



NRC Annual Performance Assessment of Pilgrim

2007 Reactor Oversight Process

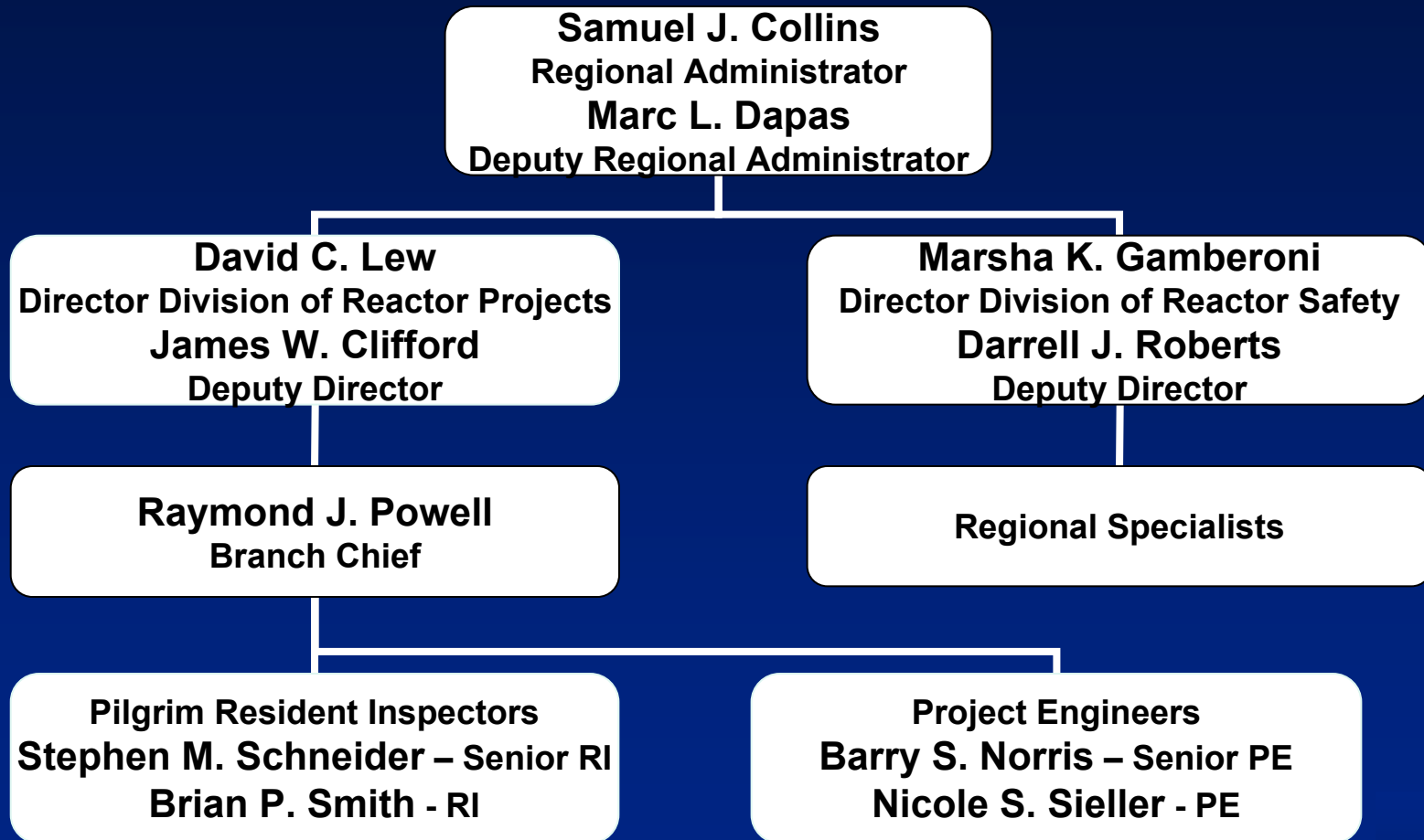
Purpose of Today's Meeting

- **Discuss Pilgrim's Plant Performance for CY 2007**
- **Provide Entergy the opportunity to respond to the NRC's Annual Performance Assessment and to identify new or existing programs to continue to improve performance**
- **Provide stakeholders the opportunity to engage the NRC staff on plant performance issues and our role in ensuring safe plant operations**

Agenda

- **Introduction**
- **NRC Organization and Performance Goals**
- **Reactor Oversight Process (ROP)**
- **National Summary of Plant Performance**
- **Pilgrim's Plant Performance Assessment**
- **Entergy Response and Remarks**
- **NRC Closing Remarks**
- **Break**
- **NRC available to address public questions**

Region I Organization

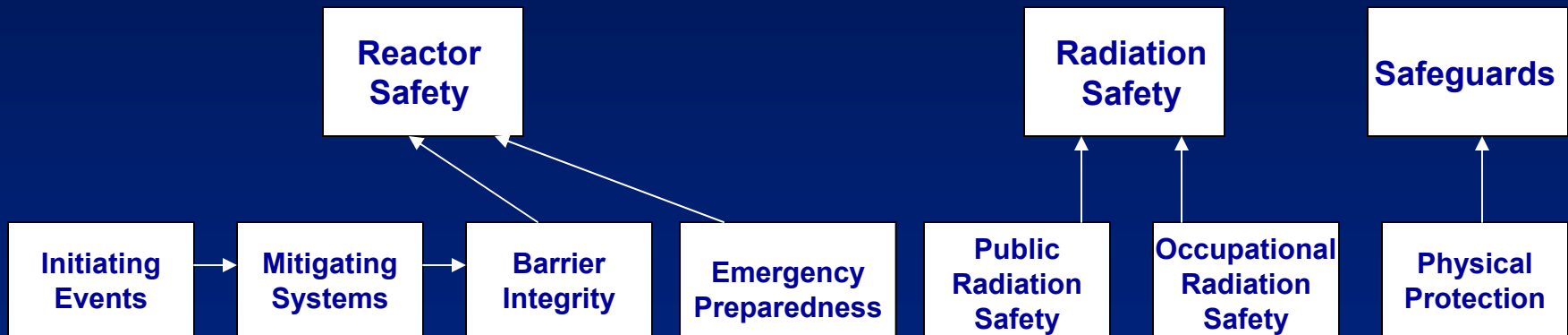


NRC Strategic Plan Goals

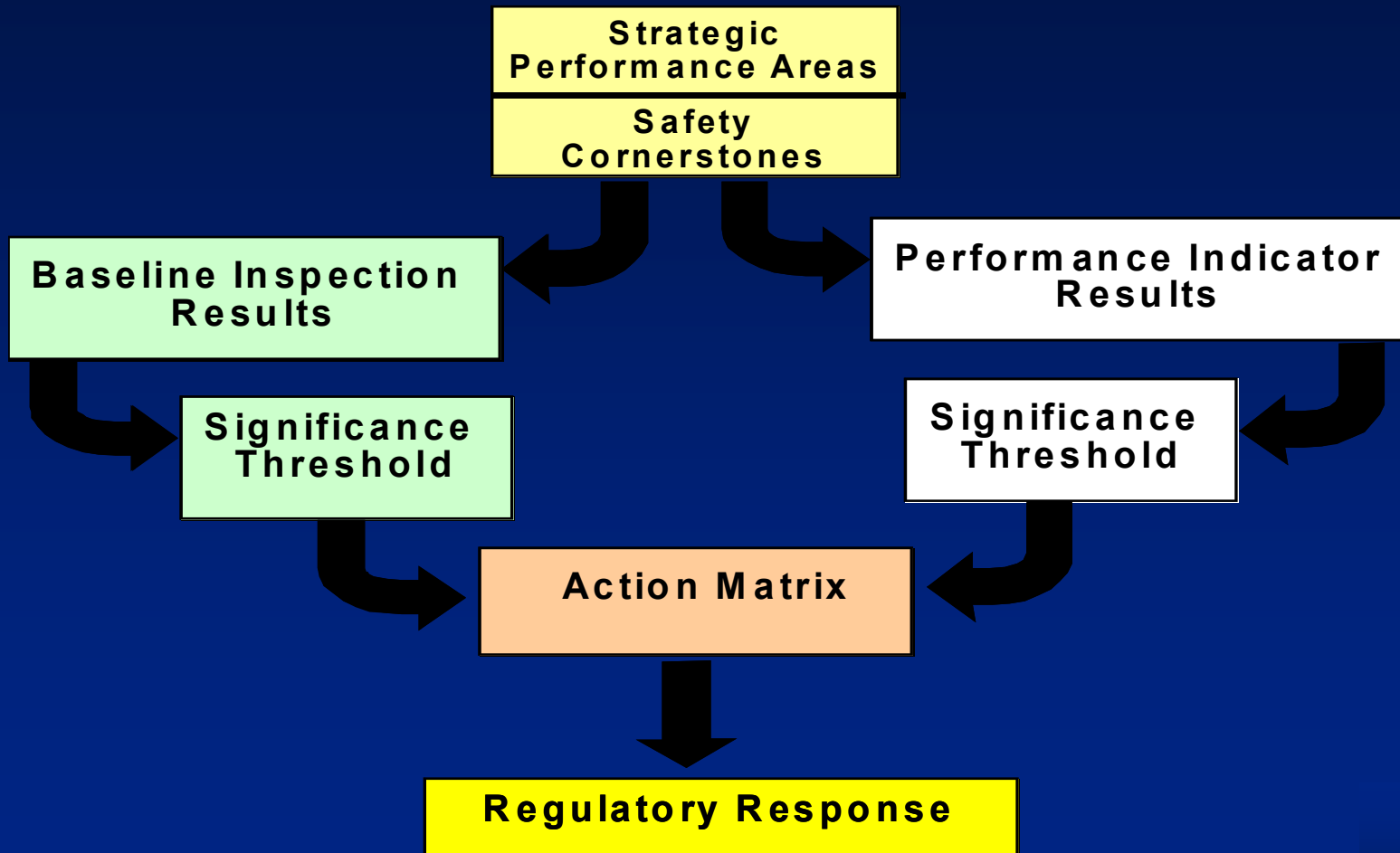
- **Safety**: Ensure adequate protection of public health and safety and the environment
- **Security**: Ensure adequate protection in the secure use and management of radioactive materials

Reactor Oversight Process

3 Strategic Areas & 7 Cornerstones



Reactor Oversight Process



Typical Baseline Inspection Areas

- **Equipment Alignment**
- **Maintenance**
- **Fire Protection**
- **Operator Response**
- **Emergency Preparedness**
- **Worker Radiation Protection**
- **Radiological Environmental Monitoring**
- **Corrective Action Program**
- **Corrective Action Case Reviews**

Significance Threshold

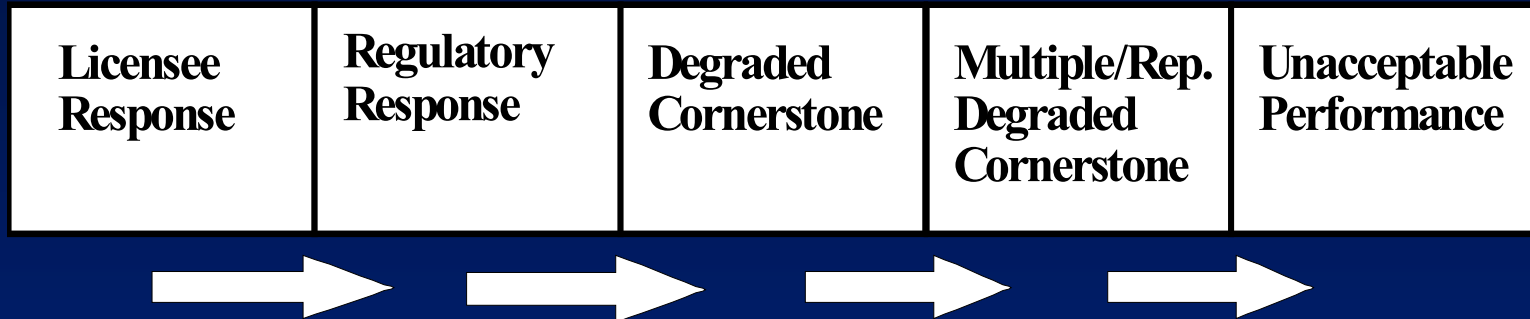
Performance Indicators

- **Green** Baseline Inspection
- **White** May increase NRC oversight
- **Yellow** Requires more NRC oversight
- **Red** Requires most 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**

National Summary of Plant Performance **(at end of 2007)**

Licensee Response	87
Regulatory Response	8
Degraded Cornerstone	8
Multiple/Repetitive Degraded Cornerstone	1
Unacceptable	0
Total	104

National Summary of Plant Performance (at end of 2007)

Performance Indicator Results

➤ Green	1954
➤ White	8
➤ Yellow	2
➤ Red	0

Total Inspection Findings

➤ Green	918
➤ White	9
➤ Yellow	2
➤ Red	0

NRC Inspection Activities at Pilgrim (for CY 2007)

- **5151 hours of inspection and related activities**
- **2 resident inspectors on-site**
- **10 regional inspections**
- **4 major team inspections:**
 - Licensed Operator Requalification**
 - Physical Security Inspection**
 - Problem Identification & Resolution**
 - Modifications / 50.59**

Pilgrim PIs / Findings

- **All Performance Indicators were Green for CY2007**
- **10 Green or Severity Level IV inspection findings for CY2007**

Example NRC Inspection Findings

- **Green – Improper calibration of a vacuum switch caused an automatic reactor scram**
- **Green – A tagging error resulted in a small (approximately 6 inch) loss of reactor inventory during the outage**
- **Green – Ineffective corrective actions resulted in recurring problems with the safety relief valves during testing**

NRC Annual Assessment Summary **Pilgrim**

- **Entergy operated the plant safely and in a manner that preserved public health and safety and protected the environment**
- **Pilgrim remained in the Licensee Response column of the NRC's Action Matrix for all four quarters of 2007**
- **All cornerstone objectives were fully met**
- **NRC plans baseline inspections at Pilgrim for the remainder of CY 2008**

Licensee Response and Remarks

Mr. Kevin Bronson
Site Vice President – Pilgrim
Entergy Nuclear Operations, Inc.

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 “News and Information” for a link to email Public Affairs**

NRC Representatives

- **James W. Clifford, Deputy Division Director, DRP**
 - (610) 337-5080
- **Raymond J. Powell, Branch Chief**
 - (610) 337-6967
- **Stephen M. Schneider, Senior Resident Inspector**
 - (508) 747-0565
- **Brian P. Smith, Resident Inspector**
 - (508) 747-0565
- **Nicole S. Sieller, Project Engineer**
 - (610) 337-5380

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)



End of the Presentation

Nuclear Regulatory Commission – Region I
King of Prussia, Pennsylvania
March 26, 2008

NRC Performance Indicators

Initiating Events PIs

- Unplanned Scrams
- Unplanned Scrams with Complications
- Unplanned Power Changes

Mitigating Systems PIs

- Emergency AC Power System
- High Pressure Injection System
- Residual Heat Removal System
- Cooling Water Support Systems
- Safety System Functional Failures

Barrier Integrity PIs

- Reactor Coolant System Specific Activity
- Reactor Coolant System Leakage

Emergency Planning PIs

- Drill / Exercise Performance
- Emergency Response Organization Participation
- Alert and Notification System

Radiation Protection PIs

- Occupational Exposure Control Effectiveness
- RETS / ODCM Radiological Effluent

Security PIs are not Publicly Available

Pilgrim Performance Indicators

Unplanned
Scrams (G)

Emergency AC
Power System (G)

RCS Specific
Activity (G)

Drill/Exercise
Performance (G)

Occupational
Exposure Control
Effectiveness (G)

RETS/ODCM
Radiological
Effluent (G)

Security
(Not Public)

Unplanned
Scrams with
Complications (G)

High Pressure
Injection System
(G)

RCS Leakage (G)

ERO Drill
Participation (G)

Unplanned Power
Changes (G)

Residual Heat
Removal System
(G)

Alert and
Notification
System (G)

Heat Removal
System (G)

Cooling Water
Systems (G)

Safety System
Functional
Failures (G)