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NRC Annual Performance Assessment of

Peach Bottom

2007 Reactor Oversight Program

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Purpose of Today's Meeting

- Discuss Peach Bottom's Plant Performance for CY 2007
- Provide Exelon 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

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Agenda

- Introduction and NRC Organization
- Review of Reactor Oversight Process (ROP)
- National Summary of Plant Performance
- Peach Bottom's Plant Performance Assessment
- Exelon Response and Remarks
- Review of NRC Actions Associated with Inattentive Security Officers
- Status of Confirmatory Action Letter (CAL) Commitments
- NRC Closing Remarks
- Break
- NRC available to address public questions

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Introduction

NRC:Region I

Marc Dapas, Deputy Regional Administrator

Paul Krohn, Chief, Division of Reactor Projects (DRP), Projects Branch 4

Fred Bower, DRP, Senior Resident Inspector

Michael Brown, DRP, Resident Inspector

Exelon

Joseph Grimes, Site Vice President, Peach Bottom

Michael Massaro, Plant Manager, Peach Bottom

Gary Stathes, Director, Operations

James Armstrong, Manager, Regulatory Assurance

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Region I Organization

Samuel J. Collins
Regional Administrator
Marc J. Dapas
Deputy Regional Administrator

David C. Lew
Director Division of Reactor Projects
James W. Clifford
Deputy Director

Marsha K. Gamberoni
Director Division of Reactor Safety
Darrell J. Roberts
Deputy Director

Paul G. Krohn
Branch Chief

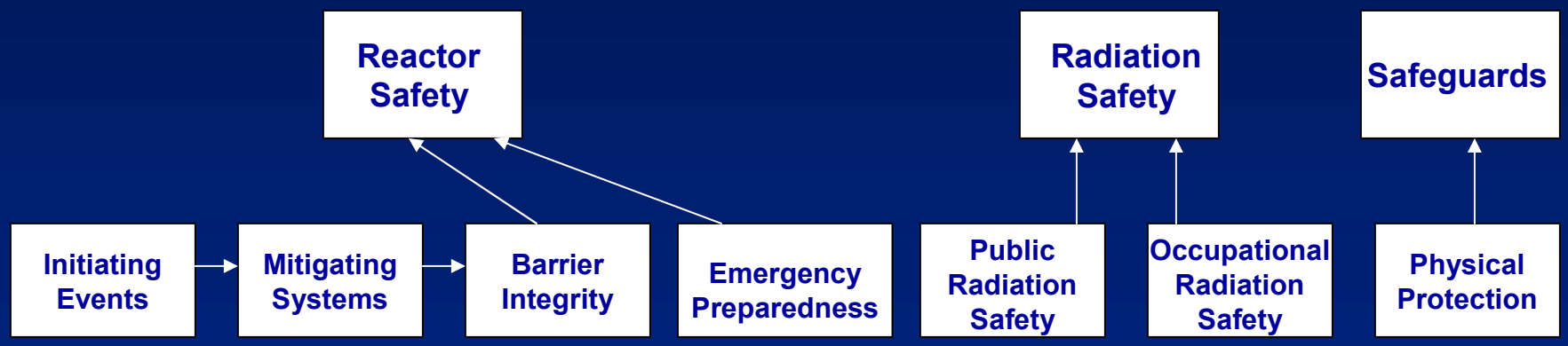
Regional Specialists
Dana Caron, Senior Security Inspector

Peach Bottom Resident Inspectors
Fred Bower – Senior RI
Michael Brown - RI

Project Engineers
Roy Fuhrmeister – Senior PE
Thomas Setzer - PE

Reactor Oversight Process

3 Strategic Areas & 7 Cornerstones



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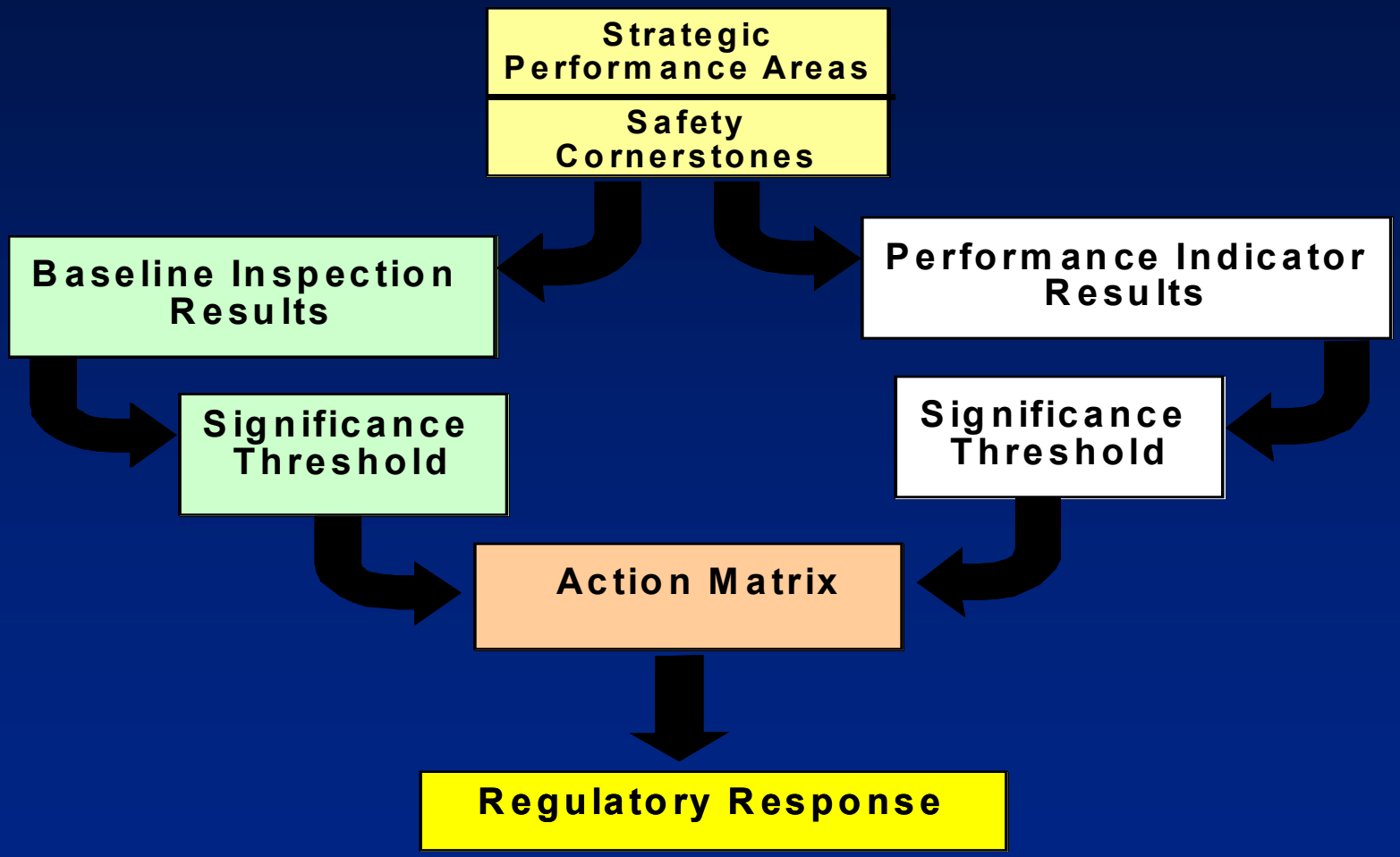
Reactor Oversight Process



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Typical Baseline Inspection Areas

- Equipment Alignment
- Maintenance
- Fire Protection
- Operator Response
- Emergency Preparedness
- Radiation Release Controls
- Worker Radiation Protection
- Corrective Action Program
- Corrective Action Case Reviews

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Significance Threshold

Performance Indicators

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

Inspection Findings

- Green — Very low safety issue
- White — Low to moderate safety issue
- Yellow — Substantial safety issue
- Red — High safety issue

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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 Involvement
- Increasing Regulatory Actions

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National Summary
(at end of 2007)

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

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National Summary
(at end of 2007)

Performance Indicator Results

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

Total Inspection Findings

- Green 919
- White 9
- Yellow 2
- Red 0

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NRC Inspection Activities at Peach Bottom

- 6720 hours of inspection and related activities
- 2 resident inspectors on-site
- 8 regional inspections
- 3 major team inspections:
  - Modifications and 50.59
  - Problem Identification and Resolution
  - Augmented Inspection Team

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Safety Significant PIs / Findings

- All Performance Indicators were Green for CY2007
- 9 Green inspection findings for CY2007
- 1 White inspection finding for CY2007 related to security

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NRC Example Inspection Findings

- Green – Inadequate implementation of work order instructions to verify correct breaker size during overhaul of an electrical load center
- Green – Technical Specification required procedure was inadequately implemented during testing when a procedure step was missed.
- Green – failure to include reactor building equipment and floor drains within the preventative maintenance program

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NRC Annual Assessment Summary Peach Bottom

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

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Licensee Response and Remarks

Mr. Joseph Grimes

Site Vice President

Peach Bottom

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Review of Inattentive Security Officer Event

Paul G. Krohn, Branch Chief

Division of Reactor Projects

NRC, Region I

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Event Background & NRC Response

- NRC made aware of videos through WCBS-TV (New York City) reporter on September 10, 2007
- NRC began enhanced oversight of security on September 10, 2007
- NRC viewed videos on September 19, 2007, which showed multiple occurrences of security officers inattentive to duty in the “ready room” of the plant between March and August 2007
- NRC commenced an Augmented Inspection Team (AIT) on September 21, 2007
- NRC issued an advisory on September 27, 2007

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Event Background & NRC Response (Cont.)

- NRC issued a Confirmatory Action Letter (CAL) on October 19, 2007
- NRC issued AIT Inspection report on November 5, 2007
- NRC commenced AIT Follow-up inspection on November 5, 2007
- NRC approved a Deviation Memo on November 28, 2007. Subsequent inspections have included:
  - Security Force Performance Monitoring (February 2008)
  - Root Cause Corrective Actions (March 2008)
  - Safety Conscious Work Environment (March 2008)
  - CAL Status (June 2008)

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Event Timeline

September 10, 2007 WCBS TV reporter contacts NRC about videos of sleeping security officers. Region I initiates enhanced monitoring.

September 19, 2007 Region I staff review videos

September 20, 2007 Region I issues AIT Charter

September 21-28, 2007 AIT conducts on-site activities

October 9, 2007 NRC conducts AIT public exit

October 19, 2007 Region I issues CAL

November 5, 2007 Region I issues AIT Report

November 5-9, 2007 Region I conducts AIT follow-up inspection

November 28, 2007 EDO approves ROP Deviation Memo

December 3, 2007 NRC conducts AIT follow-up public exit

December 21, 2007 Region I issues AIT follow-up Report

Week of 2/11/08 Region I conducts Perf. Monitoring Inspection

February 12, 2008 NRC Issues final White finding for Inattentive Sec. Offs.

March 3, 2008 Region I issues Annual Assess. Ltr.

Week of 3/3/08 Region I conducts Root Cause Corr. Action Insp.

Week of 3/24/08 Region I conducts SCWE Insp. Public exit, 4/15/08

Week of 6/2/08. CAL Status Insp.

Inattentive Security Officers

2007 Summary

- Security at the plant provided high assurance that the health and safety of the public was adequately protected at all times
- However, one White Finding was identified:
  - Inattentive officers and an ineffective Behavioral Observation program
  - Two Cross-cutting aspects: Safety Conscious Work Environment and Human Performance (Management/Supervisory Oversight)

NRC Next Steps

- Determine enforcement actions following completion of NRC review (ongoing)
- Issue publicly available CAL Status inspection report (July 2008)
- Conduct Supplemental Inspection for White finding (July 2008)
- Conduct mid-year safety performance assessment for Peach Bottom to determine if change in level of NRC response is warranted (August 2008)
- Monitor Confirmatory Action Letter commitments (ongoing)

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Status of Confirmatory Action Letter Commitments

Mr. Joseph Grimes

Site Vice President

Peach Bottom

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NRC Representatives

- Marc Dapas, Deputy Regional Administrator
  - (610) 337-5340
- Paul G. Krohn, Branch Chief, DRP
  - (610) 337-5120
- Fred Bower, Senior Resident Inspector
  - (717) 456-7614
- Michael Brown, Resident Inspector
  - (717) 456-7614

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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**
  - **Select "Public Meetings and Involvement" or "Contact Us" for Public Affairs**

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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)

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Reference Documents

- Confirmatory Action Letter (CAL) (ML072920283)
- Augmented Inspection Team (AIT) Inspection Report (ML073090061)
- Reactor Oversight Process Deviation Memorandum (ML073320344)
- Follow-Up Inspection Report (ML073550590)
- Final Significance Determination Letter (ML080440012)
- Annual Assessment Letter (ML080630190)
- Deviation Memo Performance Monitoring Report (MLxxxx)
- Deviation Memo Corrective Action Report (ML081090161)
- Deviation Memo SCWE Report (ML08140058)

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End of the Presentation

Nuclear Regulatory Commission – Region I

King of Prussia, Pennsylvania

June 9, 2008

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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

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Peach Bottom 2007 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)					