

# Annual Assessment Meeting Seabrook Power Station

---

Reactor Oversight Program - 2003 Assessment



Nuclear Regulatory Commission - Region I  
King of Prussia, PA

# Purpose of Today's Meeting

---

- NRC will address the licensee performance issues identified in the annual assessment letter in a public forum
- Licensee will respond to the information in the letter and inform the NRC of new or existing programs to maintain or improve their performance

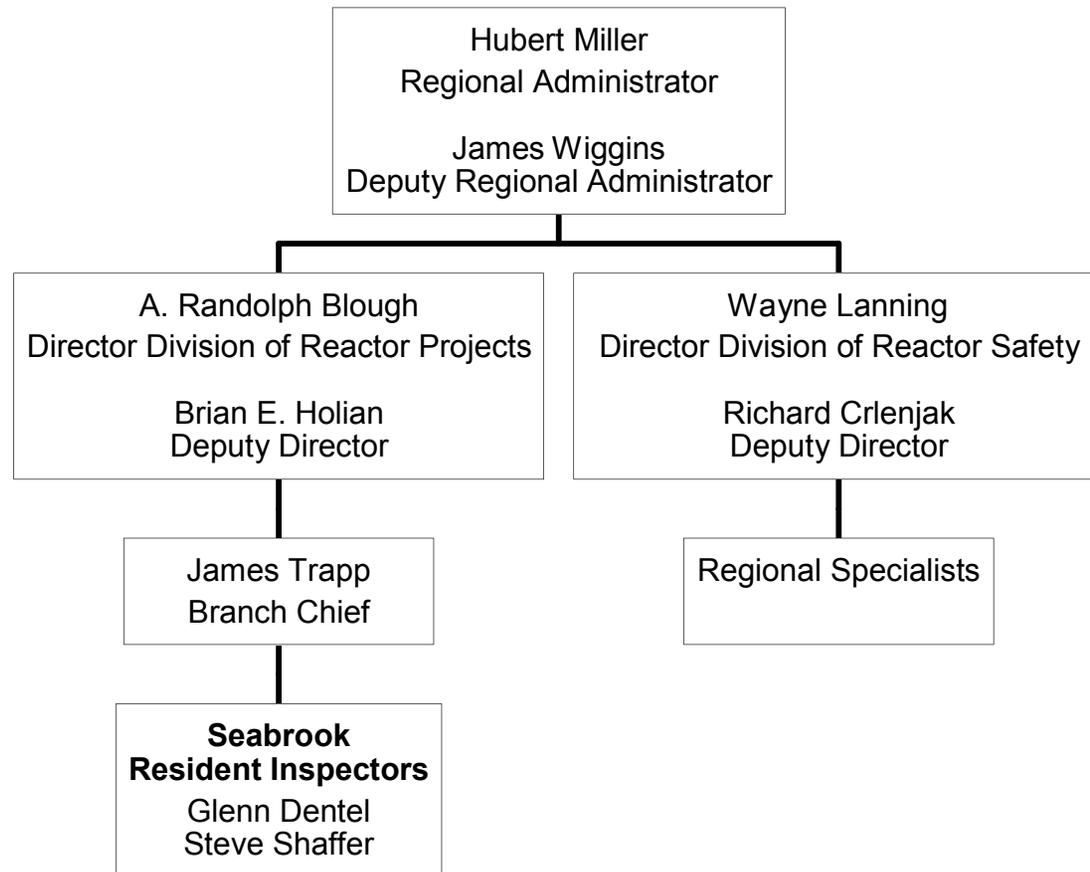
# Agenda

---

- Introduction
- Review of Reactor Oversight Process
- National Summary of Plant Performance
- Discussion of Plant Performance Results
- Licensee Response and Remarks
- NRC Closing Remarks
- Break
- NRC available to address public questions

# Region I Organization

---



# NRC Representatives

---

- James Trapp, Branch Chief
  - ▶ (610) 337-5186
- Glenn Dentel, Senior Resident Inspector
  - ▶ (603) 474-3589
- Steve Shaffer, Resident Inspector
  - ▶ (603) 474-3589

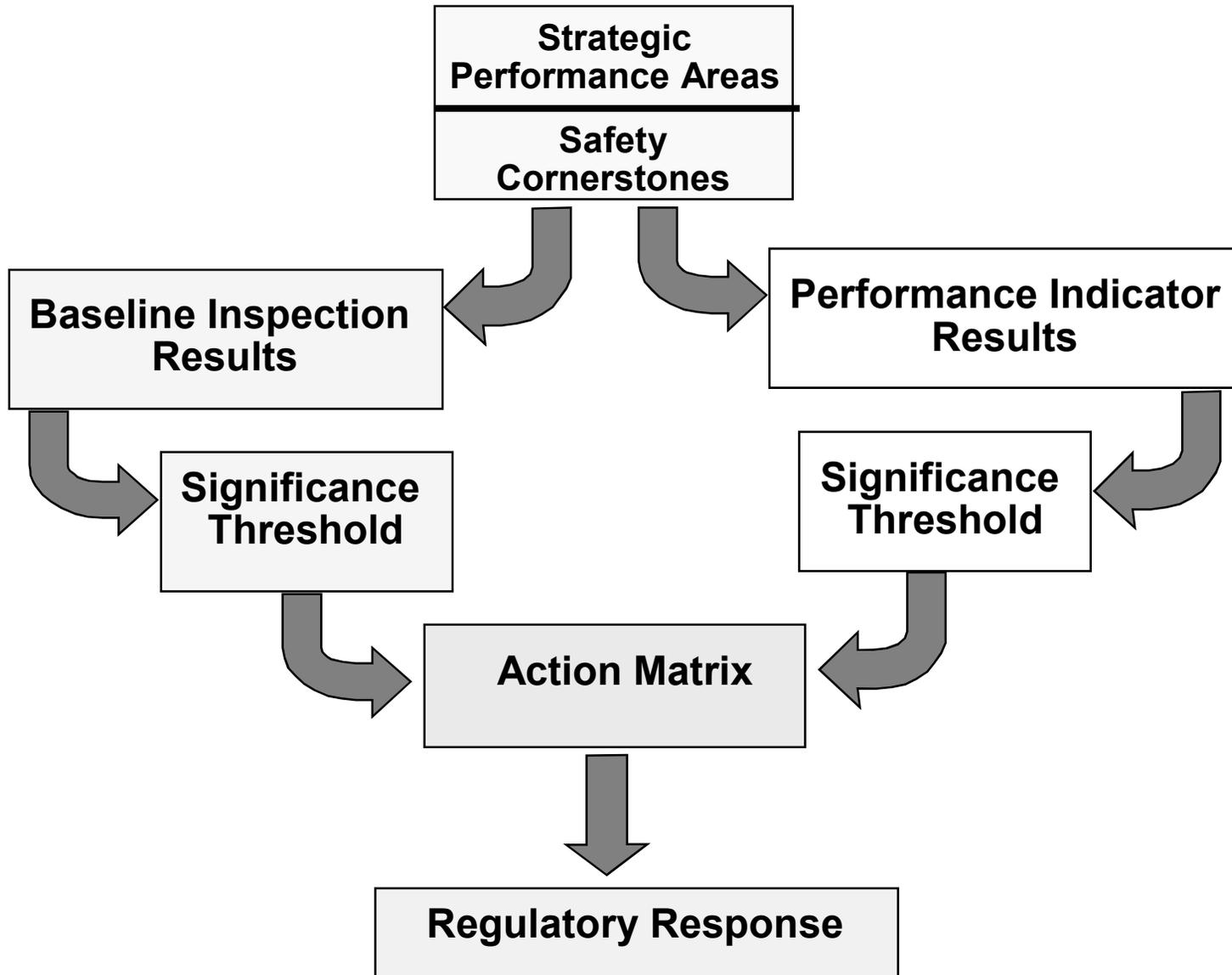
# NRC Performance Goals

---

- Maintain safety, protection of the environment, and the common defense and security
- Increase public confidence
- Make NRC activities and decisions more effective, efficient, and realistic
- Reduce unnecessary regulatory burden on stakeholders

# Reactor Oversight Process

---



# Examples of Baseline Inspections

---

- Equipment Alignment ~92 hrs/yr
- Triennial Fire Protection ~200 hrs every 3 yrs
- Operator Response ~125 hrs/yr
- Emergency Preparedness ~80 hrs/yr
- Rad Release Controls ~100 hrs every 2 yrs
- Worker Radiation Protection ~100 hrs/yr
- Corrective Action Program ~200 hrs every 2 yrs
- Corrective Action Reviews ~60 hrs/yr

# Significance Threshold

---

## Performance Indicators

<b>Green:</b>	Only Baseline Inspection
<b>White:</b>	May increase NRC oversight
<b>Yellow:</b>	Requires more NRC oversight
<b>Red:</b>	Requires more NRC oversight

## Inspection Findings

<b>Green:</b>	Very low safety significant issue
<b>White:</b>	Low to moderate safety significant issue
<b>Yellow:</b>	Substantial safety significant issue
<b>Red:</b>	High safety significant issue

# Action Matrix Concept

---

<b>Licensee Response</b>	<b>Regulatory Response</b>	<b>Degraded Cornerstone</b>	<b>Multiple/Rep. Degraded Cornerstone</b>	<b>Unacceptable Performance</b>
--------------------------	----------------------------	-----------------------------	---	---------------------------------



Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Involvement

Increasing Regulatory Actions

# National Summary of Plant Performance

---

Status at End of 2003

Licensee Response	75
Regulatory Response	22
Degraded Cornerstone	2
Multiple/Repetitive Degraded Cornerstone	3
Unacceptable	0

---

\*Davis-Besse is in IMC 0350 process

Total Units 102\*

# National Summary

---

- Performance Indicator Results (2003)
  - ▶ **Green** 1825
  - ▶ **White** 15
  - ▶ **Yellow** 0
  - ▶ **Red** 0
  
- Total Inspection Findings (2003)
  - ▶ **Green** 748
  - ▶ **White** 19
  - ▶ **Yellow** 2
  - ▶ **Red** 4

# Seabrook Assessment Results

---

January 1 - December 31, 2003

- Operated safely throughout the Assessment Period
- Regulatory Response column of the Action Matrix entered during the last quarter of 2003 (cornerstone objectives met with minimal reduction in safety margin)
- NRC will conduct baseline & supplemental inspections for the remainder of the 2004 cycle

# Seabrook Performance Indicators

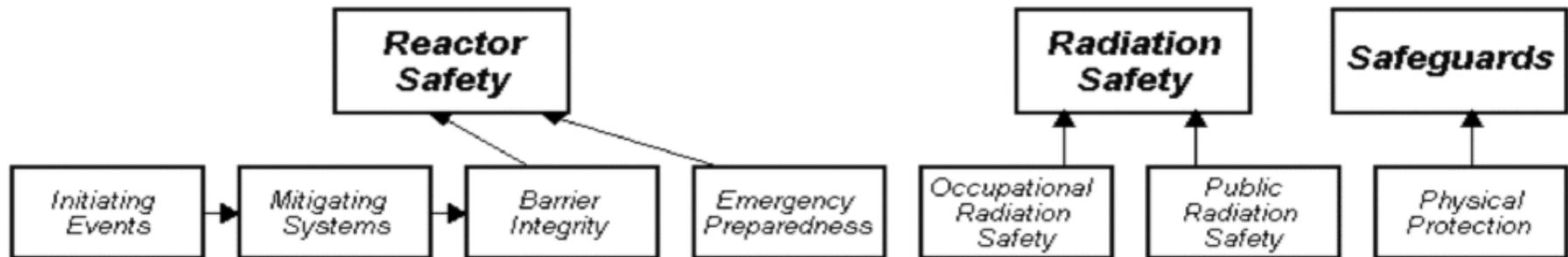
---

January 1 - December 31, 2003

- 17 Green PIs
- 1 White PI for Reactor Coolant System Leakage in the Barrier Integrity cornerstone

# Seabrook - 4Q Performance Indicators

WWW.NRC.GOV then click Reactor Oversight Process



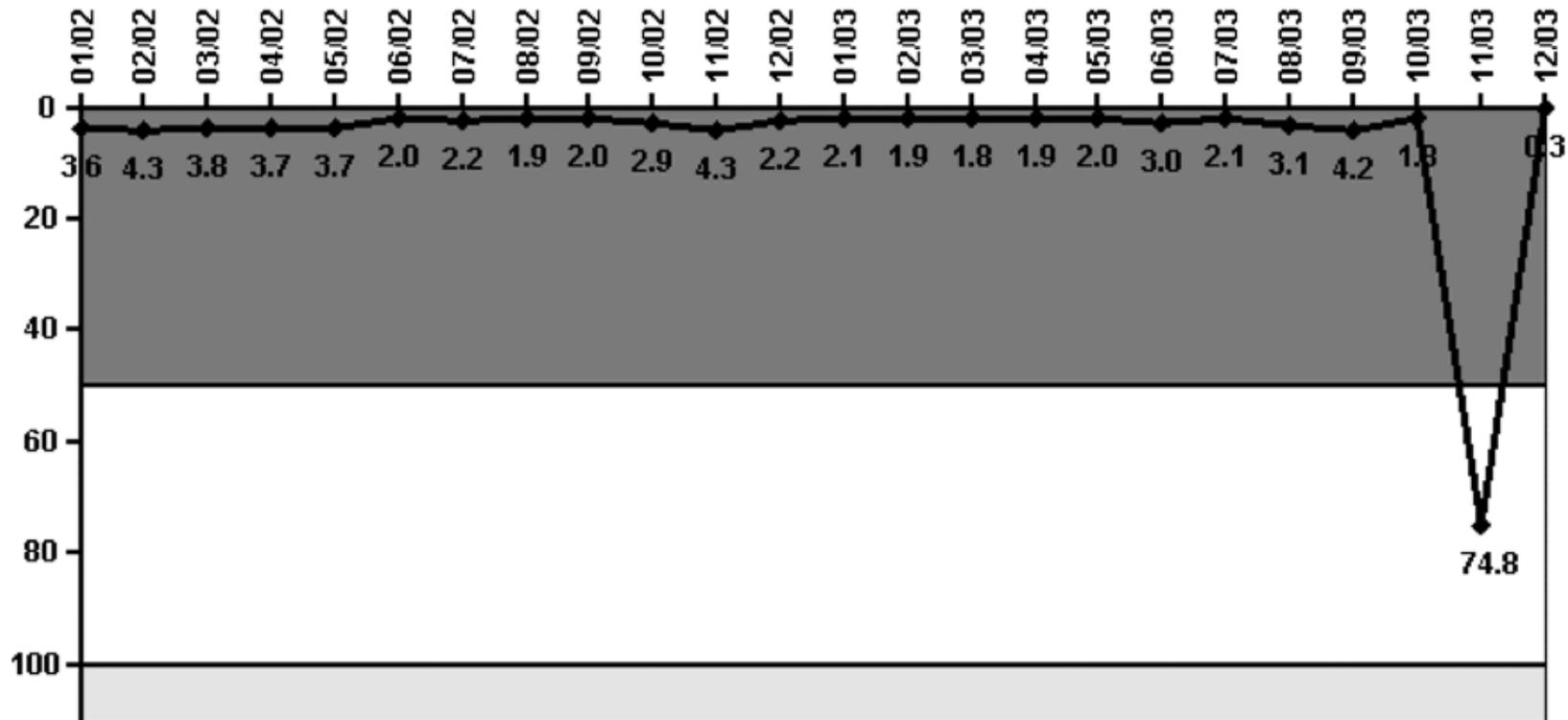
## Performance Indicators

Unplanned Scrams (G)	Emergency AC Power System Unavailability (G)	Reactor Coolant System Activity (G)	Drill/Exercise Performance (G)	Occupational Exposure Control Effectiveness (G)	RETS/ODCM Radiological Effluent (G)	Protected Area Equipment (G)
Scrams With Loss of Normal Heat Removal (G)	High Pressure Injection System Unavailability (G)	Reactor Coolant System Leakage (W)	ERO Drill Participation (G)			Personnel Screening Program (G)
Unplanned Power Changes (G)	Heat Removal System Unavailability (G)		Alert and Notification System (G)			FFD/Personnel Reliability Program (G)
	Residual Heat Removal System Unavailability (G)					
	Safety System Functional Failures (G)					

# Performance Indicator Example

WWW.NRC.GOV then click Reactor Oversight Process

## Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

# Seabrook Inspection Activities

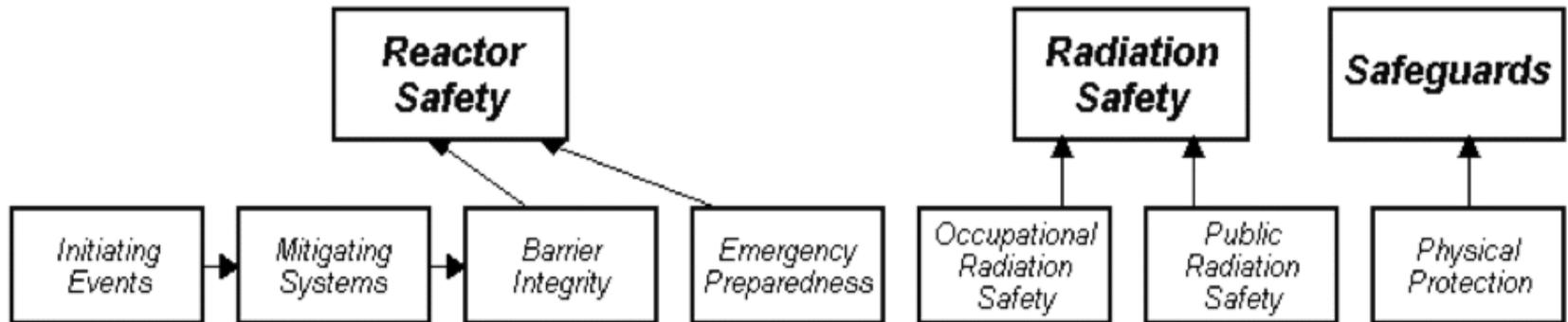
---

January 1 - December 31, 2003

- ~ 4860 hours of inspection related activities
- 2 resident inspectors assigned to the site
- 13 regional inspector visits
- Inspection Findings
  - ▶ 10 findings of very low safety significance (Green)

# Seabrook - Inspection Results

WWW.NRC.GOV then click Reactor Oversight Process



## Most Significant Inspection Findings

	Initiating Events	Mitigating Systems	Barrier Integrity	Emergency Preparedness	Occupational Radiation Safety	Public Radiation Safety	Physical Protection
4Q/2003	G	G	No findings this quarter	G	No findings this quarter	No findings this quarter	No findings this quarter
3Q/2003	No findings this quarter	No findings this quarter	No findings this quarter				
2Q/2003	No findings this quarter	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
1Q/2003	No findings this quarter	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter

# NRC Security Program Update

---

- NRC has issued Orders (February 2002):
  - ▶ Increased Patrols
  - ▶ Augmented Security Capabilities
  - ▶ Added Barriers and Posts
  - ▶ Enhanced Personnel Screening for Access
  - ▶ Enhanced Security Awareness
- Office of Nuclear Security and Incident Response Formed (April 2002)
- Established Threat Advisory and Protective Measure System (August 2002):

# **NRC Security Program Update** (continued)

---

- Access Authorization Order (January 2003)
- Training Order (April 2003)
- Fatigue Order (April 2003)
- Design Basis Threat (April 2003)
- Changes to Site Security plans to incorporate the requirements of the orders (April 2004)
- Expanded Force-on-Force Exercises (in progress)
- New NRC Baseline Inspection Program initiated (February 2004)

# Nuclear Industry Deregulation

---

- Economic Deregulation throughout Region I
- Competition can spur some improvements
  - ▶ Work control, planning, coordination
- NRC must watch for any negative impacts
- NRC Activities:
  - ▶ Performance Indicators
  - ▶ Corrective Action Program Inspections
  - ▶ Maintenance Inspections
  - ▶ Modification Inspections
  - ▶ Safety Conscious Work Environment Assessment

# Approaches for Continued Performance Success

---

## An NRC Perspective

- Strong corrective action program
  - ▶ Continued low threshold for problem identification
- Effective engineering & technical support
- Penetrating internal self-assessments & employee surveys
- Commitment to high standards --Maintaining a long-term view on resources

# 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/adams.html>
- Public Document Room
  - ▶ 1-800-397-4209 (Toll Free)