

# **NRC Annual Performance Assessment of Limerick Generating Station**

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**2006 Reactor Oversight Program**



# **U.S. NRC**

**UNITED STATES NUCLEAR REGULATORY COMMISSION**

*Protecting People and the Environment*

# Purpose of Today's Meeting

- NRC will address Limerick's performance as described in the annual assessment letter
- Exelon 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
- NRC will be available to engage interested stakeholders on performance of the plant and our role in ensuring safe plant operations

# Agenda

- Introduction and NRC Organization
- Review of NRC Reactor Oversight Process
- Regulatory Summary of National Plant Performance
- NRC Assessment of Limerick's Performance Results
- Exelon Response and Remarks
- NRC Closing Remarks
- Break
- NRC available to address public questions

# Region I Organization

Samuel J. Collins  
Regional Administrator

Marc L. Dapas  
Deputy Regional Administrator

David C. Lew  
Director Division of Reactor Projects

James W. Clifford  
Deputy Director

Paul G. Krohn  
Branch Chief

Limerick Generating Station  
Resident Inspectors  
Sam Hansell - SRI  
Carey Bickett - RI

Project Engineers  
Roy Fuhrmeister - SPE  
Thomas Setzer - PE

A. Randolph Blough  
Director Division of Reactor Safety

Marsha K. Gamberoni  
Deputy Director

Regional Specialists

# NRC Representatives

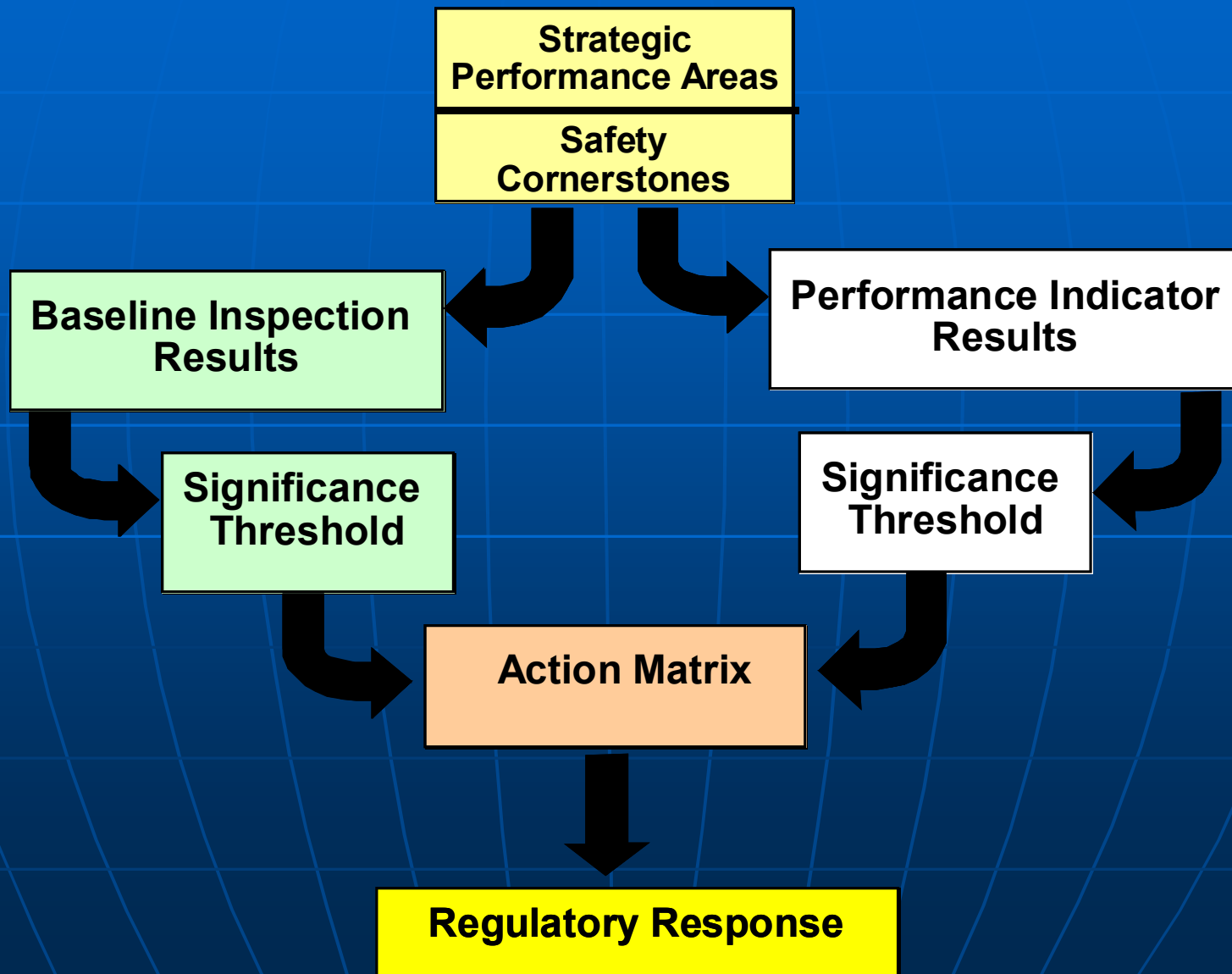
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- David C. Lew, Director, Division Reactor Projects
  - (610) 337-5229
- James W. Clifford, Deputy Division Director, DRP
  - (610) 337-5080
- Paul Krohn, Branch Chief
  - (610) 337-5120
- Peter Bamford, Project Manager, NRR
  - (301) 415-2833
- Sam Hansell, Senior Resident Inspector
  - (610) 327-1344
- Carey Bickett, Resident Inspector
  - (610) 327-1344
- Roy Fuhrmeister, Senior Project Engineer
  - (610) 337-5059

# NRC Performance Goals

- Safety: Ensure protection of the public health and safety and the environment
- Security: Ensure the secure use and management of radioactive materials
- Openness: Ensure openness in our regulatory process
- Effectiveness: Ensure that NRC actions are effective, efficient, realistic, and timely
- Management: Ensure excellence in agency management to carry out the NRC's strategic objectives

# Reactor Oversight Process



# Typical Baseline Inspection Areas

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



# Significance Threshold

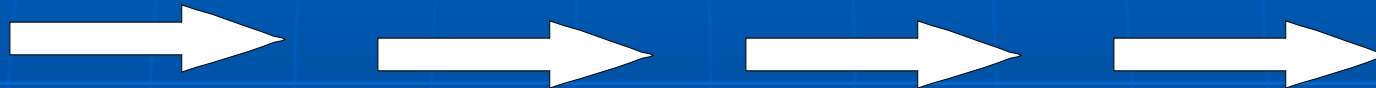
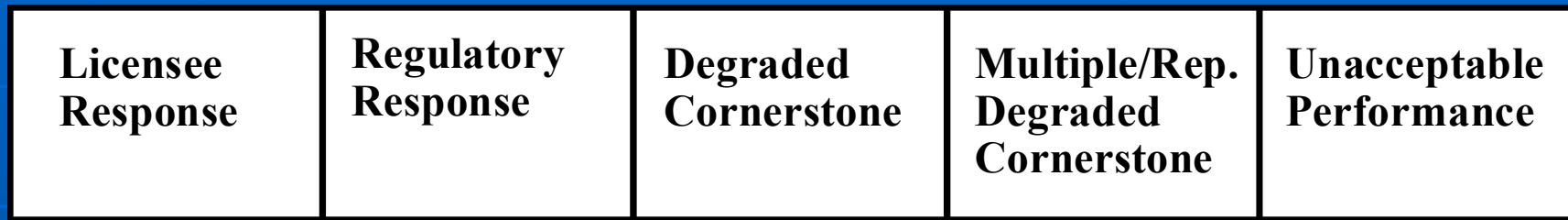
## Performance Indicators

- Green:** Only 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

# Action Matrix Concept



**Increasing Safety Significance**

**Increasing NRC Inspection Efforts**

**Increasing NRC/Licensee Management Involvement**

**Increasing Regulatory Actions**

# Regulatory Summary of National Plant Performance

Status at End of 2006

Licensee Response	73
Regulatory Response	21
Degraded Cornerstone	5
Multiple/Repetitive Degraded Cornerstone	4
Unacceptable	0
<hr/> Total	<hr/> 103

# National Summary

- Performance Indicator Results (at end of 2006)

▶ Green	1635
▶ White	11
▶ Yellow	0
▶ Red	0

- Total Inspection Findings (2006)

▶ Green	676
▶ White	19
▶ Yellow	3
▶ Red	3

# Limerick Generating Station Inspection Activities

(Jan 1 - Dec 31, 2006)

- 4855 hours of inspection and assessment related activities
- 2 resident inspectors assigned to the site
- 8 regional specialist inspections
- 1 team inspection

# Limerick Generating Station Inspection Activities

(Jan 1 - Dec 31, 2006)

- Daily Resident Inspections
- Unit 1 Refueling Outage (March 6 – March 23, 2006)
- Completed a Problem Identification and Resolution Team (PI&R) Team Inspection

# Limerick Generating Station

## Assessment Results

(Jan 1 - Dec 31, 2006)

- Exelon operated Limerick in a manner that preserved public health and safety
- All cornerstone objectives were met
- Limerick was in the licensee response column of the Action Matrix for all of 2006
- Six green inspection findings were identified during the year
- NRC plans baseline inspections for the remainder of 2007

# Limerick Generating Station

## Sample Inspection Findings

- Refueling Operations without audible source range monitor alarms
- Performance of timely corrective actions for a revision to an Offsite Electrical Power Voltage Calculation
- Implementation of effective corrective actions to correct a Residual Heat Removal System procedure deficiency



# Licensee Response and Remarks

Mr. Chris Mudrick  
Site Vice President-Limerick  
Exelon Generation LLC

# 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 “Public Meetings and Involvement”
- Paul G. Krohn, Branch Chief
  - ▶ pgk1@nrc.gov

# 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)