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

Jim Dyer, Regional Administrator James Caldwell, Deputy Regional Administrator

Jan Strasma, Regional Public Affairs Officer

Division of Reactor Projects

Geoffrey E. Grant, Director Steven Reynolds, Deputy Director

Reactor Projects Branch #5 Roger Lanksbury, Chief Mike Kunowski, Project Engineer

Prairie Island Resident Inspector Office Steve Ray, Senior Resident Inspector Duane Karjala, Resident Inspector Division of Reactor Safety

John (Jack) Grobe, Director Roy Caniano, Deputy Director

Regional Specialists

NRC Representatives

- Roger Lanksbury, Chief Projects Branch #5 rdl@nrc.gov (630/829-9631
- Steve Ray, Senior Resident Inspector (Until 4/6/02) spr@nrc.gov (651)388-8209
- John Adams, Senior Resident Inspector (After 4/6/02) jta@nrc.gov (651)388-8209
- Duane Karjala, Resident Inspector dak2@nrc.gov (651)388-8209
- Jan Strasma, Public Affairs Officer rjs2@nrc.gov (630)829-9663

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

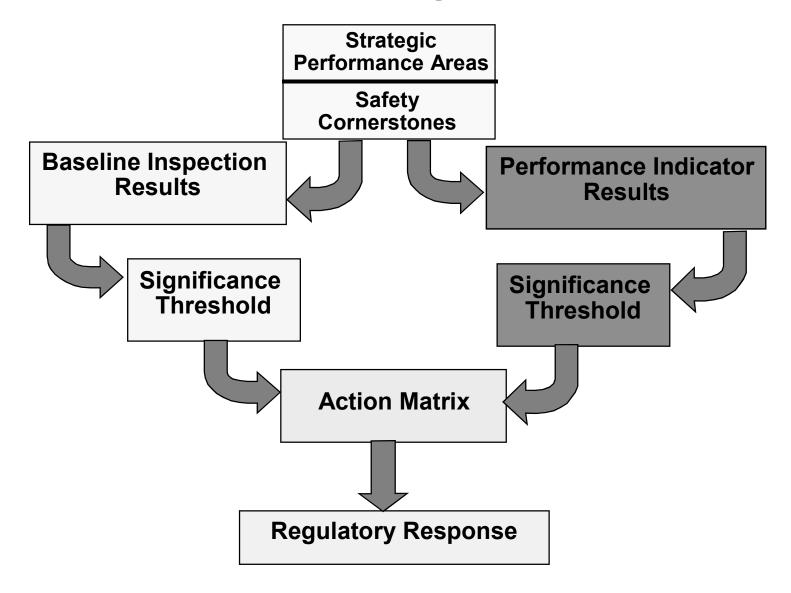
NRC Performance Goals

- 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



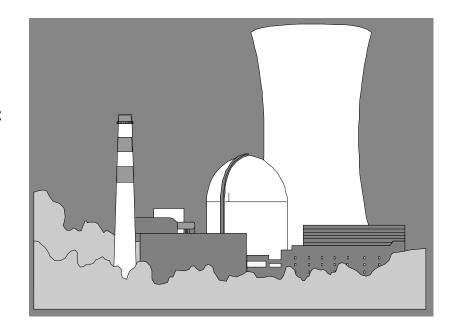
Strategic Performance Areas Safety Cornerstones

- 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

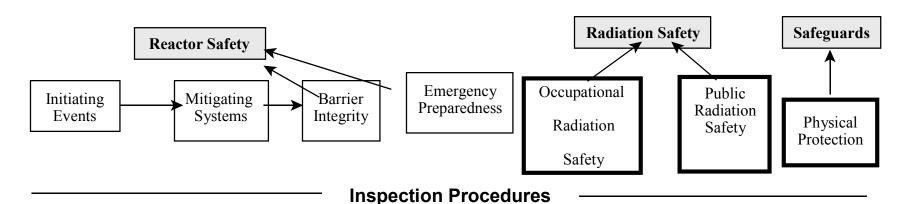
Examples of Baseline Inspections

- 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



- 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

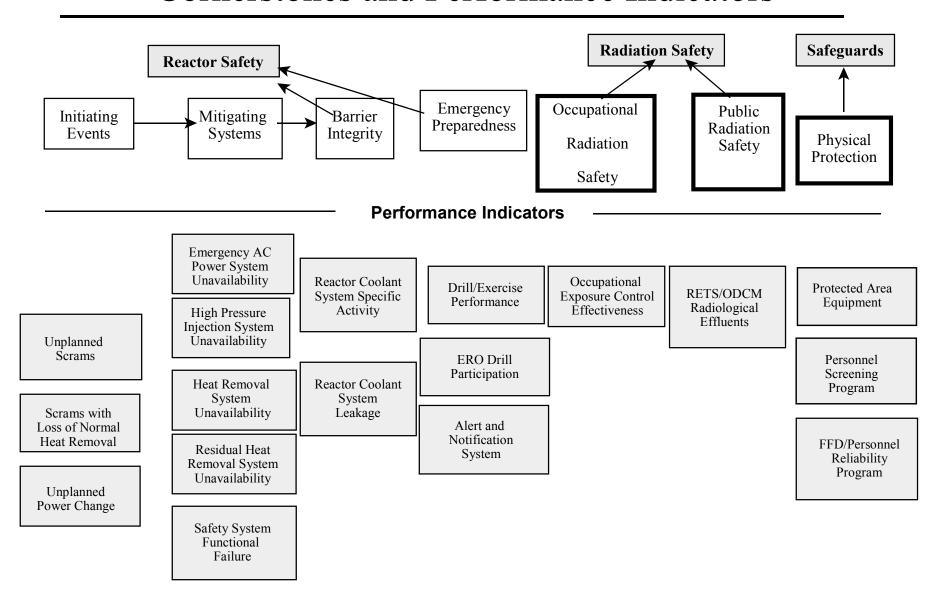
Event Follow-up and Supplemental Inspections

- 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

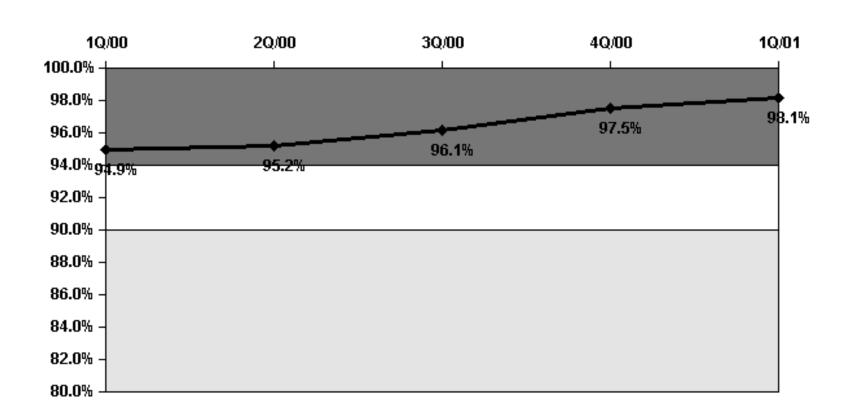
White: Low to moderate safety issue

Yellow: Substantial safety issue

Red: High safety issue

Performance Indicator

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

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

		Licensee Response Column	Regulatory Response Column	Degraded Cornerston Column	e Multiple/ Repetitive Degraded Cornersto Column	U nacceptable ne Performance Column
R E S U L T S		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
R E S P O N S E	R eg ulatory P e rform ance M e e tin g	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
C O M U N I C A T I O N	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 Regulatory Response Cornerstone Multiple/Degraded Cornerstone 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)

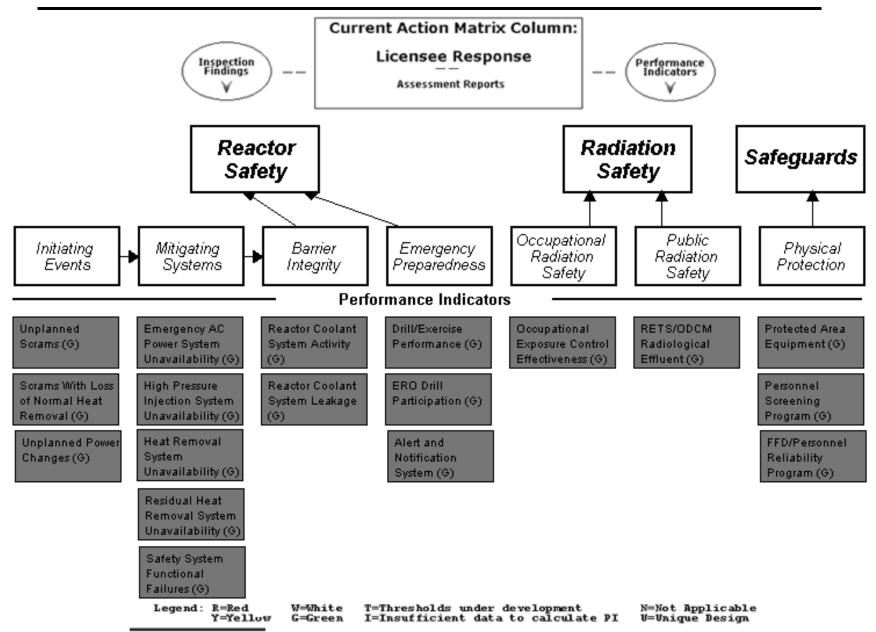
Green: 660

White: 23

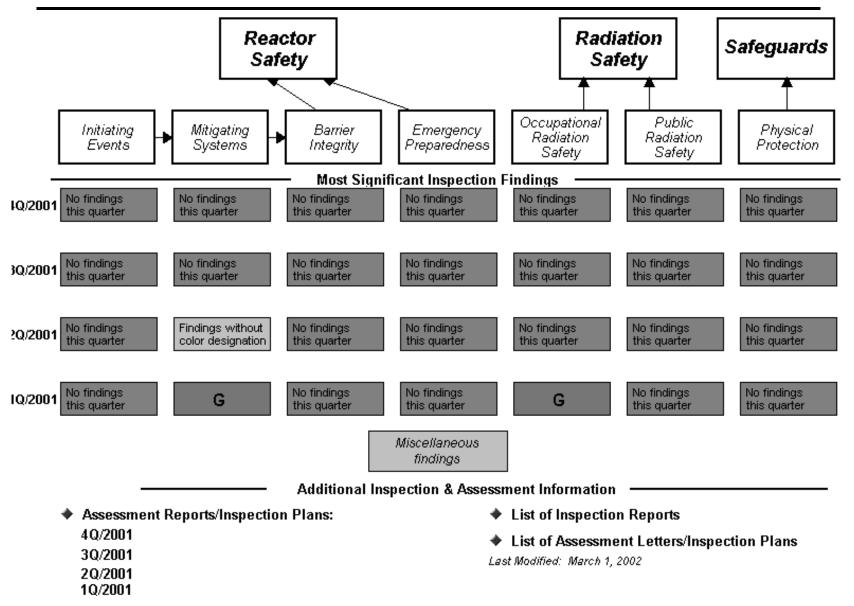
Yellow: 2

Red: 0

Prairie Island 1 4th Qtr 2001 - Performance Summary

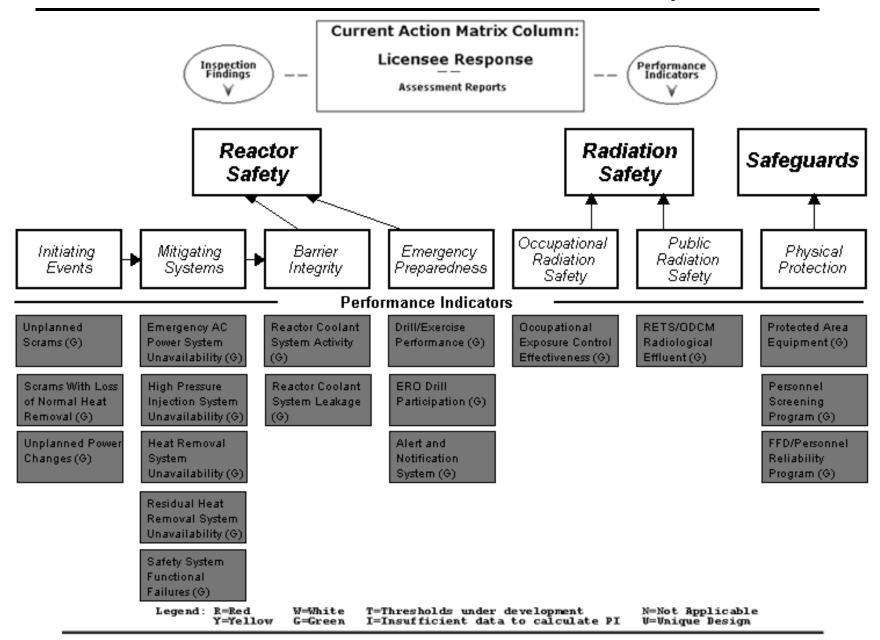


Prairie Island 1 4th Qtr 2001 - Performance Summary

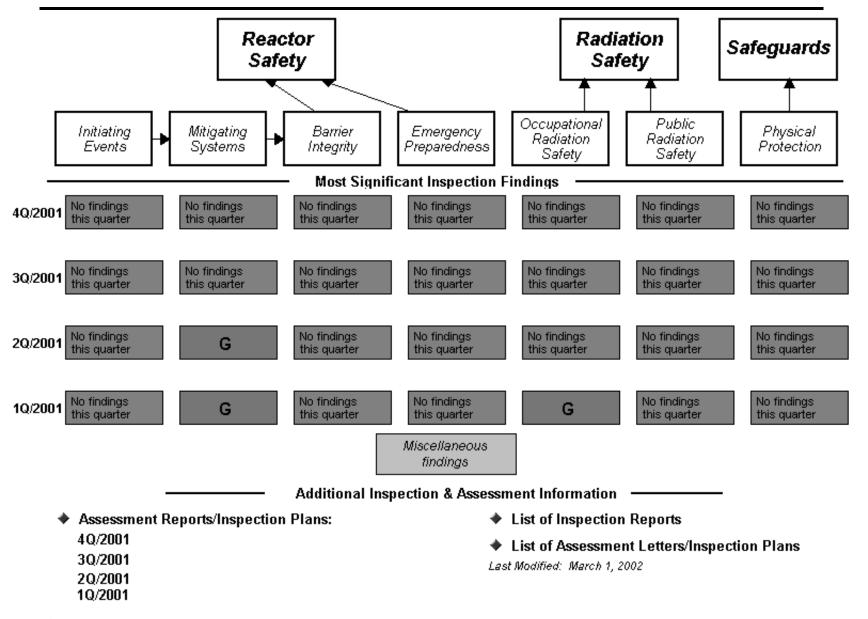


Cross Reference Of Assessment Reports

Prairie Island 2 4th Qtr 2001 - Performance Summary



Prairie Island 2 4th Qtr 2001 - Performance Summary



♦ Cross Reference Of Assessment Reports

PRAIRIE ISLAND INSPECTION ACTIVITES

MAJOR INSPECTION ACTIVITIES:

SUPPLEMENTAL INSPECTION
PROBLEM IDENTIFICATION & RESOLUTION
PERMANENT PLANT MODIFICATIONS

APPROXIMATELY 2300 BASELINE INSPECTION HOURS EXPENDED

PRAIRIE ISLAND INSPECTION RESULTS

ONE WHITE FINDING FROM LAST ASSESSMENT PERIOD COULD NOT BE CLOSED (MITIGATING SYSTEMS CORNERSTONE)

ONE GREEN FINDINGS (MITIGATING SYSTEMS CORNERSTONE)

TWO NO COLOR FINDINS

Prairie Island 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) from the previous assessment period required additional NRC oversight
 - Supplemental Inspection done but issue not closed
 - Remainder required no additional NRC oversight (Green)
- NRC Plans to conduct baseline inspections and a follow-up supplemental inspection for the White finding