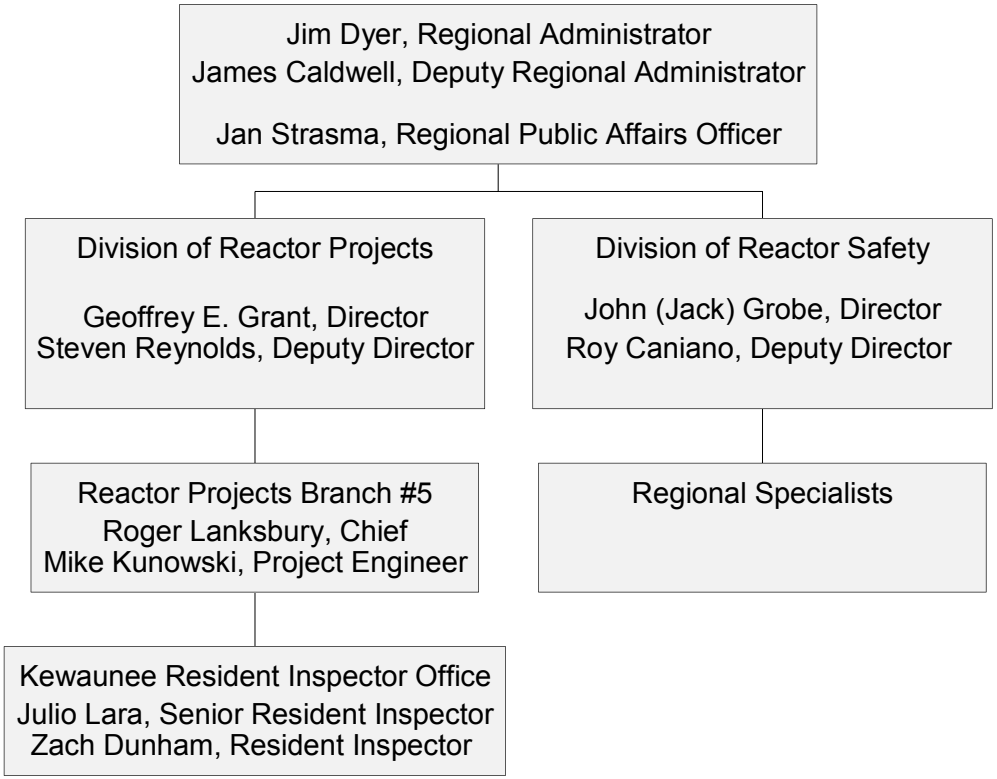
ANNUAL ASSESSMENT MEETING

Nuclear Regulatory Commission

Agenda

- Introduction
- Review of Reactor Oversight Process
- Discussion of Plant Performance Results
- Licensee Response and Remarks
- NRC Closing Remarks
- Meeting with the Licensee adjourned
- NRC available to address questions from the public

Region III Organization



NRC Representatives

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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/adams.html

Public Document Room

1-800-397-4209 (Toll Free)

NRC Activities

- Ensure nuclear plants are designed, constructed, and operated safely
- Issue licenses for the peaceful use of nuclear materials in the U.S.
- Ensure licensees use nuclear materials and operate plants safely, and are prepared to respond to emergencies

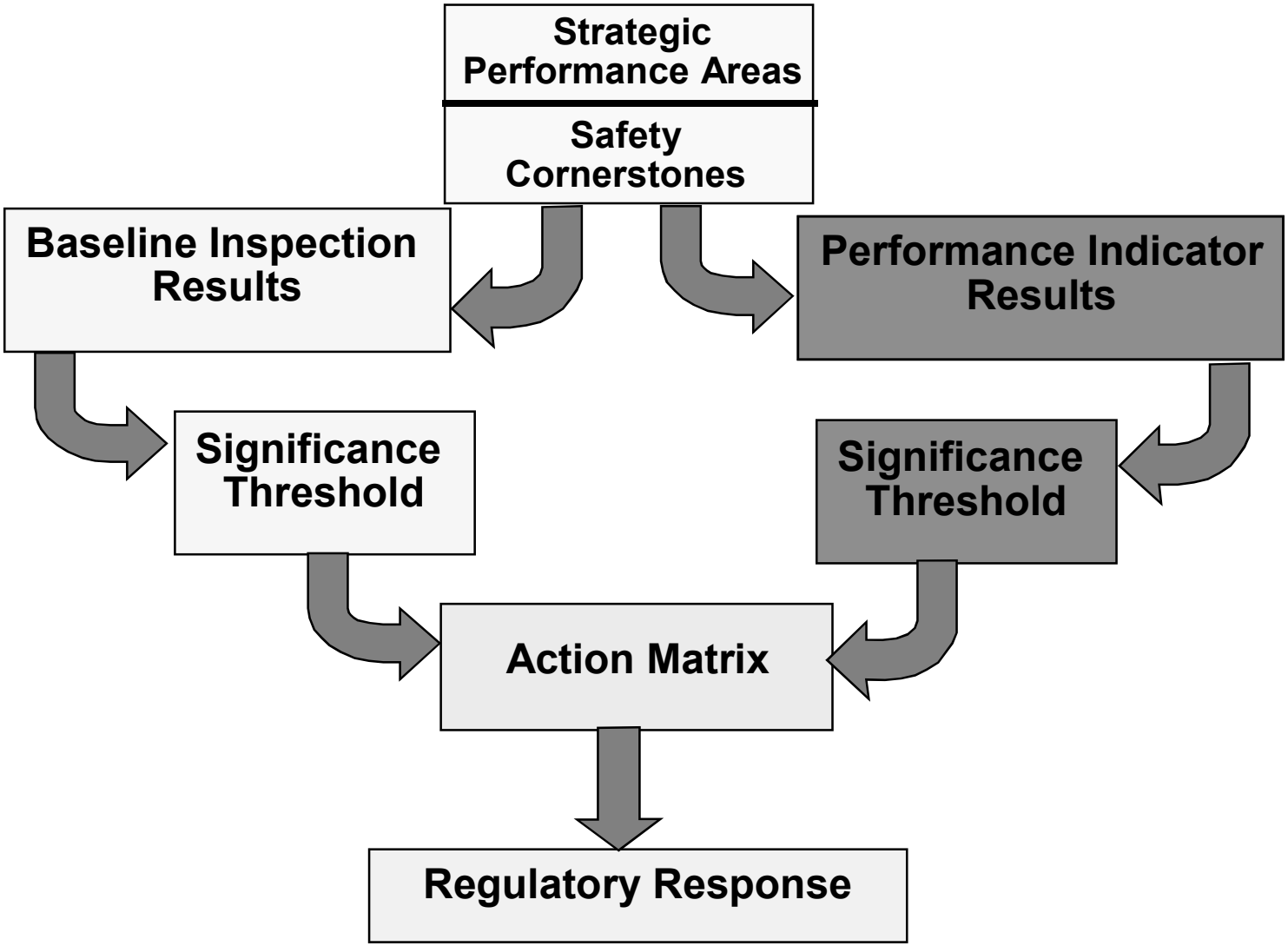
NRC Performance Goals

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

NRC Oversight Activities

- Provides assurance plants are operating safely and in accordance with the regulations
- Risk informed process
- Objective indicators of performance
- Inspections focused on key safety areas
- Defines expected NRC and licensee actions

Reactor Oversight Process



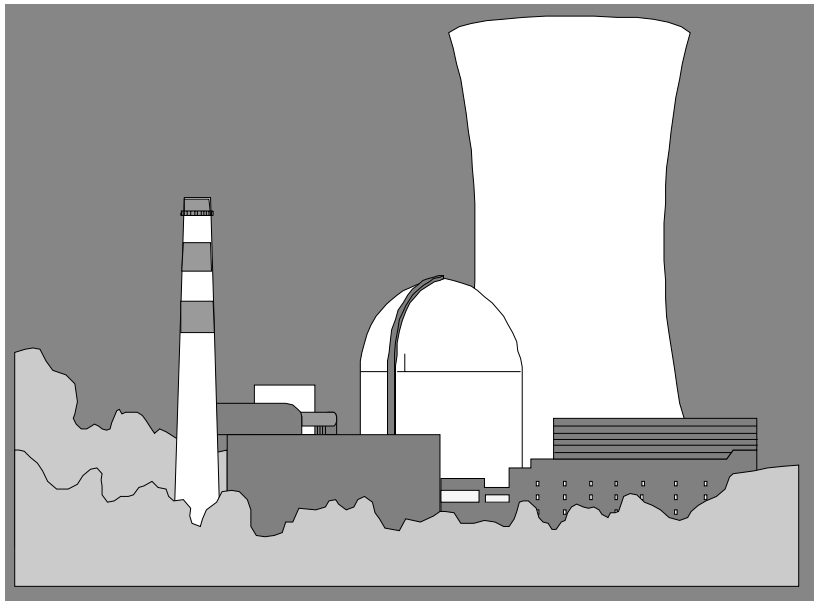
Strategic Performance Areas
Safety Cornerstones

- Reactor Safety
  - Initiating Events
  - Mitigating Systems
  - Barrier Integrity
  - Emergency Preparedness
- Radiation Safety
  - Occupational Radiation Safety
  - Public Radiation Safety
- Safeguards
  - Physical protection

NRC Resident and Regional Inspectors Conduct Safety Inspections

Baseline Inspections at all reactor sites to monitor plant safety performance in each of the Strategic Performance Areas

Event Follow-up and Supplemental Inspections when required



Key Aspects of Baseline Inspection Program

- Conducted at all plants
- Objective evidence of safety in all cornerstones
- Emphasizes safety significant systems, components, activities, and events
- Monitors licensee effectiveness in finding and fixing safety issues
- Standardized inspection report format to describe significant findings and non-compliance
- Inspection reports are publicly accessible

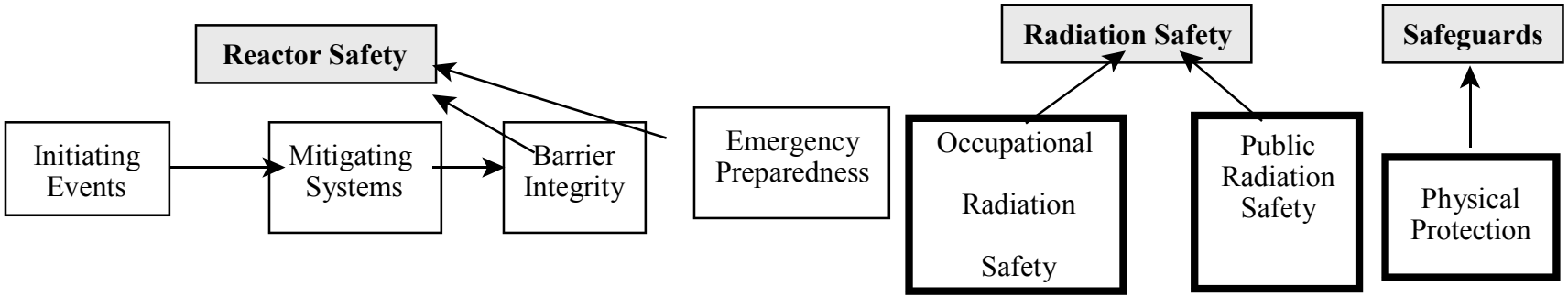
Examples of Baseline Inspections

- Plant safety tours
- Plant control room tours
- Maintenance and alignment of equipment
- Operator response during simulated emergency conditions
- Plant security
- Controls for radiation releases
- Worker radiation protection

Examples of Baseline Inspections

- Equipment Alignment - ~ 70 hrs/yr
- Annual Fire Protection - ~ 35 hrs/yr
- Trienniel Fire Protection - ~200 hrs every 3 yrs
- Operator Response - ~ 125 hrs/yr
- Plant security - ~40 hours/yr
- Emergency preparedness - ~60 hrs/yr
- Rad release controls - ~100 hrs every 2 years
- Worker radiation protection - ~125 hrs/year
- Corrective action program - 10% every inspecton
- Corrective action program - ~200 hr every 2 yrs

Inspection Areas



Inspection Procedures

- Adverse Weather
- Evaluation of Changes
- Equipment Alignment
- Fire Protection
- Flood Protection
- Heat Sink
- In Service Inspection
- Operator Requalification
- Maintenance Rule Imp
- Maintenance Risk Assessment
- Non-Routine Events

- Operability Evaluation
- Operator Workarounds
- Permanent Mods-Online
- Permanent Mods
- Post Maintenance Test
- Refueling Outage
- SSDI
- Surveillance Testing
- Temporary Modifications
- PI&R
- Event Follow-up
- PI Verification

- Excercise Evaluation
- Alert and Notice
- ERO Augment
- EAL
- EP Preparation
- Drill Evaluation

- RAD Access
- ALARA Plan
- RAD monitoring
- RAD Effluents
- RAD Transport
- RAD Environmental

- Sec Authorization Access
- Sec Search
- Sec Response
- Sec Plan change

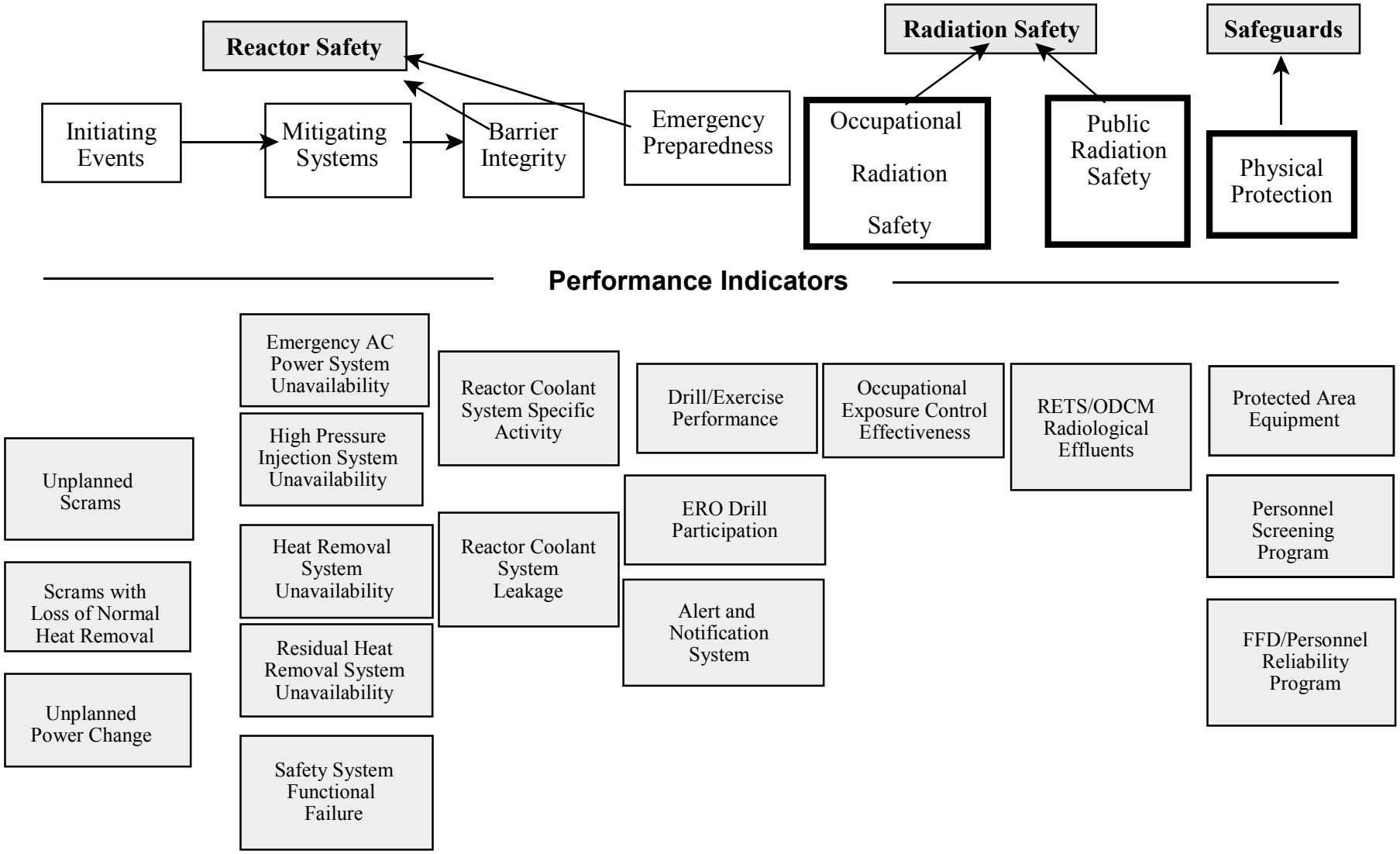
Event Follow-up and Supplemental Inspections

- Review events for significance
- Follow-up significant inspection findings
- Determine causes of performance declines
- Provides for graduated response

Performance Indicators

- 18 Performance Indicators
- Covers all cornerstones
- Licensee submits data to NRC quarterly
- Baseline Inspection program verifies accuracy
- Available on Reactor Oversight Program Web site

Relationship of Strategic Performance Areas, Safety Cornerstones and Performance Indicators



Significance Threshold

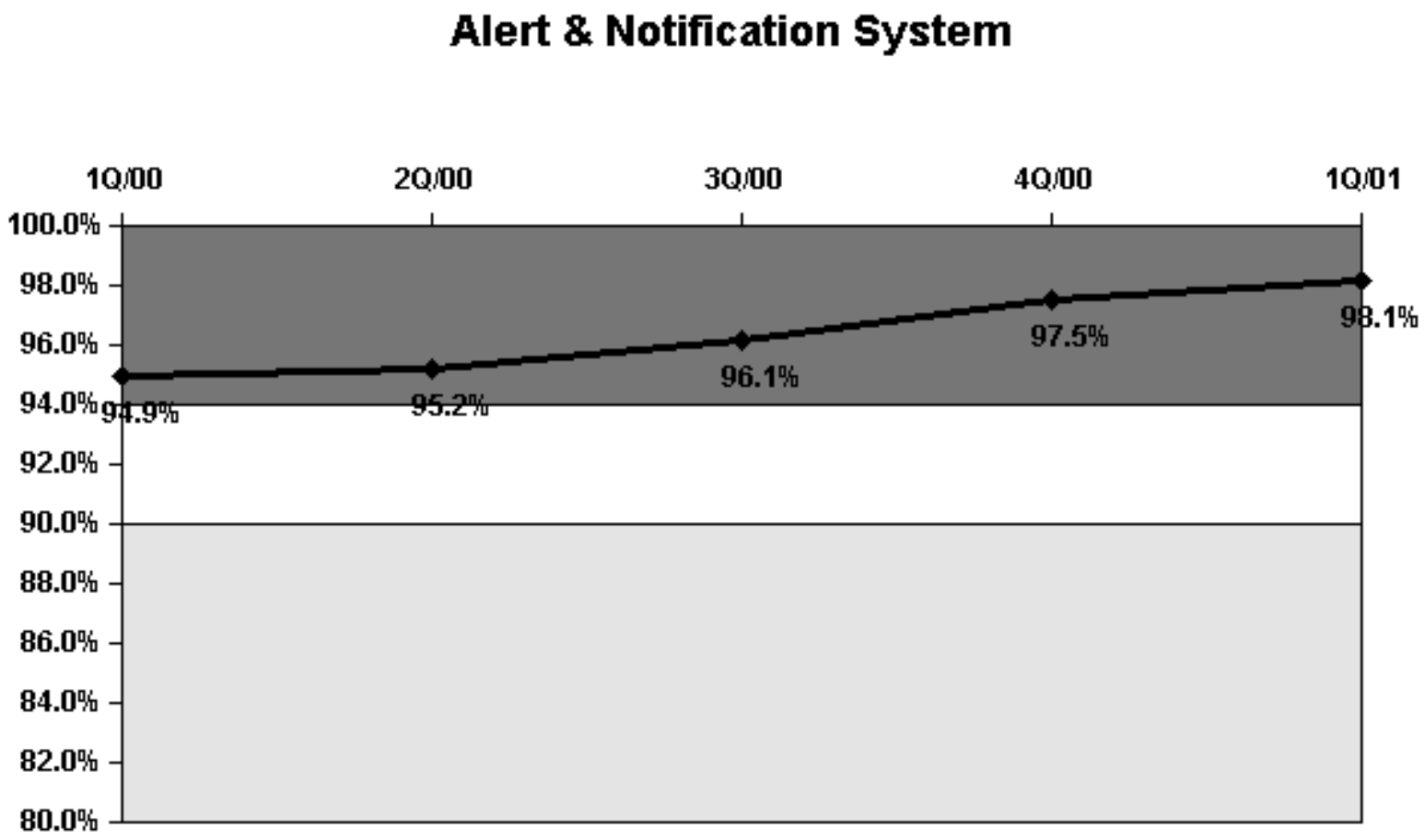
Performance Indicators

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

Performance Indicator



Thresholds: White < 94.0% Yellow < 90.0%

Key Aspects of Assessment Program

- Objective assessment of performance
- "Action Matrix" to determine agency response to performance
  - Inspection level increases
  - Management involvement increases
  - Regulatory action increases
- Plant specific assessment letters
- Information on NRC public web site

An Action Matrix is used to assess overall plant safety performance and specify thresholds for NRC Enforcement Actions

		Licensee Response Column	Regulatory Response Column	Degraded Cornerstone Column	Multiple/ Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
RESULTS		All Assessment Inputs (Performance Indicators (PIs) and Inspection Findings) Green; Cornerstone Objectives Fully Met	One or Two White Inputs (in different cornerstones) in a Strategic Performance Area; Cornerstone Objectives Fully Met	One Degraded Cornerstone (2 White Inputs or 1 Yellow Input) or any 3 White Inputs in a Strategic Performance Area; Cornerstone Objectives Met with Minimal Reduction in Safety Margin	Repetitive Degraded Cornerstone, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or 1 Red Input; Cornerstone Objectives Met with Longstanding Issues or Significant Reduction in Safety Margin	Overall Unacceptable Performance; Plants Not Permitted to Operate Within this Band, Unacceptable Margin to Safety
RESPONSE	Regulatory Performance Meeting	None	Branch Chief (BC) or Division Director (DD) Meet with Licensee	DD or Regional Administrator (RA) Meet with Licensee	RA (or EDO) Meet with Senior Licensee Management	Commission meeting with Senior Licensee Management
	Licensee Action	Licensee Corrective Action	Licensee root cause evaluation and corrective action with NRC Oversight	Licensee Self Assessment with NRC Oversight	Licensee Performance Improvement Plan with NRC Oversight	
	NRC Inspection	Risk-Informed Baseline Inspection Program	Baseline and supplemental inspection procedure 95001	Baseline and supplemental inspection procedure 95002	Baseline and supplemental inspection procedure 95003	
	Regulatory Actions	None	Supplemental inspection only	Supplemental inspection only	-10 CFR 2.204 DFI -10 CFR 50.54(f) Letter - CAL/Order	Order to Modify, Suspend, or Revoke Licensed Activities
COMMUNICATION	Assessment Letters	BC or DD review/sign assessment report (w/ inspection plan)	DD review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan) Commission Informed	
	Annual Public Meeting	SRI or BC Meet with Licensee	BC or DD Meet with Licensee	RA (or designee) Discuss Performance with Licensee	EDO (or Commission) Discuss Performance with Senior Licensee Management	Commission Meeting with Senior Licensee Management

INCREASING SAFETY SIGNIFICANCE ---------->

Action Matrix Concept

Licensee Response	Regulatory Response	Degraded Cornerstone	Multiple/Degraded Cornerstone	Unacceptable Performance

Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Involvement

Increasing Regulatory Actions

National Summary of Plant Performance -103 Plants End of Calendar Year 2001

Licensee Response	74
Regulatory Response	24
Degraded Cornerstone	4
Multiple/Repetitive Degraded Cornerstone	1
Unacceptable	0

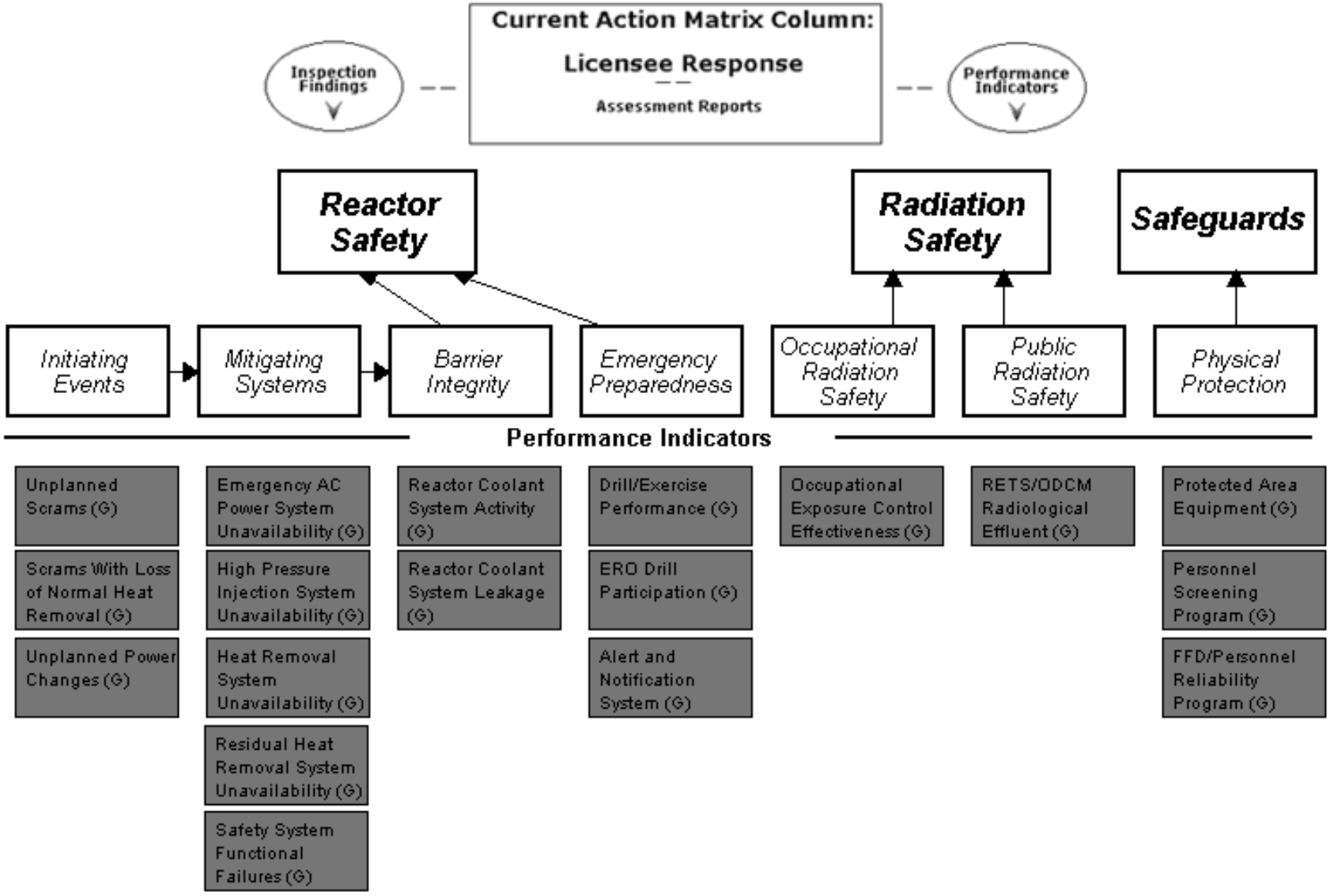
Fourth Quarter Calendar Year 2001 Performance Indicator Results

Green: **1834**
White: **8**
Yellow: **0**
Red: **0**

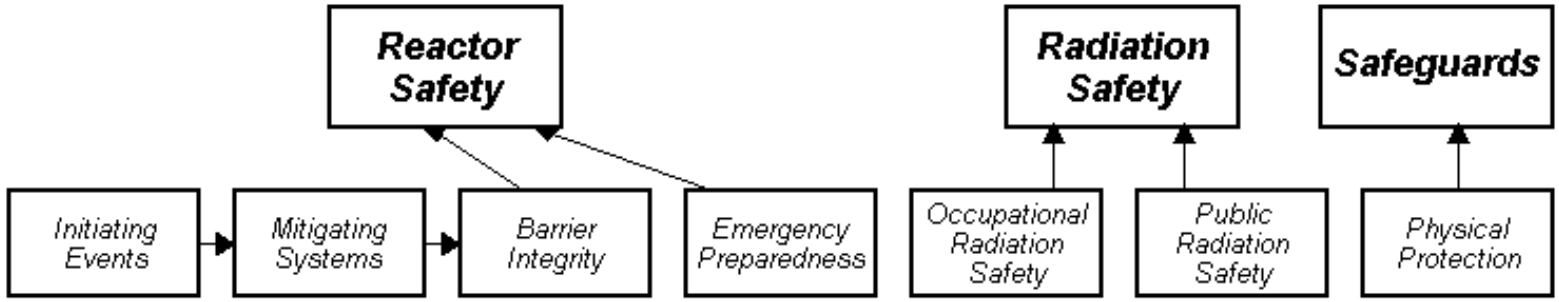
Total Inspection Findings
(April 2001 - December 2001)

Green: **660**
White: **23**
Yellow: **2**
Red: **0**

Kewaunee
4th Qtr 2001 - Performance Summary



Kewaunee
4th Qtr 2001 - Performance Summary



Most Significant Inspection Findings

4Q/2001	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	G	No findings this quarter	No findings this quarter
3Q/2001	No findings this quarter	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
2Q/2001	No findings this quarter	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
1Q/2001	No findings this quarter	G	No findings this quarter	W (1)	No findings this quarter	No findings this quarter	No findings this quarter

Miscellaneous findings

Additional Inspection & Assessment Information

- **Assessment Reports/Inspection Plans:**
  - 4Q/2001
  - 3Q/2001
  - 2Q/2001
  - 1Q/2001
- **Cross Reference Of Assessment Reports**
- **List of Inspection Reports**
- **List of Assessment Letters/Inspection Plans**

Last Modified: March 1, 2002

KEWANUEE INSPECTION ACTIVITES

MAJOR INSPECTION ACTIVITIES:

- PROBLEM IDENTIFICATION & RESOLUTION
- PERMANENT PLANT MODIFICATIONS
- STEAM GENERATOR REPLACEMENT INSPECTION

APPROXIMATELY 2000 BASELINE INSPECTION HOURS EXPENDED

KEWAUNEE INSPECTION RESULTS

SEVEN GREEN FINDINGS (MITIGATING SYSTEMS CORNERSTONE AND OCCUPATIONAL RADIATION SAFETY CORNERSTONE)

- inadequate corrective actions
- lack of fire barrier between AFW trains
- licensed operator failures during requalification
- failure to promptly identify and repair a stuck open check valve
- unavailability of systems during shutdown not tracked
- timely and appropriate corrective actions not taken
- failure to provide barrier for entry into a high radiation area

THREE NO COLOR FINDINGS

- lack of contingency plans fora high-risk outage configuration
- failure to conduct a required surveillance of procedures
- failure to balance reliability and availability

Kewaunee Annual Assessment (April 1 -Dec. 31, 2001)

- Operated safely
- Fully met all cornerstone objectives
- Licensee Response Band of Action Matrix
  - All inspection findings were of very low safety significance (Green) or no color
  - All Performance Indicators required no additional NRC oversight (Green)
- NRC Plans to conduct only baseline inspections

NRC Response To 9/11

- Activated NRC Response Centers
- Closely Coordinated Response With:
  - -- Our Licensees
  - -- FBI
  - -- Military, State, & Local Authorities
  - -- Law Enforcement
  - -- Intelligence Communities
- Issued Security Advisories
  - -- Increased Patrols
  - -- Augmented Security Capabilities
  - -- Added Barriers and Posts
  - -- More Limited Access
  - -- Enhanced Security Awareness
- Issued Order on Security
- NRC Monitored Enhanced Security