2	1.8	2.7	2.7	6.3

# Brunswick Assessment Summary

- Progress Energy operated Brunswick in a manner that preserved public health and safety
- All cornerstone objectives were met
- Other than one Supplemental Inspection, NRC plans only baseline inspections at Brunswick for the remainder of CY 2006

# Brunswick CY2006 Scheduled Inspection Activities

- Resident inspector daily inspections
- Maintenance inspection
- Engineering modification inspection
- Engineering design bases inspection
- Supplemental Inspection
- Radiation protection inspections
- Emergency preparedness inspections
- Licensed operator requalification inspection
- Heat sink inspection
- Security inspection

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# 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

# 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)