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Davis-Besse Annual Assessment Meeting

Reactor Oversight Program - CY 2007

Davis-Besse Nuclear Power Plant

Oak Harbor, OH

May 13, 2008

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Purpose of Today's Meeting

- A public forum for discussion of the licensee's performance
- NRC will address the licensee performance issues identified in the annual assessment letter
- Licensee 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

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Agenda

- Introduction
- Review of Reactor Oversight Process
- National Summary of Plant Performance
- Discussion of Plant Performance Results
- Licensee Response and Remarks
- NRC Closing Remarks
- Break
- NRC available to address public questions

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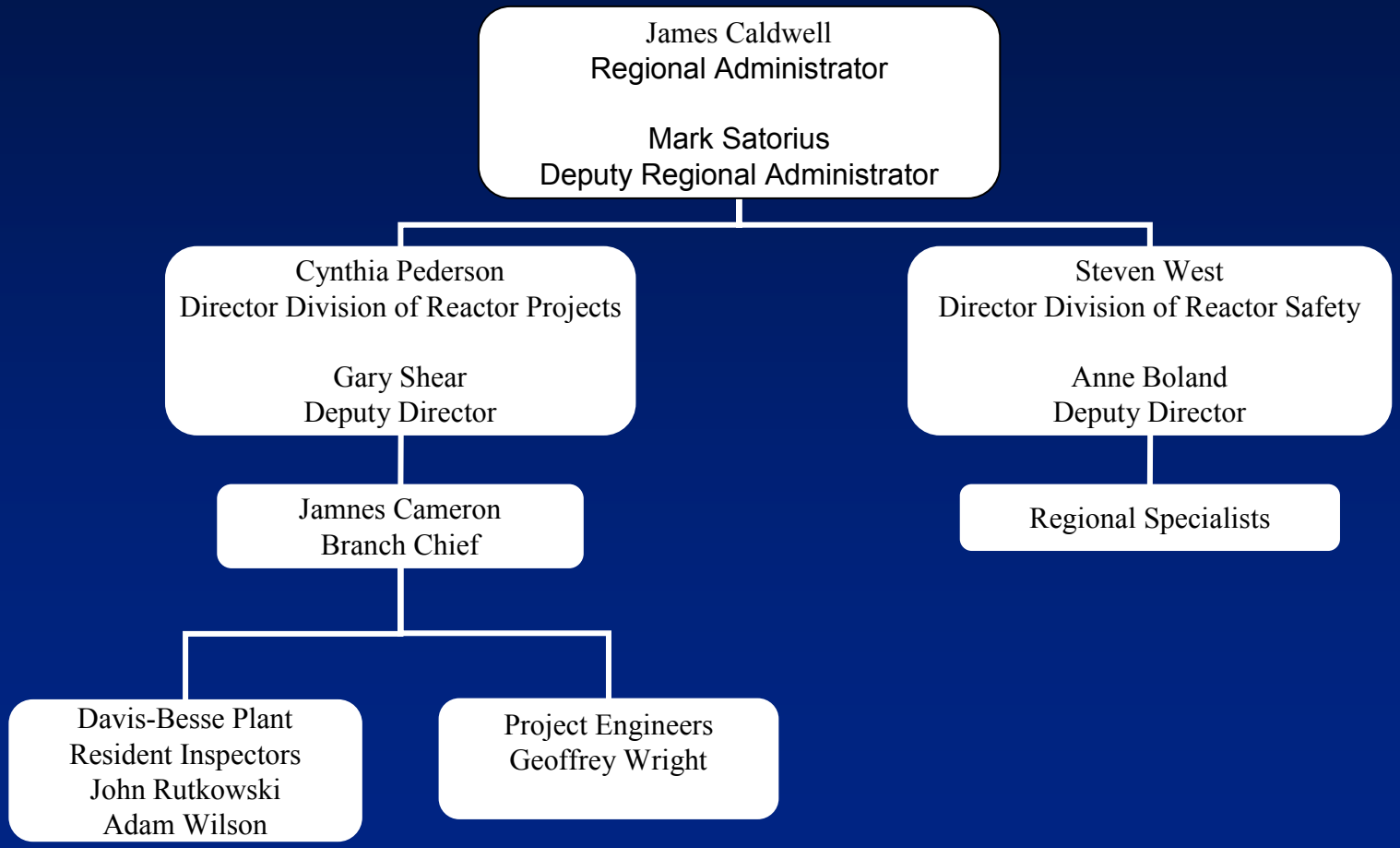
Region III Organization



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NRC Representatives

- Jamnes Cameron, Branch Chief
  - (630) 829-9833
- John Rutkowski, Senior Resident Inspector
  - (419) 244-4494
- Adam Wilson, Resident Inspector
  - (419) 244-4494

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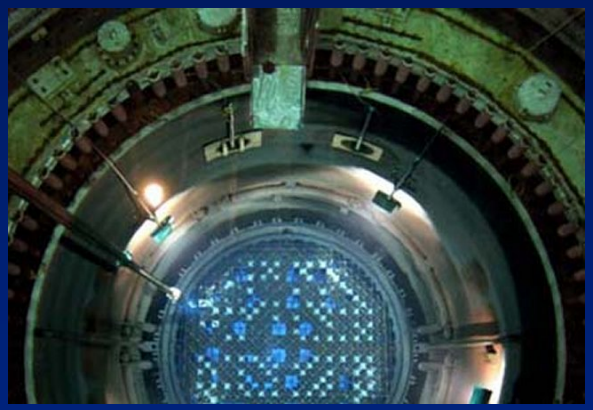
Our Mission



To license and regulate the nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

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Some Nuclear Facts

- More than 100 nuclear power plants supply about 20 percent of the electricity in the U.S.
- Nuclear materials are used in medicine for cancer treatment and diagnosis.
- Nuclear materials are widely used in industry, such as in density gauges, flow measurement devices, radiography devices, and irradiators.

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The NRC Regulates:

- Nuclear reactors - commercial power reactors, research and test reactors, new reactor designs;
- Nuclear materials - nuclear reactor fuel, radioactive materials for medical, industrial and academic use;
- Nuclear waste – transportation, storage and disposal of nuclear material and waste, decommissioning of nuclear facilities; and
- Nuclear security – physical security of nuclear facilities and materials from sabotage or attacks.

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What we don't do:

- Regulate nuclear weapons, military reactors or space vehicle reactors
- Own or operate nuclear power plants.
- Regulate some radioactive materials, such as naturally occurring radon and X-rays.

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How We Regulate

- Establish rules and regulations
- Issue licenses
- Provide oversight through inspection, enforcement, and evaluation of operational experience
- Conduct research to support regulatory decisions
- Respond to events and emergencies

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Assurance of Plant Safety

- Require "defense-in-depth"
- Require long-term maintenance of equipment
- Require continual training of operators
- Verify compliance with regulations

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What We Do – Nuclear Waste

The NRC regulates:

- Storage of spent reactor fuel in fuel pools or dry storage casks, and
- A national spent fuel storage site—Yucca Mountain

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What We Do – Nuclear Security

NRC requires:

- Well-armed and well-trained security forces;
- Surveillance and perimeter patrols;
- State-of-the-art site access equipment and controls;
- Physical barriers and detection zones; and
- Intrusion detection systems and alarm stations

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NRC Performance 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.

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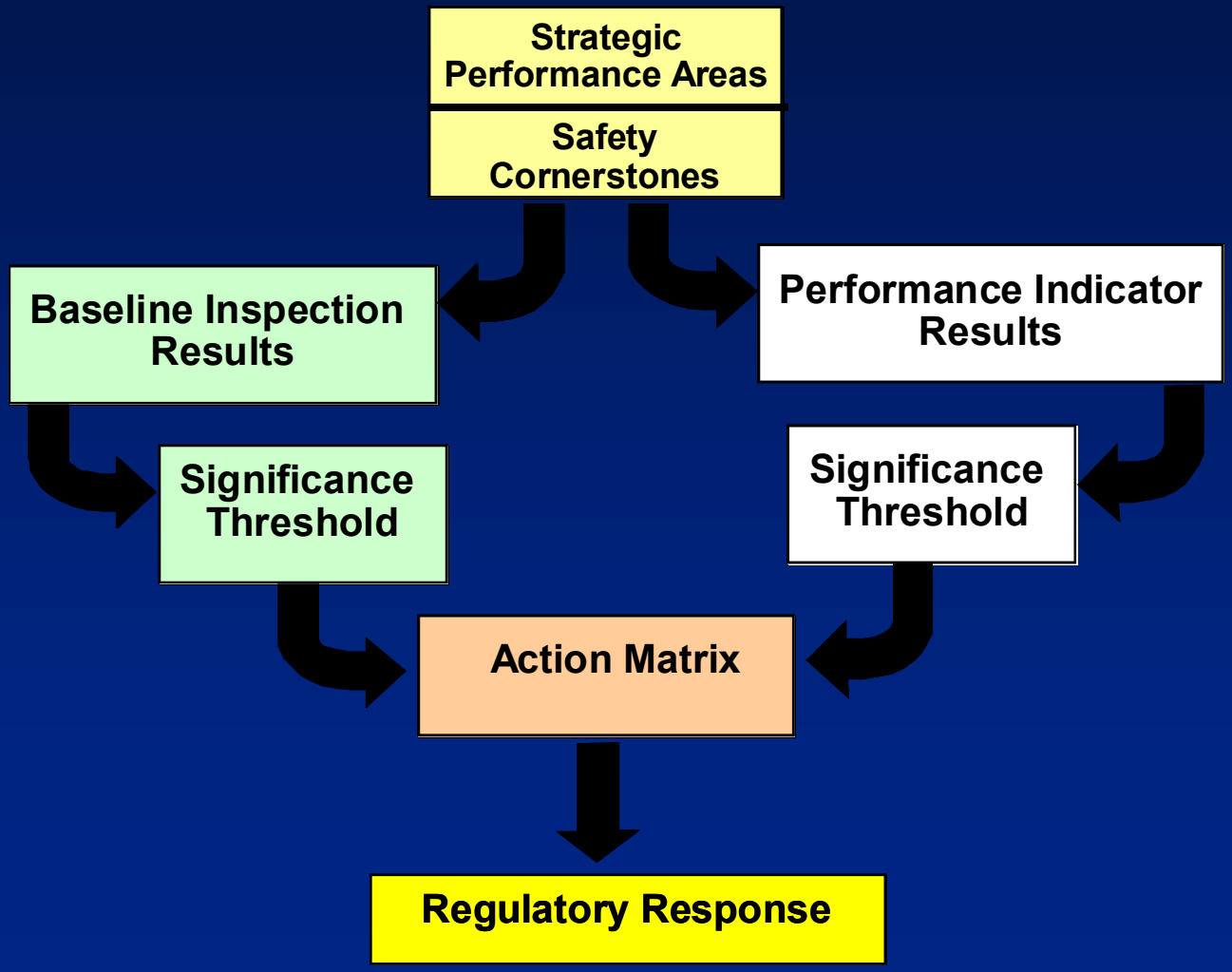
Reactor Oversight Process



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Examples of Baseline Inspections

- Equipment Alignment ~80 hrs/yr
- Triennial Fire Protection every 3 yrs ~250 hrs
- Operator Response ~125 hrs/yr
- Emergency Preparedness ~80 hrs/yr
- Average total hours for a single PWR plant 3808 hrs/yr

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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

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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 of Plant Performance

Status at End of CY 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

- Performance Indicator Results (at end of CY 2007)
  - Green 1942
  - White 8
  - Yellow 1
  - Red 0
- Total Inspection Findings (CY 2007)
  - Green 759
  - White 9
  - Yellow 2
  - Red 0

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Davis-Besse Assessment Results

(Jan 1 - Dec 31, 2007)

- Licensee Response column of Action Matrix
- March ’04, July ’05, August ’07 Confirmatory Orders
- Findings with Human Performance cross-cutting aspects

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Safety Significant Findings or PIs

- No greater than Green findings or PI's

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Davis-Besse Inspection Activities

(Jan 1 - Dec 31, 2007)

- 100% Baseline Inspection Completion
  - Resident Inspectors
  - Region-based Inspectors
  - RPV Head follow-up inspections
  - 15 Green Findings (baseline inspections)
    - 5 resulted from Component Design Basis Inspection Nov 2007
- Supplemental Inspections

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Davis-Besse Miscellaneous Activities

(Jan 1 - Dec 31, 2007)

- 8/15/07 Confirmatory Order
  - DFI regarding Exponent Report differences on cause of RPV head degradation
  - Special training required for selected FirstEnergy and FENOC individuals
  - Independent Assessment of training effectiveness in ’08 and ’09

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Davis-Besse
Annual Assessment Summary

January 1 - December 31, 2007

- FENOC operated the Davis-Besse Plant in a manner that preserved public health and safety
- All cornerstone objectives were met with no greater than Green findings or PI's
- Baseline inspections at Davis-Besse for the remainder of the assessment period
- Continue supplemental inspections for '04 and '07 Confirmatory Orders.

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Licensee Response and Remarks

Barry S. Allen
Site Vice President
FirstEnergy Nuclear Operating Company

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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 “What We Do” 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)