

ANNUAL ASSESSMENT MEETING

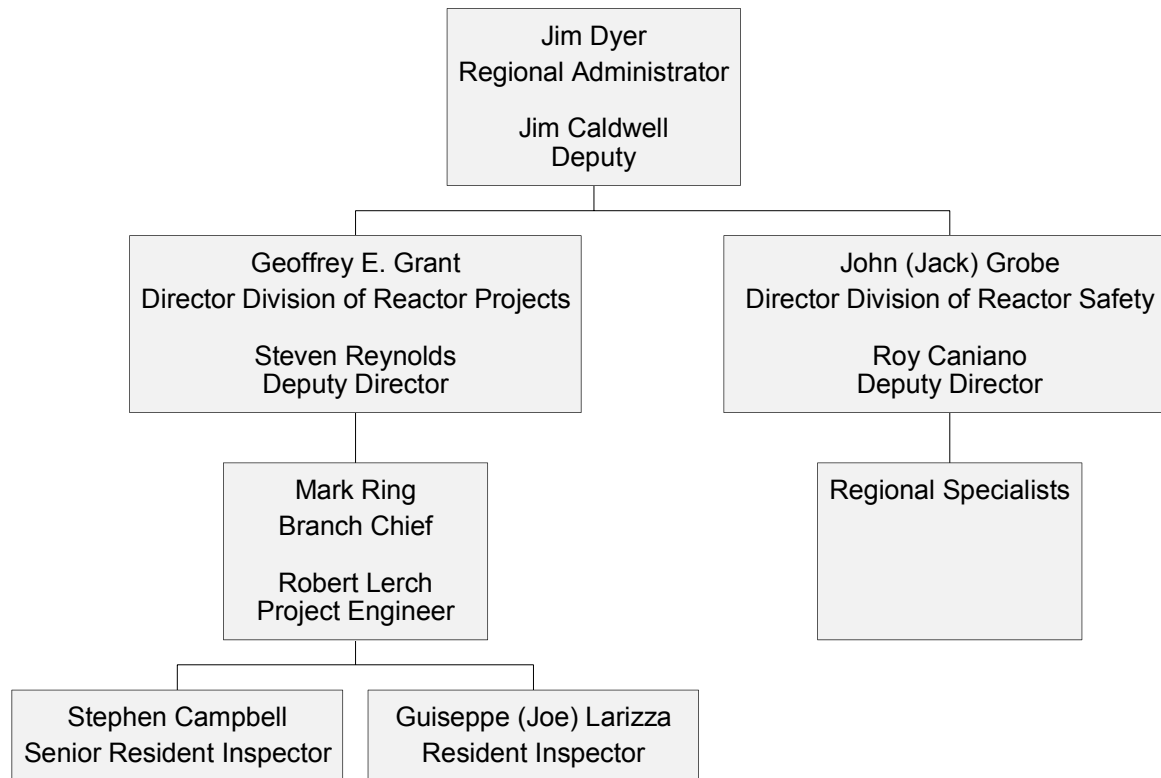


Nuclear Regulatory Commission

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

- Mark A. Ring, Chief, Projects Branch 1
 - (mar@nrc.gov (630) 829-9703)
- Stephen Campbell, Senior Resident Inspector
 - (sjc4@nrc.gov (734) 586-2798)
- Joe Larizza, Resident Inspector
 - (jfl1@nrc.gov (763) 295-2066)

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

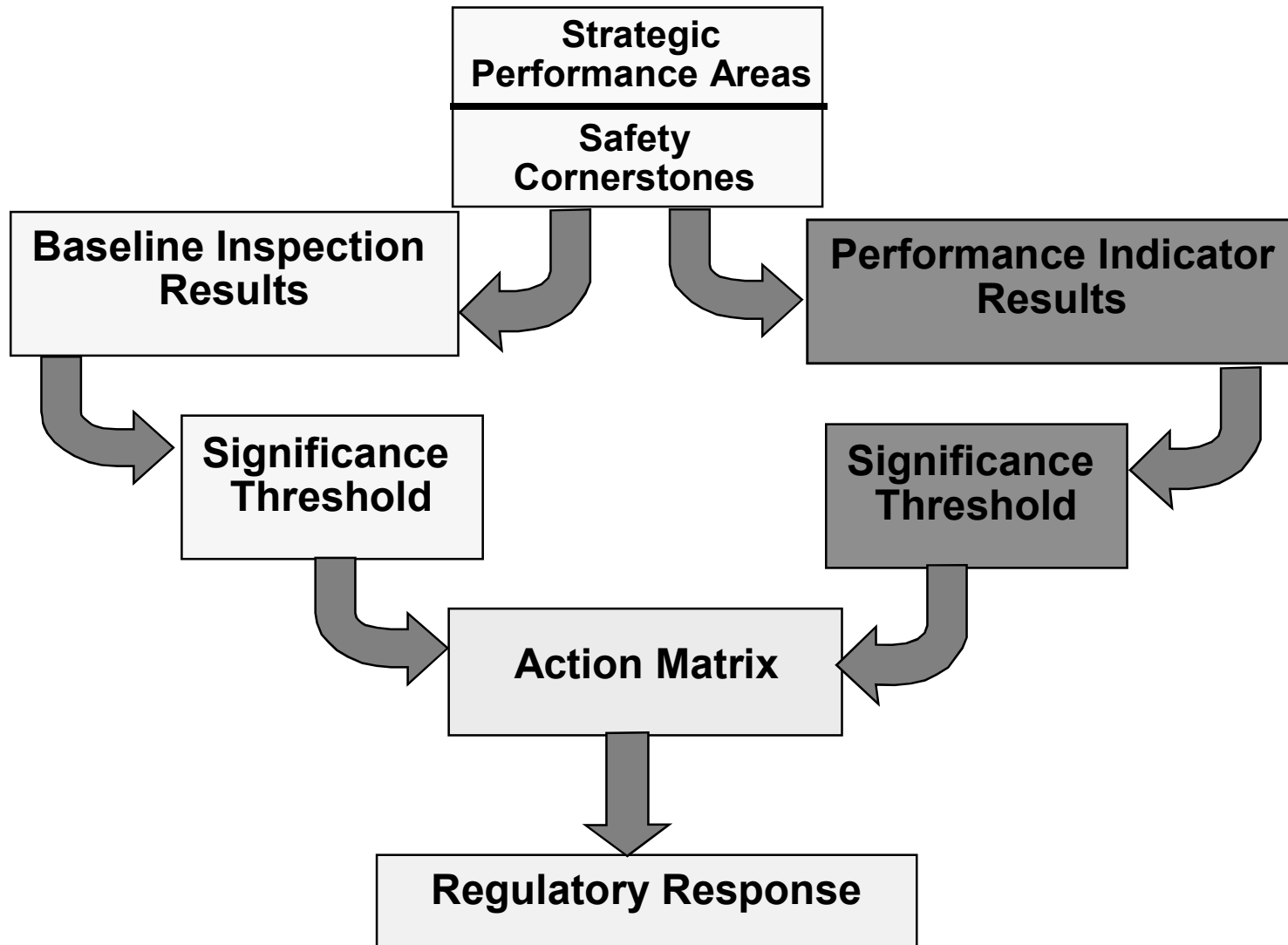
NRC Performance Goals

- 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

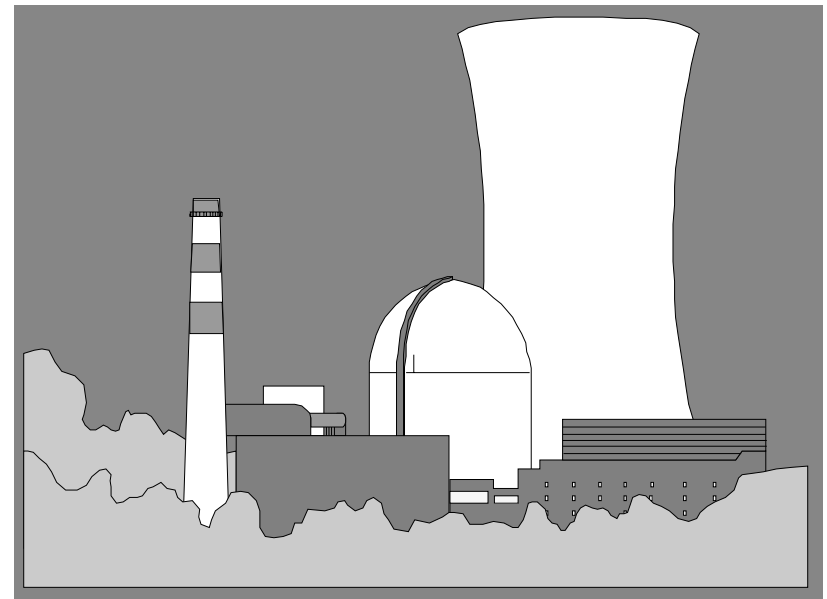
Safety Cornerstones

- 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

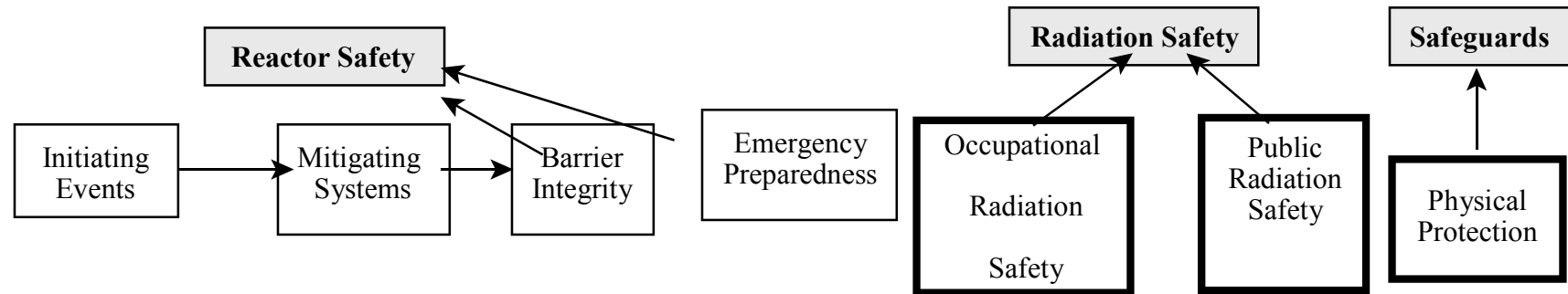
Examples of Baseline Inspections

- 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
- Triennial 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 inspection
- Corrective action program - ~200 hr every 2 yrs

Inspection Areas



Inspection Procedures

- | | | | |
|-------------------------------|---------------------------|-----------------------|----------------------------|
| ● Adverse Weather | ● Operability Evaluation | ● Exercise Evaluation | ● Sec Authorization Access |
| ● Evaluation of Changes | ● Operator Workarounds | ● Alert and Notice | ● Sec Search |
| ● Equipment Alignment | ● Permanent Mods-Online | ● ERO Augment | ● Sec Response |
| ● Fire Protection | ● Permanent Mods | ● EAL | ● Sec Plan change |
| ● Flood Protection | ● Post Maintenance Test | ● EP Preparation | |
| ● Heat Sink | ● Refueling Outage | ● Drill Evaluation | |
| ● In Service Inspection | ● SSDI | ● RAD Access | |
| ● Operator Requalification | ● Surveillance Testing | ● ALARA Plan | |
| ● Maintenance Rule Imp | ● Temporary Modifications | ● RAD monitoring | |
| ● Maintenance Risk Assessment | ● PI&R | ● RAD Effluents | |
| ● Non-Routine Events | ● Event Follow-up | ● RAD Transport | |
| | ● PI Verification | ● RAD Environmental | |

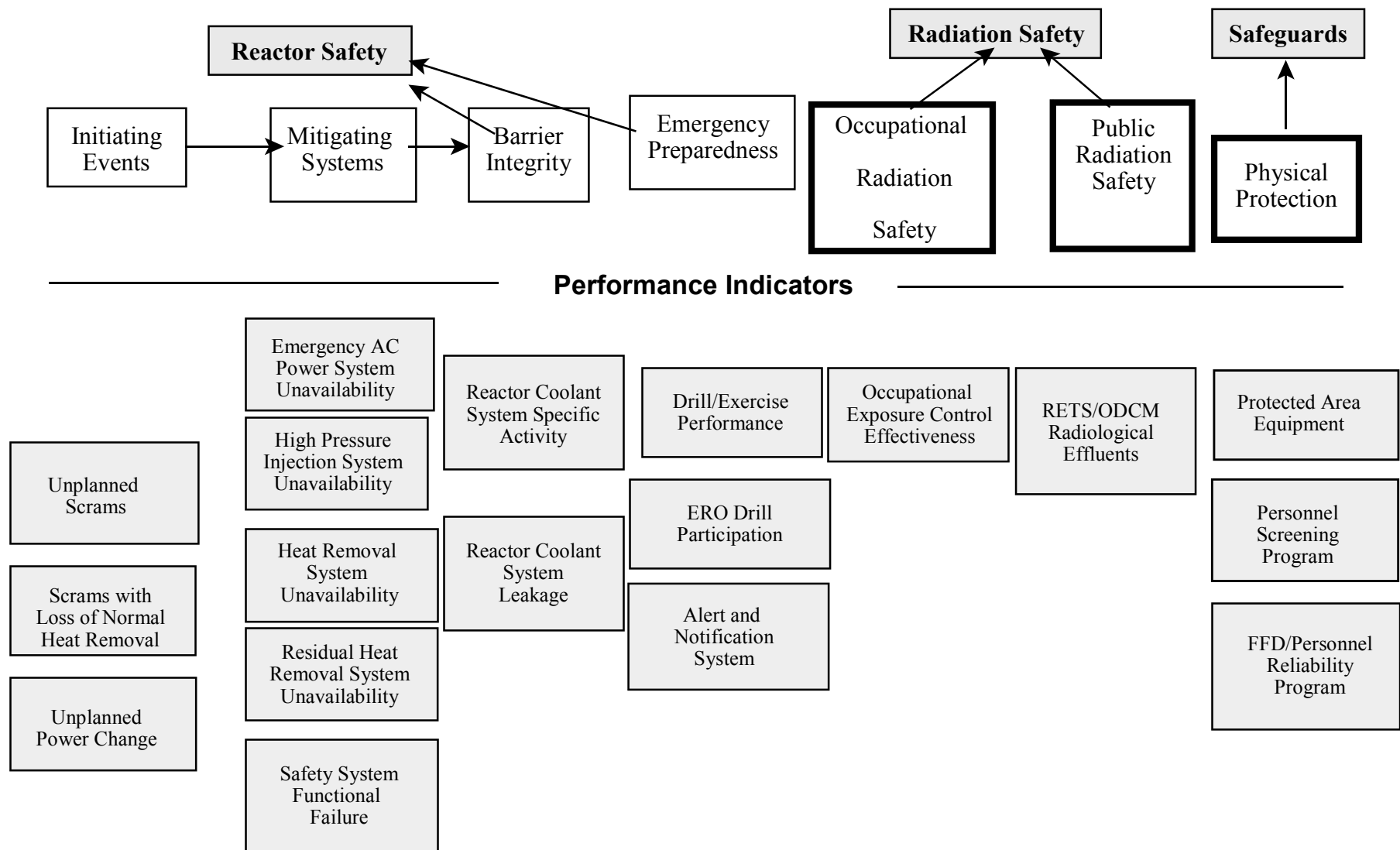
Event Follow-up and Supplemental Inspections

- 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

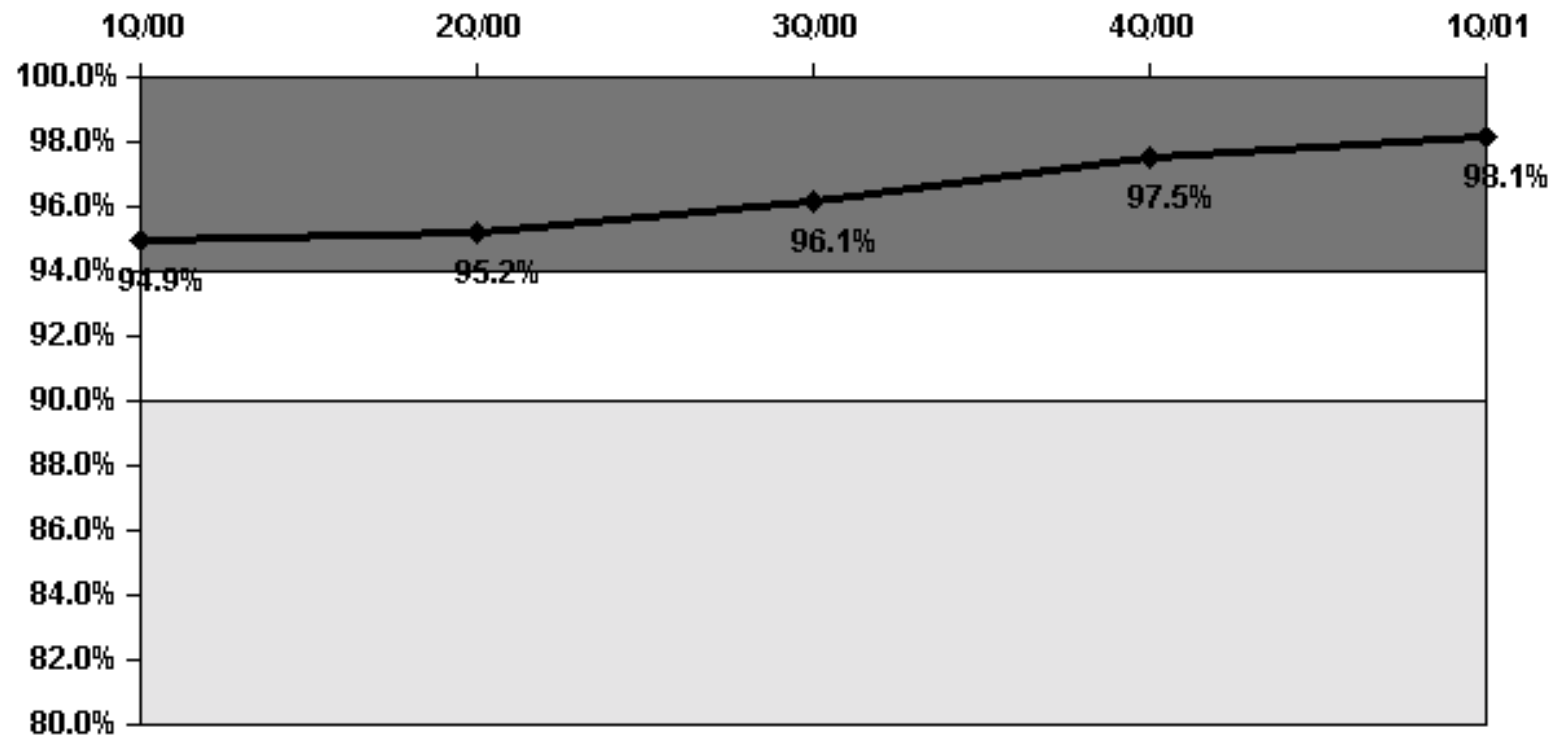
Green:	Only baseline Inspection
White:	May increase NRC oversight
Yellow:	Requires more NRC oversight
Red:	Requires more NRC oversight

Inspection Findings

Green:	Very Low safety issue
White:	Low to moderate safety issue
Yellow:	Substantial safety issue
Red:	High safety issue

Performance Indicator

Alert & Notification System




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

Action Matrix Concept

Licensee Response	Regulatory Response	Degraded Cornerstone	Multiple/Degraded Cornerstone	Unacceptable Performance
<div><p>Increasing Safety Significance</p><p>Increasing NRC Inspection Efforts</p><p>Increasing NRC/Licensee Management Involvement</p><p>Increasing Regulatory Actions</p></div>				

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 ----->					

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

National Summary

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

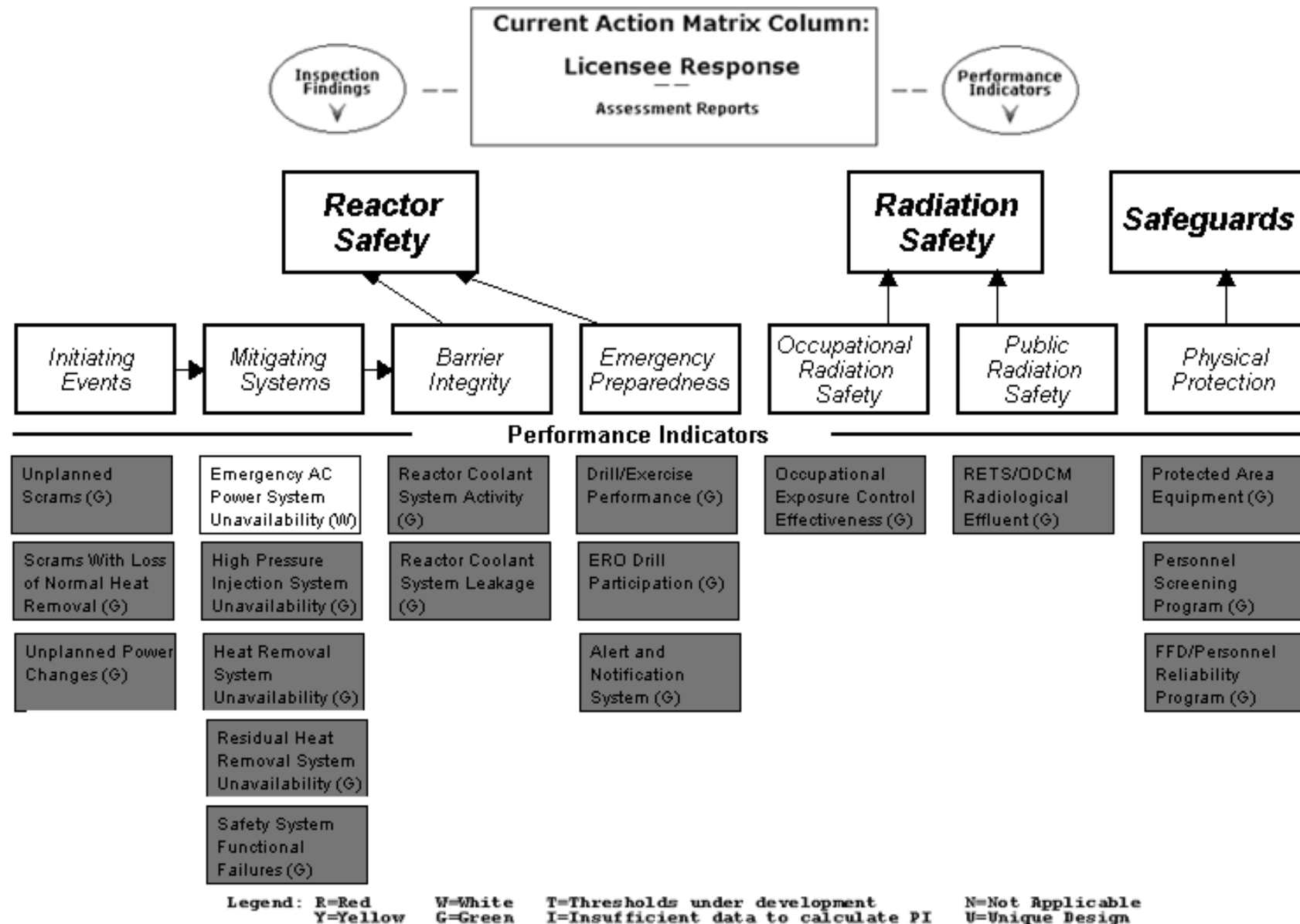
White: 23

Yellow: 2

Red: 0

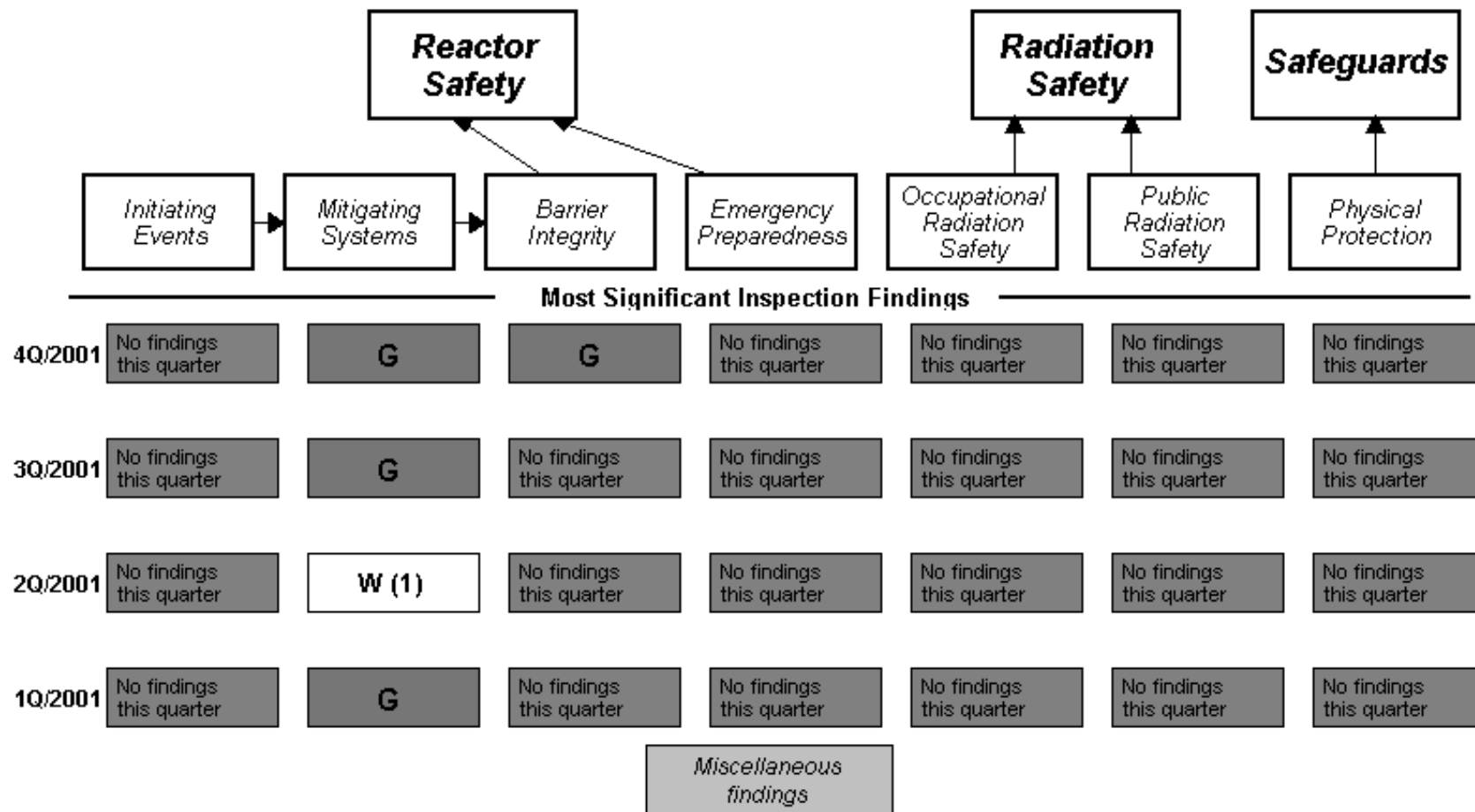
FERMI

4th Qtr 2001 - Performance Summary



FERMI

4th Qtr 2001 - Performance Summary



Additional Inspection & Assessment Information

◆ **Assessment Reports/Inspection Plans:**

4Q/2001
3Q/2001
2Q/2001
1Q/2001

◆ **List of Inspection Reports**

◆ **List of Assessment Letters/Inspection Plans**

Last Modified: March 1, 2002

◆ **Cross Reference Of Assessment Reports**

FERMI INSPECTION RESULTS

**ONE WHITE FINDING (MITIGATING
SYSTEMS CORNERSTONE):**

**INADEQUATE DESIGN CONTROL LED TO
EMERGENCY DIESEL GENERATOR FAILURE**

**FIVE GREEN FINDINGS (MITIGATING
SYSTEMS AND BARRIER INTEGRITY
CORNERSTONES):**

**INADEQUATE TEST CONTROL
OPERATOR MEDICAL CONDITIONS
INADEQUATE PROCEDURE USE**

1251.5 BASELINE INSPECTION HOURS

FERMI INSPECTION RESULTS (CONTINUED)

**ONE NO COLOR FINDING (CROSS CUTTING ISSUE
NOT READILY ASSESSED FOR SIGNIFICANCE)**

INSPECTION HOURS:

ABOUT 2000 TOTAL INSPECTION HOURS

MAJOR INSPECTION ACTIVITIES:

SUPPLEMENTAL INSPECTION

SAFETY SYSTEM DESIGN INSPECTION

PROBLEM IDENTIFICATION INSPECTION

Fermi Annual Assessment (April 1 -Dec 31, 2001)

- Operated safely
- Fully met all cornerstone objectives
- Regulatory Response Band of Action Matrix
 - One inspection finding of low to moderate safety significance (White) and one performance indicator (White) required additional NRC oversight (same issue)
 - Supplemental Inspection complete
 - Remainder required no additional NRC oversight (Green)
- NRC Plans to conduct 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