

***Palisades Nuclear Plant
Annual Assessment
Meeting***

**South Haven, Michigan
May 5, 2011**

Reactor Oversight Process – 2010

**Nuclear Regulatory Commission - Region III
Lisle, Illinois**



Purpose of Today's Meeting

- **A public forum for discussion of the licensee's performance in 2010**
- **NRC will address the performance issues identified in the annual assessment letter**
- **Licensee will be given the opportunity to respond and inform the NRC of new or existing programs to maintain or improve performance**

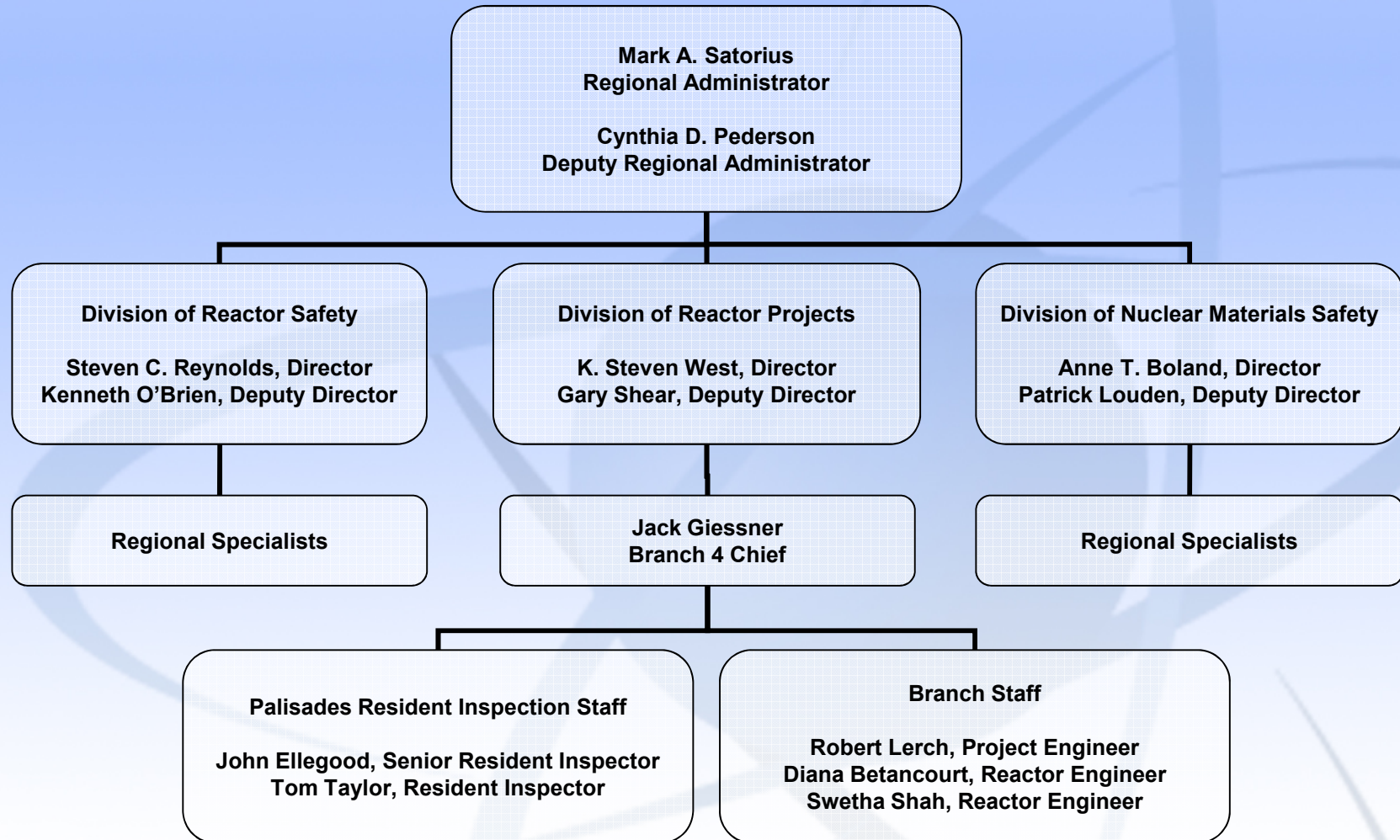


Agenda

- **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**



Region III Organization





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.**



Some Nuclear Facts



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





How We Regulate

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

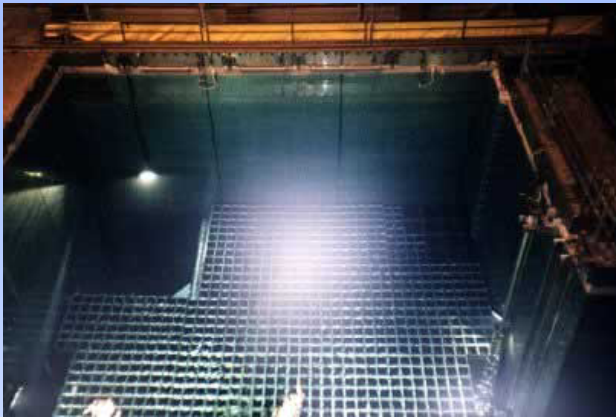


Assurance of Plant Safety

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



What We Do – Nuclear Waste



- **The NRC regulates:**
 - **Storage of spent reactor fuel in fuel pools or dry storage casks, and**
 - **Any national spent fuel storage site, when a storage site is determined.**



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.

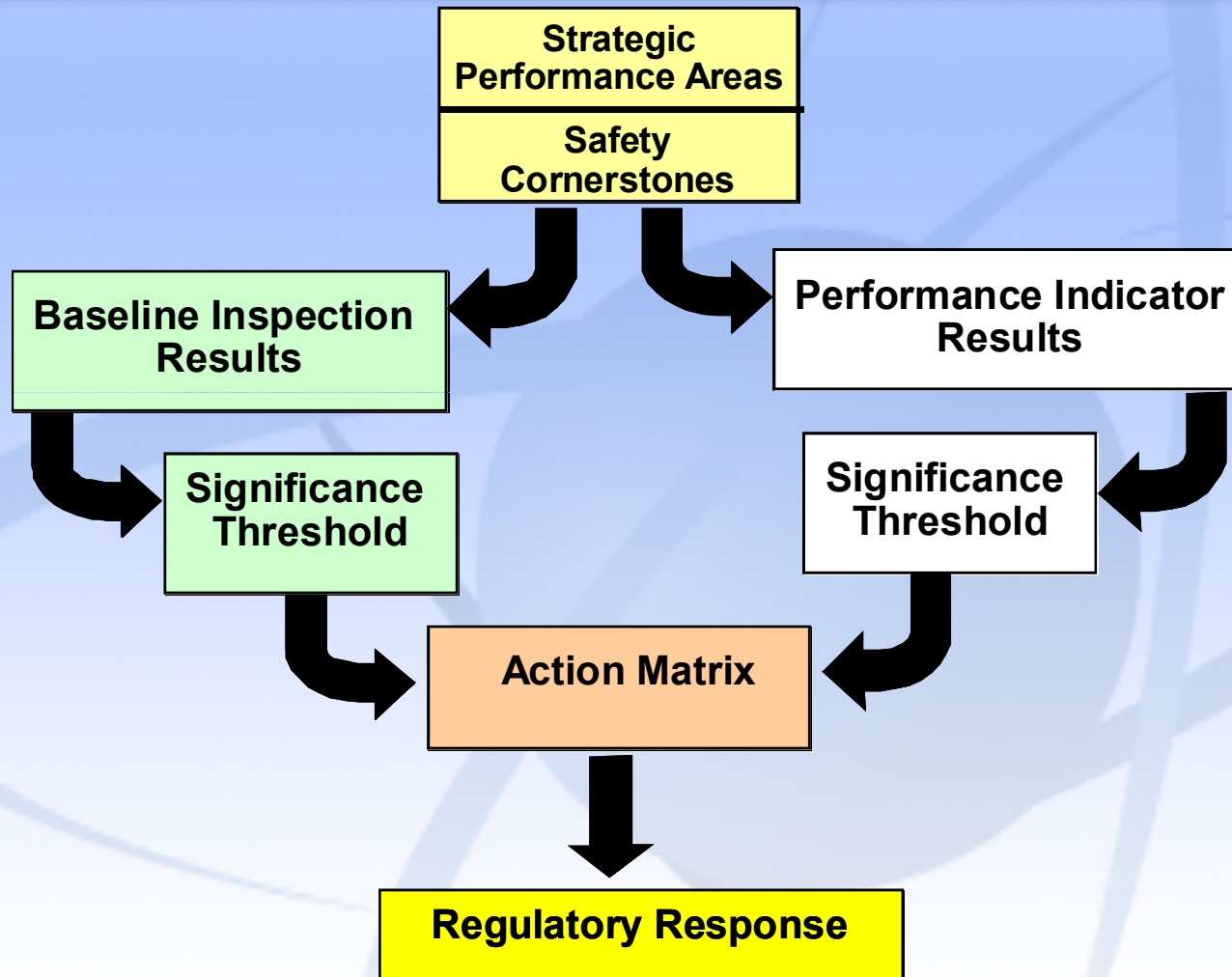


NRC Performance Goals

- **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.



Reactor Oversight Process





Examples of Baseline Inspections

- **Equipment Alignment** ~80 hrs/yr
- **Triennial Fire Protection** ~250 hrs every 3 yrs
- **Operator Response** ~125 hrs/yr
- **Emergency Preparedness** ~80 hrs/yr
- **Rad Release Controls** ~110 hrs every 2 yrs
- **Worker Radiation Protection** ~95 hrs/yr
- **Corrective Action Program** ~250 hrs every 2 yrs
- **Corrective Action Case Reviews** ~60 hrs/yr



Significance Threshold

Performance Indicators

- Green:** Only Baseline Inspection
- White:** Increases NRC oversight
- Yellow:** Increases NRC oversight
- Red:** Increases 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

Licensee Response I	Regulatory Response II	Degraded Cornerstone III	Multiple/Rep Degraded Cornerstone IV	Unacceptable Performance V
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Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Involvement

Increasing Regulatory Actions



National Summary of Plant Performance

Status as of 12/31/2010

Licensee Response	89
Regulatory Response (Palisades for 3 Qtrs)	9
Degraded Cornerstone	6
Multiple/Repetitive Deg. Cornerstone	0
Unacceptable	0
Total	104



National Summary

- **Performance Indicator Results for 2010***

– Green	7009
– White	23
– Yellow	0
– Red	0

*PI's are counted per plant per quarter

- **Total Inspection Findings in 2010**

– Green	816
– White	9
– Yellow	2
– Red	0

Finding data current as of 3/3/2011



Palisades Assessment Results

January 1 - December 31, 2010

- **Palisades was in the Regulatory Response Column for the first three quarters of 2010.**
- **Palisades was in the Licensee Response Column for the fourth quarter of 2010.**
- **The Spent Fuel Pool White Finding was closed after a 95001 Supplemental Inspection in September 2010.**



Safety Significant Findings or PIs

- **All Findings and Performance Indicators (PIs) were of very low safety significance (Green).**



Palisades Inspection Activities

January 1 - December 31, 2010

- **The two resident inspectors and regional specialists conducted over 2,145 hours of inspection and related activities at Palisades. There were ten Region III inspections.**
- **There were two major team inspections- a Problem Identification and Resolution Inspection and a Triennial Fire Protection Inspection**



Palisades Inspection Activities

January 1 - December 31, 2010

- **March 1 – March 5 : Baseline Emergency Preparedness Inspection**
 - **Inspection Report 2010502**
 - **Green Non-Cited Violation for failure to complete an independent review of all program elements of the Emergency Preparedness program.**

- **September 13 – September 17 : 95001 Supplemental Inspection**
 - **Inspection Report 2010009**
 - **Conducted in response to the White finding for failure to evaluate spent fuel pool rack swelling**



Palisades Inspection Activities

January 1 - December 31, 2010

- **January 11 – January 28 : Problem Identification and Resolution Inspection**
 - **Inspection Report 2010006**
 - **No findings**

- **August 5 – September 3 : Triennial Fire Protection Baseline Inspection**
 - **Inspection Report 2010008**
 - **No findings**



Palisades Annual Assessment Summary

January 1 - December 31, 2010

- **Palisades operated in a manner that preserved public health and safety**
- **All cornerstone objectives were met .**



Palisades Annual Assessment Summary

January 1 - December 31, 2010

- **NRC plans baseline inspections at Palisades for 2011**



Licensee Response and Remarks

Palisades Nuclear Plant Entergy Nuclear Operations, Inc. Representatives



Open to the Public

- **The NRC places a high priority on keeping the public and stakeholders informed of its activities.**
- **At www.nrc.gov, you can:**
 - **Find public meeting dates and transcripts;**
 - **Read NRC testimony, speeches, press releases, and policy decisions; and**
 - **Access the agency's Electronic Reading Room to find NRC publications and documents.**



What Do You Think of the ROP???

The biennial ROP external survey is coming 3rd Quarter 2011, and we want to hear from you!

Email ROPsurvey@nrc.gov to be notified when the ROP survey is available.

For information on ROP stakeholder feedback, please visit our website at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/program-evaluations.html#section3>



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



NRC Representatives

- **John “Jack” Giessner, Branch Chief, Division of Reactor Projects**
- **(630) 829-9619**
- **John Ellegood, Senior Resident Inspector**
- **(269) 764-8971**
- **Tom Taylor, Resident Inspector**
- **(269) 764-8972**
- **Mahesh “Mac” Chawla, Project Manager, NRR**
- **(301) 415-8371**



NRC Representatives

- **Rhex Edwards, Reactor Inspector, Materials Control, ISFSI, and Decommissioning**
 - **(630) 829-9722**
- **Viktorija Mitlyng, Public Affairs Officer**
 - **(630) 829-9662**
- **AnnMarie Stone, Branch Chief, Division of Reactor Safety**
 - **(630) 829-9729**
- **NRC Region III Office Switchboard**
 - **(630) 829-9500 / (800) 522-3025**



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)