

# D.C. Cook Performance Meeting

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Supplemental Inspection - Inspection Procedure 95002 Exit Meeting



Nuclear Regulatory Commission - Region III

Lisle, Illinois

May 12, 2004

# NRC Representatives

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- Patrick Hiland, Acting Deputy Division Director, DRP
  - (630) 829-9601
- Brian Kemker, Senior Resident Inspector
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  - (269) 465-5353
- Eric Duncan, Branch Chief
  - (630) 829-9628
- Steve Burton, Inspection Procedure 95002 Team Leader
  - (763) 295-2066

# Agenda

- Review of Reactor Oversight Process
- Discussion of D.C. Cook Performance
- Inspection Procedure 95002 Inspection Results
- Licensee Response and Remarks
- NRC Closing Remarks
- NRC Available to Address Public Questions

# NRC Performance Goals

- Maintain safety and protect the environment
- Enhance public confidence
- Improve effectiveness, efficiency, and realism of processes and decision making
- Reduce unnecessary regulatory burden

# Regulatory Framework

NRC's Overall  
Safety Mission

**PUBLIC HEALTH AND SAFETY  
AS A RESULT OF CIVILIAN  
NUCLEAR REACTOR  
OPERATION**

Strategic  
Performance  
Areas

**REACTOR  
SAFETY**

**RADIATION  
SAFETY**

**SAFEGUARDS**

Cornerstones

**INITIATING  
EVENTS**

**MITIGATING  
SYSTEMS**

**BARRIER  
INTEGRITY**

**EMERGENCY  
PREPAREDNESS**

**PUBLIC  
RADIATION  
SAFETY**

**OCCUPATIONAL  
RADIATION  
SAFETY**

**PHYSICAL  
PROTECTION**

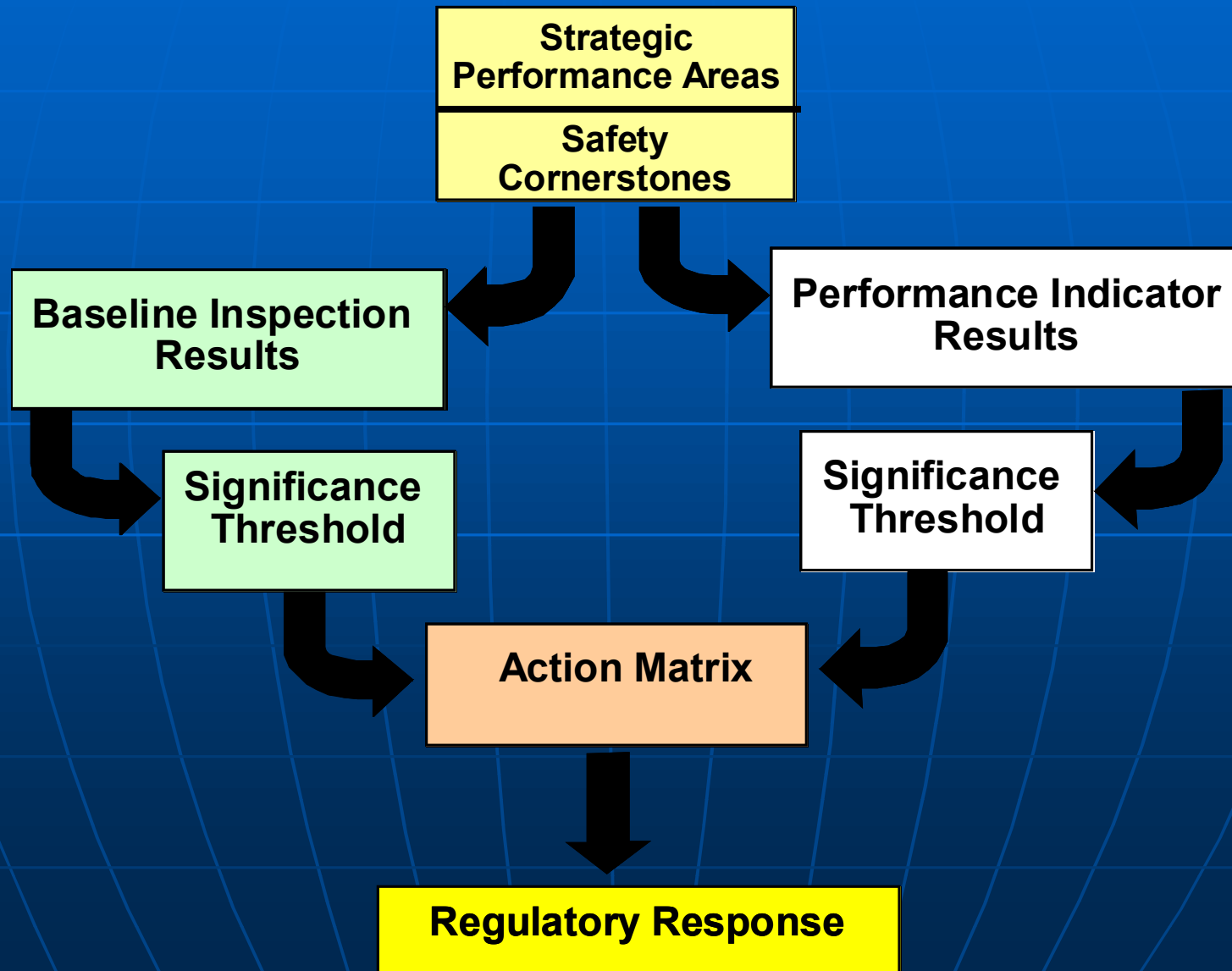
**HUMAN  
PERFORMANCE**

**SAFETY CONSCIOUS  
WORK ENVIRONMENT**

**PROBLEM IDENTIFICATION  
AND RESOLUTION**

**Cross-Cutting Areas**

# Reactor Oversight Process



# Significance Threshold

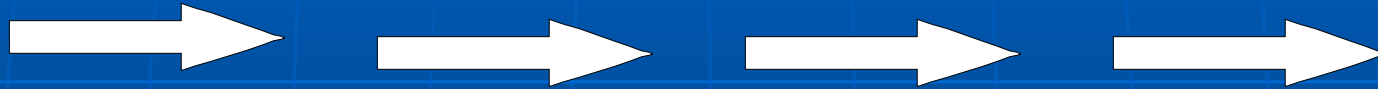
## Performance Indicators

- 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**



# Purpose of Today's Meeting

- Provide a public forum for the discussion of D.C. Cook performance
- NRC to discuss D.C. Cook performance issues identified during the IP 95002 inspection
- D.C. Cook management will respond to the information presented and inform the NRC of new or existing programs to maintain or improve their performance

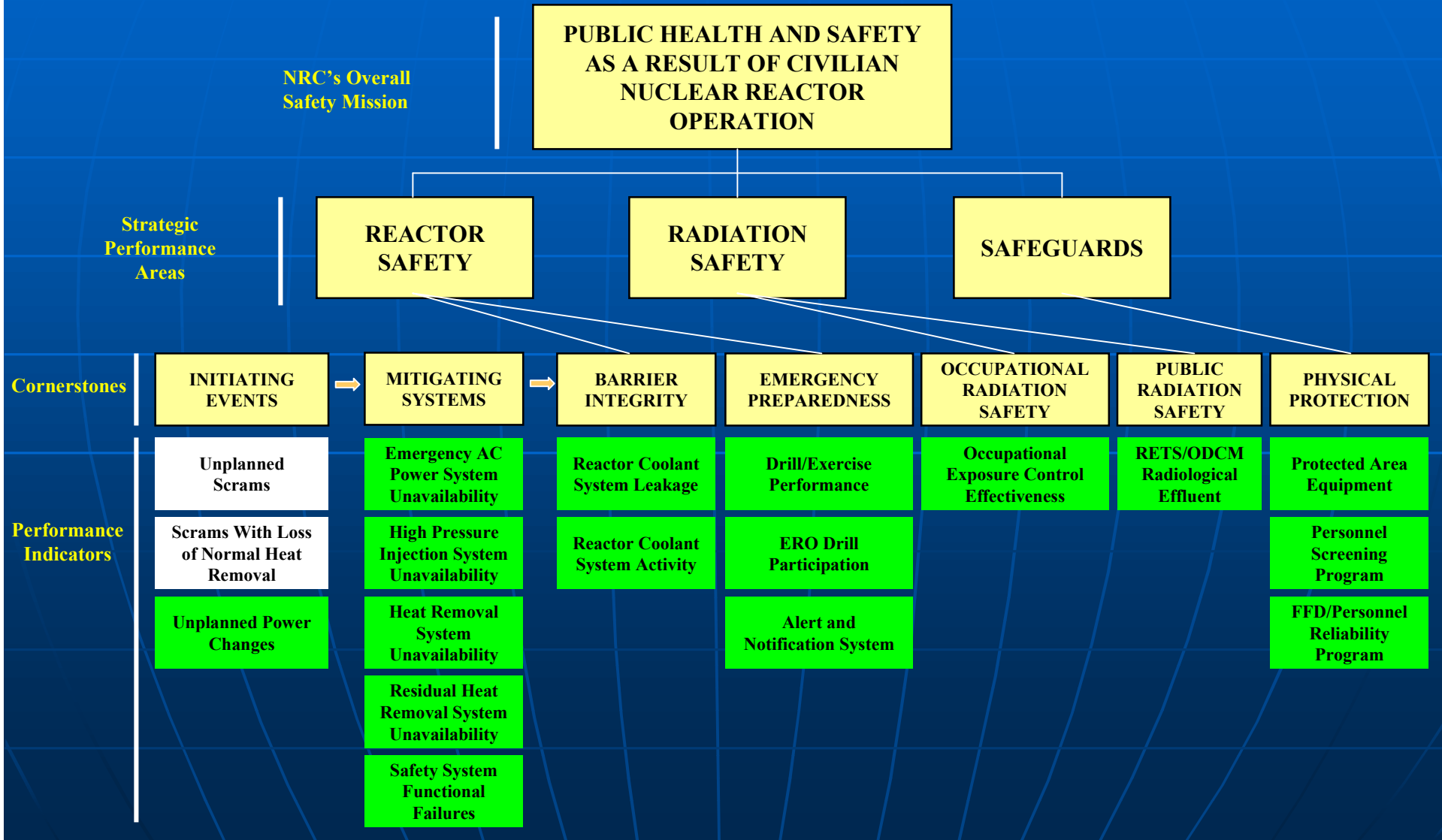
# D.C. Cook Performance Summary

- AEP has operated D.C. Cook in a manner that preserves public health and safety. All cornerstone objectives are being met.
- Unit 1 is in the Regulatory Response column of the Action Matrix.
- Unit 2 is in the Degraded Cornerstone column of the Action Matrix. Two Unit 2 White performance indicators at the end of the assessment period represented a moderate degradation in safety performance.
- One substantive cross-cutting issue in the Problem Identification and Resolution area remains open.
- NRC continues to conduct baseline inspections at D.C. Cook for the assessment period and performed a supplemental inspection to review the White performance indicators.

# White Performance Indicators

- Two Unit 2 White performance indicators in the Initiating Events cornerstone were identified during the 2003 assessment period placing Unit 2 in the Degraded Cornerstone column of the Action Matrix.
- A White performance indicator in the Unplanned Scrams Per 7000 Critical Hours area was identified in 4Q03.
- A White performance indicator in the Scrams With Loss of Normal Heat Removal area was first identified in 2Q03 and updated in 4Q03 to reflect crossing the Green/White threshold in 3Q02.

# D.C. Cook Performance Indicators



## D.C. Cook Supplemental Inspection Activities

- A Supplemental Inspection to review the Scrams With Loss of Normal Heat Removal White performance indicator was conducted in accordance with IP 95001, “Inspection For One or Two White Inputs in a Strategic Performance Area,” and was completed on November 21, 2003.
- A Supplemental Inspection to review the White finding in the Public Radiation cornerstone of the Radiation Safety Strategic Performance Area in accordance with IP 95001 is in progress and scheduled to be completed next week.

# D.C. Cook Supplemental Inspection Activities

- A Supplemental Inspection to collectively review the Scrams With Loss of Normal Heat Removal and Unplanned Scrams Per 7000 Critical Hours White performance indicators was conducted from April 19 to April 30, 2004
- Inspection conducted in accordance with IP 95002, “Inspection For One Degraded Cornerstone Or Any Three White Inputs On A Strategic Performance Area”

# D.C. Cook Inspection Procedure 95002

## Inspection Objectives

- To provide assurance that the root causes and contributing causes are understood for the individual and collective performance issues.
- To independently assess the extent of condition and the extent of cause for the individual and collective performance issues.
- To provide assurance that licensee corrective actions for the performance issues are sufficient to address the root causes and contributing causes, and to prevent recurrence.

# D.C. Cook Inspection Procedure 95002

## Inspection Results

- The issues were inspector-identified and self-revealing
- The issues were evaluated from a risk perspective
- Prior trends were not evaluated with respect to the collective nature of the scrams
- Prior opportunities for identifying the causal factors for the scrams were not recognized
- A systematic method was used for evaluating the causal factors
- The evaluation was completed at a level of detail commensurate with the safety significance of the issue



# D.C. Cook Inspection Procedure 95002

## Inspection Results

- Corrective actions to address the contributing causes were appropriate
- Integration of corrective action items with the recovery plan was inconsistent
- Traditional schedules for completion & measures for success had not been established
- Key performance indicators and managerial controls were established that could be effective in managing the corrective actions
- The inspectors extent of condition and extent of cause review identified no significant deficiencies

# D.C. Cook Inspection Procedure 95002

## Inspection Results

### Summary

- Proper integration of the recovery plan and the corrective action program is paramount to ensure success with correcting the identified causal factors
- Of the causal factors identified, a common denominator was an ineffective corrective action program
- Plant events not collectively evaluated to identify corrective actions to improve plant performance

# Licensee Response and Remarks

Joseph Jensen

Site Vice-President

Indiana Michigan Power Company

# 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.html>

- Public Document Room

- ◆ 1-800-397-4209 (Toll Free)

# Public Comment Opportunity