

Perry Annual Assessment Meeting

Reactor Oversight Process - CY 2004



Nuclear Regulatory Commission - Region III

Lisle, Illinois

April 4, 2005

Agenda

- Welcome
- Meeting Purpose
- Introduction
- NRC Senior Management Opening Remarks
- Review of Reactor Oversight Process
- National Summary of Plant Performance
- Discussion of Perry Plant Performance Results
- Licensee Response and Remarks
- NRC Closing Remarks
- Break
- NRC available to address public questions

Purpose of Today's Meeting

- A public forum for discussion of the licensee's performance
- NRC will discuss the licensee performance issues identified in the annual assessment letter
- Licensee will respond to the information in the letter and inform the NRC of new or existing programs to maintain or improve their performance

NRC Representatives

- Ellis Merschhoff, Deputy Executive Director for Reactor Programs, OEDO
- (301) 415-8710
- Jim Caldwell, Regional Administrator, RIII
- (630) 829-9657
- Steve Reynolds, Perry and Davis-Besse Oversight Manager, RIII
- (630) 829-9600
- Bill Macon, Project Manager, NRR
- (301) 415-3965
- Christine Lipa, Branch Chief, RIII
- (630) 829-9619
- Ray Powell, Senior Resident Inspector
- (440) 259-3610
- Mark Franke, Resident Inspector
- (440) 259-3610

NRC Organization

The Commission

Executive Director for Operations

Deputy Executive Director
for Materials, Research, and
State Programs

Deputy Executive
Director for Reactor
Programs

Office of the
Chief Information
Officer

Deputy Executive
Director for Management
Services

Deputy Executive Director for
Homeland Protection and
Preparedness

Office of
Enforcement

Office of Nuclear
Reactor Regulation

Office of
Investigations

Region I

Region II

Region III

Region IV

Region III Organization

James Caldwell
Regional Administrator

Geoffrey Grant
Deputy Regional Administrator

Mark Satorius
Director, Division of Reactor Projects

Steven Reynolds
Deputy Director, Division of Reactor Projects

Christine Lipa
Branch Chief

Perry Resident Inspector Office
Raymond Powell
Mark Franke
Diane Flowers

Project Engineers and Reactor Engineers
Nick Shah
Geoff Wright
Monte Phillips
Richard Smith
Gregory Roach

Cynthia Pederson
Director, Division of Reactor Safety

Roy Caniano
Deputy Director, Division of Reactor Safety

Regional Specialists

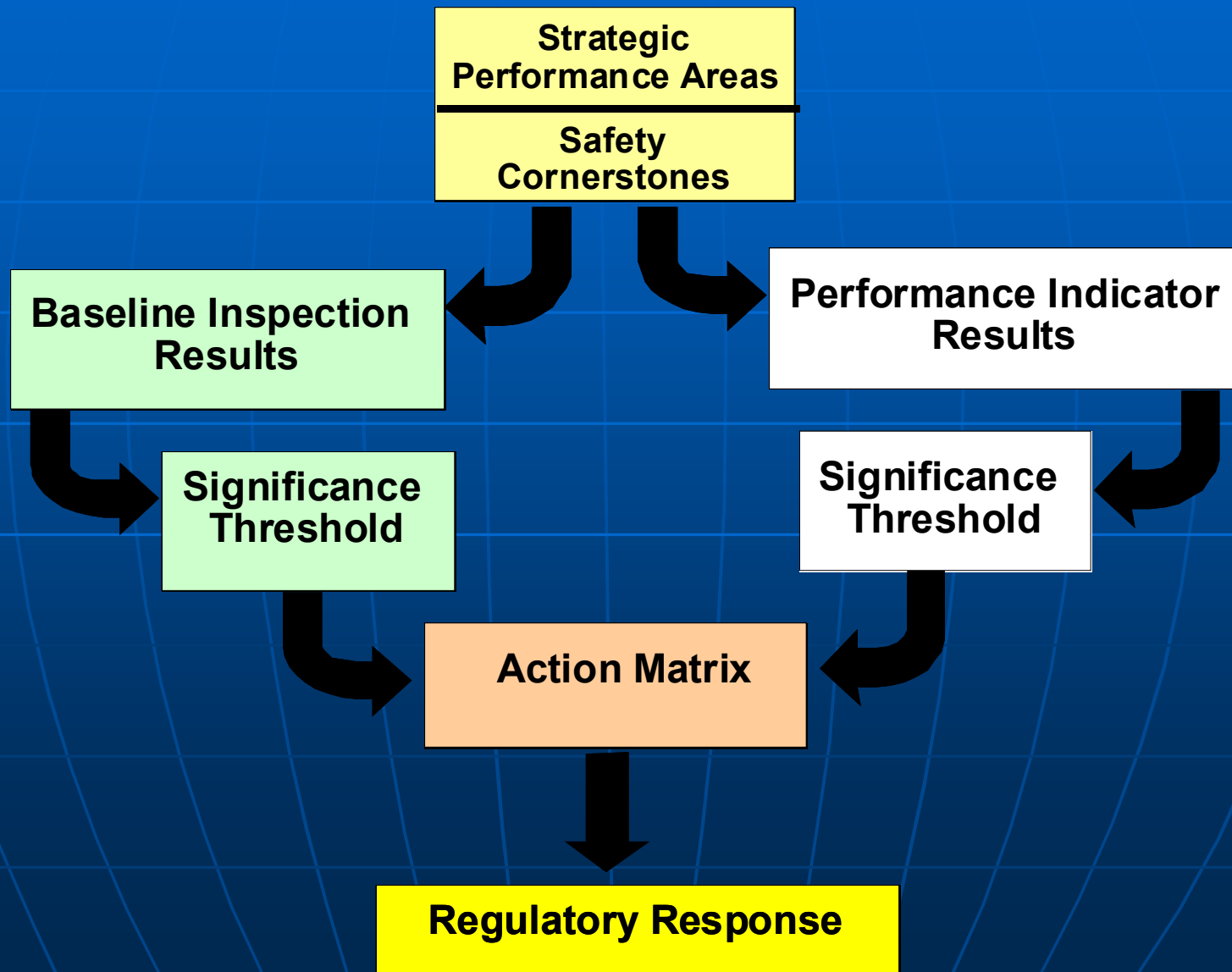
NRC Senior Management

Opening Remarks

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 objective

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 Case Reviews ~60 hrs/yr

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

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National Summary of Plant Performance

Status at End of CY 2004

| | |
|--|-------------|
| Licensee Response | 78 |
| Regulatory Response | 21 |
| Degraded Cornerstone | 0 |
| Multiple/Repetitive Degraded Cornerstone | 3 |
| Unacceptable | 0 |
| Total | 102* |

*Davis-Besse is in IMC 0350 process

National Summary

- Performance Indicator Results (at end of CY 2004)

| | |
|----------|------|
| ▶ Green | 1834 |
| ▶ White | 6 |
| ▶ Yellow | 0 |
| ▶ Red | 0 |

- Total Inspection Findings (CY 2004)

| | |
|----------|-----|
| ▶ Green | 778 |
| ▶ White | 11 |
| ▶ Yellow | 0 |
| ▶ Red | 0 |

Perry Assessment Results

January 1 - December 31, 2004

- Perry is presently in the Repetitive Degraded Cornerstone Column (IV) of the NRC's Action Matrix. In an August 12, 2004 letter, the NRC transitioned Perry to Column IV as it had entered its 5th consecutive calendar quarter with at least 2 open White findings in the Mitigating Systems cornerstone.
- Two White findings in the Mitigating Systems cornerstone remain open, Emergency Service Water (ESW) pump 'A' failure (09/2003) and Low Pressure Core Spray (LPCS) waterleg pump air binding (08/2003).

Safety Significant Findings or PIs

- On 09/01/2003, an ESW 'A' pump shaft coupling failed during routine operation. The same shaft coupling failed again on 05/21/2004. As a result, the NRC considered the corrective actions for the first occurrence to be inadequate.
- On 08/14/2003, following bus re-energization after a Loss of Offsite Power (LOOP), the LPCS waterleg (keep fill) pump became air bound rendering LPCS and Residual Heat Removal (RHR) 'A' inoperable.

Safety Significant Findings or PIs

- On July 20, 2004, Perry declared an Alert based on a high radiation indication in the Offgas system. Contrary to the Perry Emergency Plan, the licensee did not perform a required computer dose assessment within the required 15 minutes of the Alert declaration.
- This occurrence resulted in a White finding in the Emergency Preparedness cornerstone. The NRC plans to perform an IP 95001 Supplemental Inspection to review the licensee's corrective actions.

Safety Significant Findings or PIs Closed During CY 2004

- A White Performance Indicator (PI) for occupational exposure control effectiveness returned to Green at the close of the first quarter 2004, following a successful IP 95001 Supplemental Inspection. The PI initially turned White following 3 occupational exposure events which occurred during April 2003.
- A White finding in the Emergency Preparedness cornerstone was closed following a successful IP 95001 in May 2004. The finding dealt with an untimely declaration of an Alert during an April 24, 2003 spent fuel handling event.

Cross-Cutting Issues

- In an August 30, 2004 letter, the NRC identified a substantive cross-cutting issue in the area of problem identification and resolution (PI&R). This assessment was reiterated by the NRC in a March 2, 2005 letter.
- This determination was based in part on the repetitive failure of the ESW 'A' pump, missed opportunities to identify the LPCS/RHR system venting procedure deficiencies, and the need to perform multiple revisions of root cause evaluations.

Cross-Cutting Issues

- In the letter dated March 2, 2005, the NRC identified a substantive cross-cutting issue in the area of human performance.
- This finding is based in part on 11 Green findings during the review period that exhibited a common theme of failure to follow procedures and inattention to detail.

Perry Baseline Inspection Activities

January 1 - December 31, 2004

- The NRC's two resident inspectors at Perry implement the Reactor Oversight Process through the baseline inspection program on a daily basis.
- Perry's biennial Emergency Preparedness exercise was successfully completed on October 5, 2004 with full licensee, NRC, and state and local government participation.

Perry Supplemental Inspection Activities

January 1 - December 31, 2004

- During CY 2004, two IP 95001 Supplemental Inspections were performed to review licensee corrective actions concerning findings in the Occupational Radiation Safety and Emergency Preparedness cornerstones.
- The NRC performed IP 95002 from 05/2004 to 06/2004 to address the response to the ESW and LPCS White findings. The licensee's corrective actions were deemed inadequate resulting in an unsatisfactory inspection with the findings remaining open.

Perry Special Inspection Activities

January 1 - December 31, 2004

- A Special Inspection was performed following the May 21, 2004 failure of the ESW 'A' pump.
- A second Special Inspection team was formed following two reactor recirculation pump downshift events which occurred on 12/23/04 and 01/06/05.

Perry Annual Assessment Summary

January 1 - December 31, 2004

- FENOC operated Perry in a manner that preserved public health and safety.
- Cornerstone objectives were met. However, long standing issues remain in the Mitigating Systems cornerstone.
- In addition to baseline inspections at Perry, the NRC is currently performing Supplemental Inspection IP 95003 and plans to complete an IP 95001 for the new White Emergency Preparedness finding.

Licensee Response and Remarks

FENOC

NRC Senior Management

Closing Remarks

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 “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)

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