

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

July 2, 2001

Charles M. Dugger, Vice President Operations - Waterford 3 Entergy Operations, Inc. 17265 River Road Killona, Louisiana 70066-0751

SUBJECT: SUMMARY OF END-OF-CYCLE PERFORMANCE ASSESSMENT MEETING

FOR THE WATERFORD STEAM ELECTRIC STATION, UNIT 3

Dear Mr. Dugger:

This refers to the public meeting conducted at the James M. Cain Energy Education Center, on June 20, 2001, between your staff and the NRC. The participants discussed the results of the NRC's end-of-cycle assessment of Waterford Steam Electric Station, Unit 3, performance for the period April 2, 2000, through March 31, 2001.

The NRC presented the overall assessment results that were based on inspection findings and performance indicators. The presentation also included a brief overview of the reactor oversight process.

The attendance list, and the NRC prepared public meeting handouts are enclosed.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

Gregory A. Pick for

William B. Jones, Chief Project Branch E Division of Reactor Projects

Docket No: 50-382 License No: NPF-38 Enclosures: Attendance List

NRC End-of-Cycle Assessment Meeting, Waterford 3, June 20, 2001

Reactor Oversight Process Annual Assessment Meeting

cc w/enclosures:

Executive Vice President and Chief Operating Officer Entergy Operations, Inc. P.O. Box 31995 Jackson, Mississippi 39286-1995

Vice President, Operations Support Entergy Operations, Inc. P.O. Box 31995 Jackson, Mississippi 39286-1995

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General Manager, Plant Operations Waterford 3 SES Entergy Operations, Inc. 17265 River Road Killona, Louisiana 70066-0751

Manager - Licensing Manager Waterford 3 SES Entergy Operations, Inc. 17265 River Road Killona, Louisiana 70066-0751

Chairman

Louisiana Public Service Commission One American Place, Suite 1630 Baton Rouge, Louisiana 70825-1697

Director, Nuclear Safety & Regulatory Affairs Waterford 3 SES Entergy Operations, Inc. 17265 River Road Killona, Louisiana 70066-0751 Ronald Wascom, Administrator and State Liaison Officer Department of Environmental Quality P.O. Box 82135 Baton Rouge, Louisiana 70884-2135

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Winston & Strawn 1400 L Street, N.W. Washington, D.C. 20005-3502

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Electronic distribution from ADAMS by RIV:

Regional Administrator (EWM)

DRP Director (KEB)

DRS Director (ATH)

Senior Resident Inspector (TRF)

Branch Chief, DRP/E (WBJ)

Senior Project Engineer, DRP/E (GAP)

Section Chief, DRP/TSS (PHH)

RITS Coordinator (NBH)

B. Henderson, PAO (BWH)

C. A. Hackney, RSLO (CAH)

C. J. Gordon (CJG)

DRS Branch Chiefs (GMG, JLS2, JLP)

W. D. Travers, EDO (WDT)

W. M. Dean, Chief, NRR/DIPM/IIPB (WMD)

R. K. Frahm, PPR Program Manager, NRR/ILPB (RKF)

B. A. Boger, Associate Dir. for Inspection and Programs (BAB2)

B. W. Sheron, Associate Dir. for Project Licensing and Technical Analysis (BWS)

M. A. Satorius, Chief, Regional Operations Staff, OEDO (MAS)

S. Richards, NRR Project Director (SAR)

R. Gramm, Chief, Section 1, NRR/DLPM (RAG)

N. Kalyanam, NRR Project Manager (NXK)

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GFLarkin;tbh	WBJones		
/RA/	GAPick for		
07/02/01	07/02/01		

ENCLOSURE 1

Attendance List

Licensee

- J. Burde, Supervisor, Engineering
- C. DeDeauy Sr., Supervisor, Licensing
- R. Douet, Manager, Operations
- M. Duhe, Communications
- E. Ewing, General Manager, Plant Operations
- G. Fey, Superintendent, Maintenance
- R. Fili, Manager, Quality Assurance
- B. Fron, Superintendent, Security
- P. Gropp, Manager, Engineering
- A. Harris, Director, Nuclear Safety Assurance
- J. Herron, Vice President, Operations
- S. Hymel, Corrective Actions
- E. Lemke, Instructor, Training
- D. Madere, Engineer, Licensing
- C. Pickering Engineer, Licensing
- B. Pilutte, Supervisor, Radiation Protection
- K. Rockwood, Instructor
- T. Schreckengast, Manager, Operations/Licensing
- R. Williams, Engineer, Licensing

NRC

- W. Jones, Chief, Branch E, Division of Reactor Projects
- T. Farnholtz, Senior Resident Inspector
- J. Keeton, Resident Inspector
- B. Kennedy, Engineering Associate



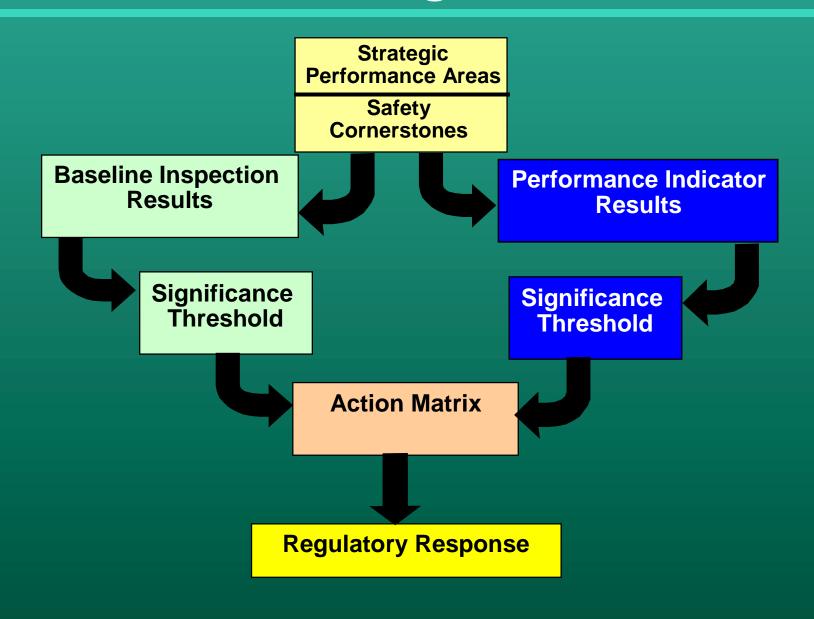
NRC Public Meeting

End of Cycle Assessment Waterford 3 June 20, 2001

Agenda

- PIntroduction and opening comments NRC
- PIntroduction and opening remarks Entergy
- P Overview of reactor oversight process NRC
- P Presentation of assessment NRC
- P Discussion of assessment NRC and Entergy
- PClosing remarks Entergy
- PClosing remarks NRC
- P Adjourn

Reactor Oversight Process







Reactor Oversight Process

Nuclear Reactors | NRC Home Page | NRC Site Contents | Search

essons Learned Public Works

Assessment

Plant

Results

March 26 - 28, 2001 in Gaithersburg, MD Summary Slides from Closing Session Agenda

YEW Meeting Summary NEW

Federal Register Notice: Request for Public Comment on the First Year of Initial Implementation of the Reactor Oversight Process

Implementation

Evaluation

Panel

NEW Initial

Documents

NEW ROP Program

Role of the Reactor Oversight Process

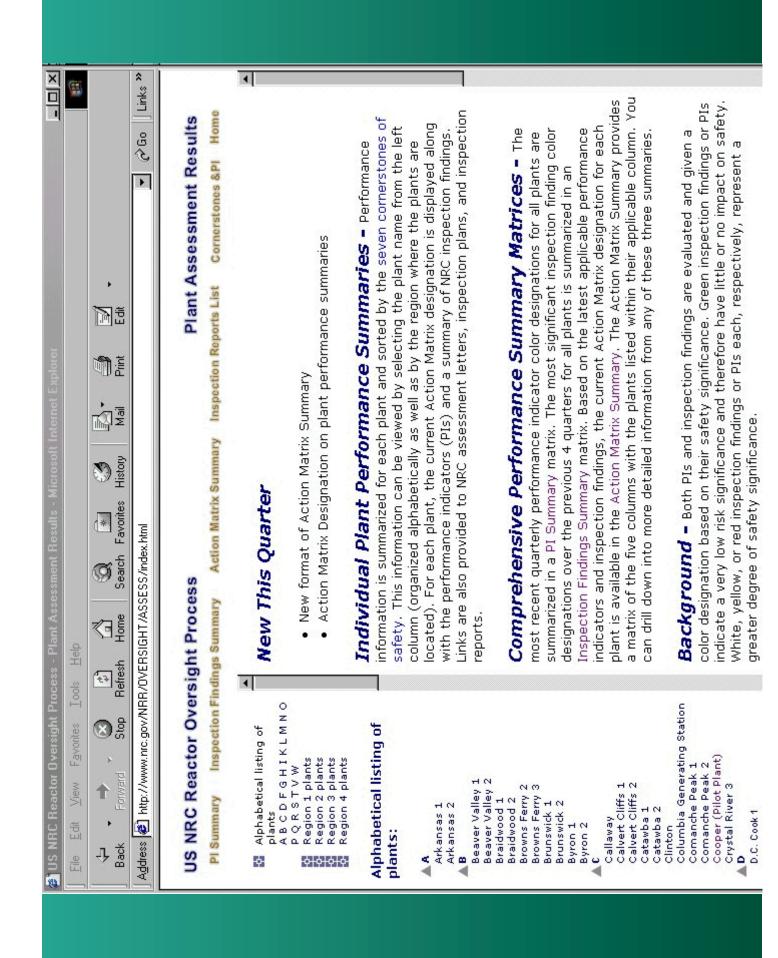
ROP "Plain Language" Description

and safety and the environment, as it relates to the peaceful use of nuclear materials in the United States. The nuclear power plants by establishing regulatory requirements for the design, construction and operation of such specific technical specifications for plant operators to follow to ensure that the plants are operated safely within plants. The NRC issues licenses for the plants to operate, licenses the plant operators, and establishes plant The Nuclear Regulatory Commission's (NRC's) mission is to ensure adequate protection of the public health agency itself does not operate nuclear power plants. Rather, it regulates the operation of the nation's 103 these requirements.

Summaries

Notices &

Meeting



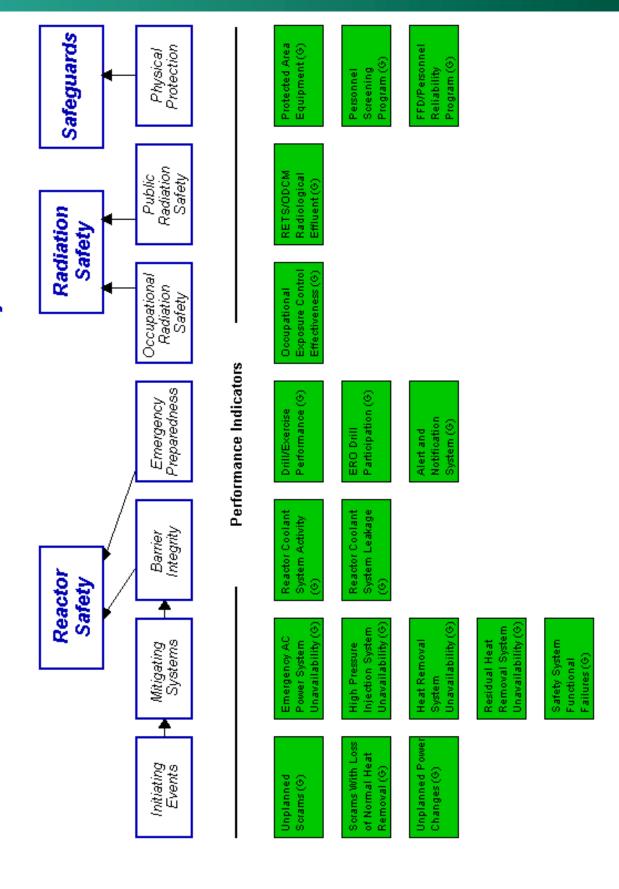
Waterford Operating Summary

- P Maintenance outage to repair extraction steam line expansion joint
- P33 day refueling outage (October November, 2000)
- PReactor trip due to governor valve testing circuitry failure (February 2001)
- POtherwise, essentially full power operation

Waterford Station Mid-cycle Assessment

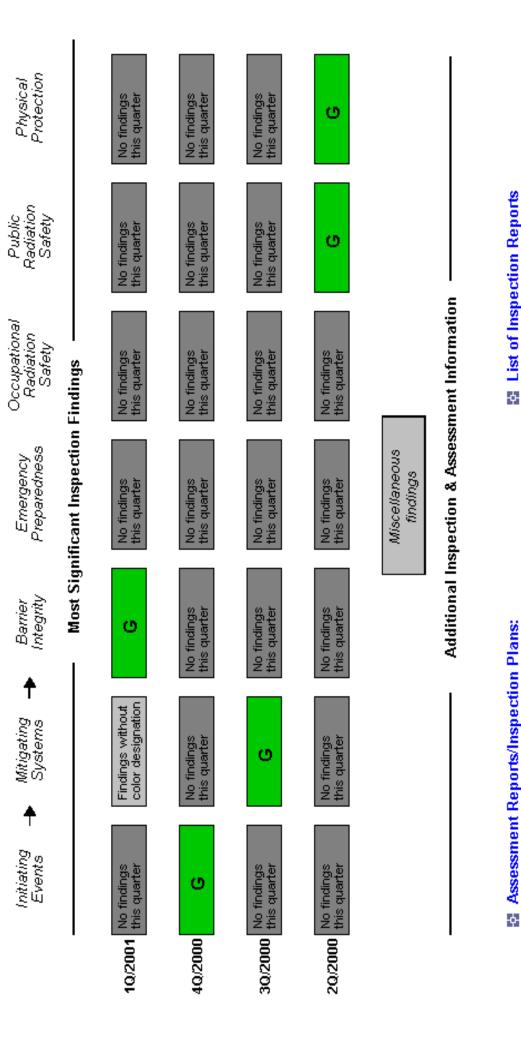
- P Completed November 2, 2000
- PLicensee Response Column
 - All inspection findings had very low safety significance (Green)
 - No performance indicators required additional NRC oversight
- P Security confirmatory order addressed through previous process

Waterford 3 1Q/2001 Performance Summary



Waterford 3 Performance Indicators for the Inspection Cycle

- P Performance indicators for the most recent quarter
 - All in the licensee response band
 - NRC baseline inspection of performance indicators



40/2000

0 10/2001

30/2000

o 20/2000

Waterford 3 Inspection Findings

- # Licensee Response Column
- # All inspection findings in Waterford 3 corrective action system

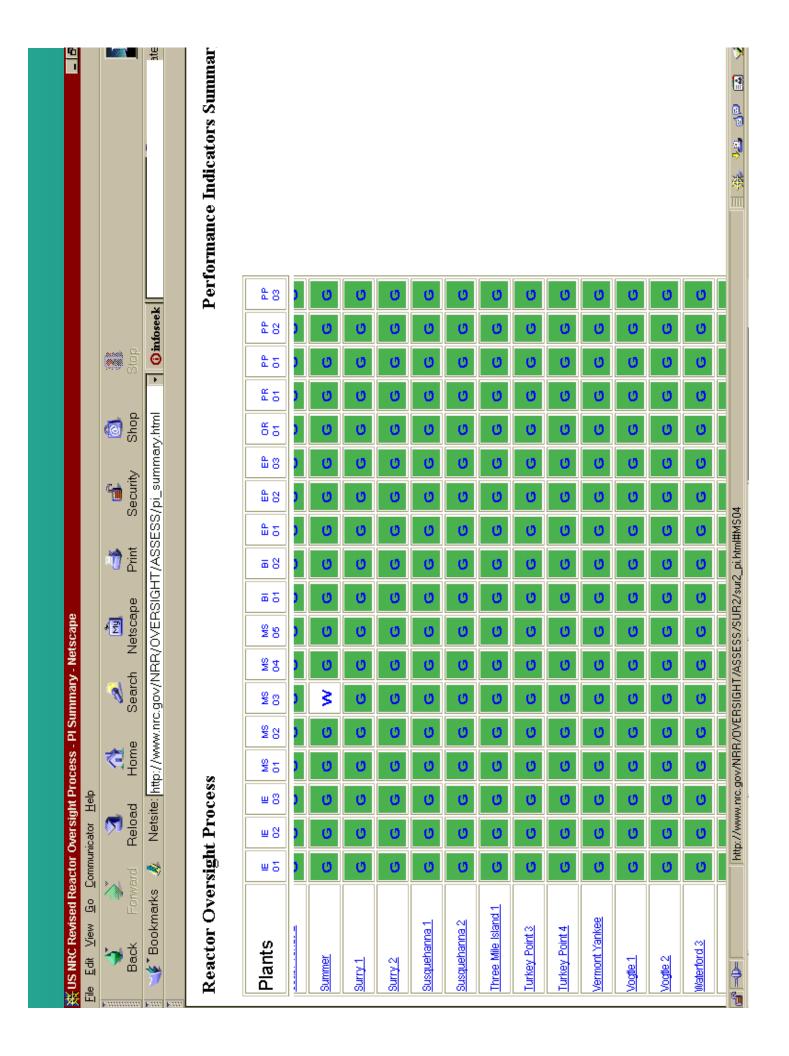
 Very low risk significance
- # Baseline inspection planned for Waterford 3

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

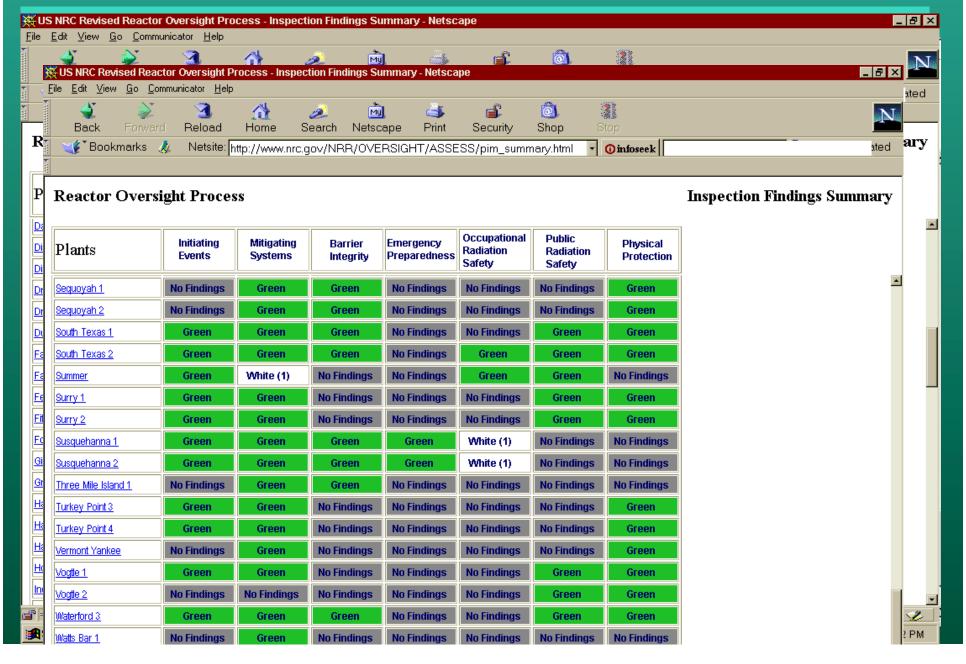
			Degraded Cornersto	U nacceptable ne Perform ance Colum n		
R E S U L T S		All Assessment Inputs (Performance Indicators (PIs) and Inspection Findings) Green; Cornerstone Objectives Fully Met	One or Two White Inputs (in different cornerstones) in a Strategic Performance Area; Cornerstone Objectives Fully 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
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
C O M M U N I C A T I	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
N	INCREASING SAFETY SIGNIFICANCE>					

Waterford 3 Station Overall Performance

- P Preserved public health and safety
- P Met all cornerstone objectives
- PNRC baseline inspections



Inspection Finding Summary



Action Matrix Summary

<u>Licensee Response</u> <u>Column</u>	Regulatory Response Column	Degraded Cornerstone Column	Multiple/Repetitive Degraded Cornerstone Column	<u>Unacceptable</u> <u>Performance Column</u>
Arkansas Nuclear 1	Calvert Cliffs 1	Callaway	Indian Point 2	
Arkansas Nuclear 2	Cooper	Kewaunee		
Beaver Valley 1	Fermi 2 ¹	Millstone 2		
Beaver Valley 2	FitzPatrick			
Braidwood 1	<u>Harris 1</u> ²			
Braidwood 2	North Anna 2 ³			
Browns Ferry 2	Oconee 1			
Browns Ferry 3	Point Beach 1			
Brunswick 1	<u>Prairie Island 1⁴</u>			
Brunswick 2	<u>Prairie Island 2⁵</u>			
Byron 1	Quad Cities 1 ⁶			
Byron 2	Quad Cities 2 ⁷			
Calvert Cliffs 2	<u>Summer</u> ⁸			
Catawba 1	Susquehanna 1 ⁹			
Catawba 2	Susquehanna 2 ¹⁰			
<u>Clinton</u>				
Columbia Generating				
Station				
Comanche Peak 1				

Major Baseline Inspections through May 31, 2002

P Problem Identification and Resolution

- June 2001- ongoing inspection
- PEmergency Preparedness Exercise
 - ▶ December 2001
- PPermanent Plant Modifications
 - ► January 2002



NRC Public Meeting

PClosing remarks - Entergy

PClosing remarks - NRC

PAdjourn

REACTOR OVERSIGHT PROCESS ANNUAL ASSESSMENT MEETING

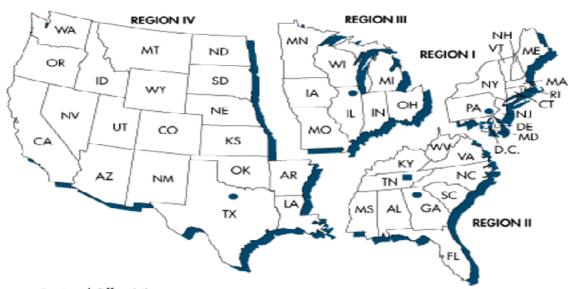


Nuclear Regulatory Commission Region IV

Overview

- Who we are
- Why we are here
- How we inspect and assess plant performance
- Plant performance results
- Questions and Answers

NRC REGIONAL OFFICES



- Regional Office (4)
- Technical Training Center (1)
- Headquarters (1)

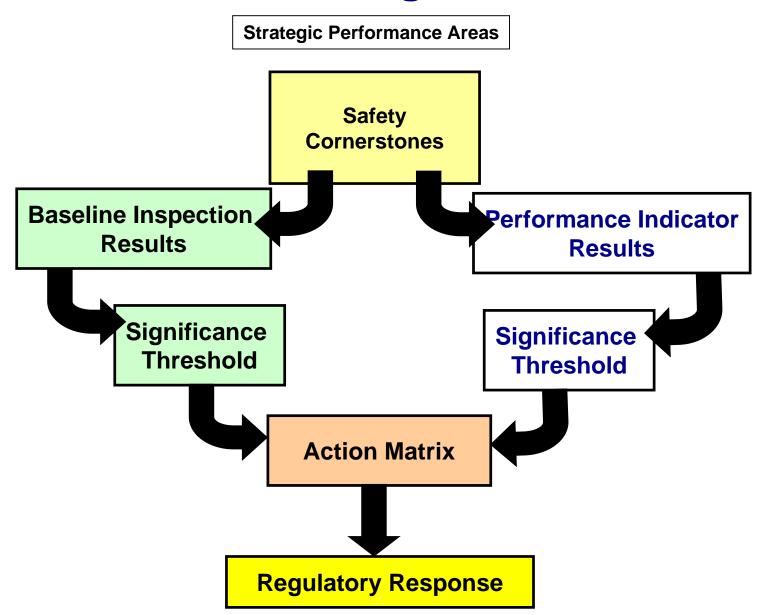
Note: Alaska and Hawaii are included in Region IV.

Source: Nuclear Regulatory Commission

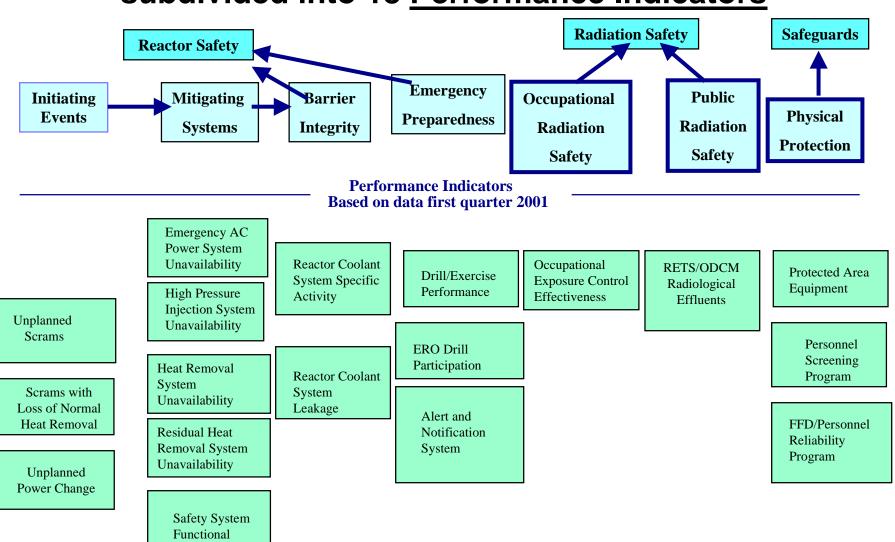
Our Oversight Activities

- Provide assurance plants are operating safely and in accord with the regulations
- Based upon a logical and sound framework
- Uses objective indicators of performance
- Uses inspections focused on key safety areas
- Assessment program triggers regulatory actions

Reactor Oversight Process



The three <u>Strategic Performance Areas</u> are subdivided into seven <u>Cornerstones</u> which are subdivided into 18 <u>Performance Indicators</u>

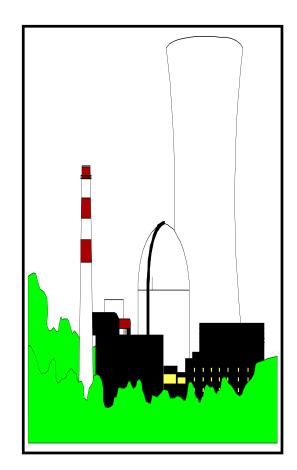


Failure

NRC Conducts Safety Inspections

NRC resident and regional inspectors utilize a <u>Baseline</u>

<u>Inspection Program</u> to monitor plant safety performance in each of the Cornerstone of Safety



Key Aspects of Baseline Inspection Program

- Objective evidence of plant safety
- Conducted at all plants
- Emphases safety significant systems, components, activities, and events
- Monitors licensee effectiveness in finding and fixing safety issues
- Inspection reports describe significant findings and non-compliance
- Inspection reports are publicly accessible

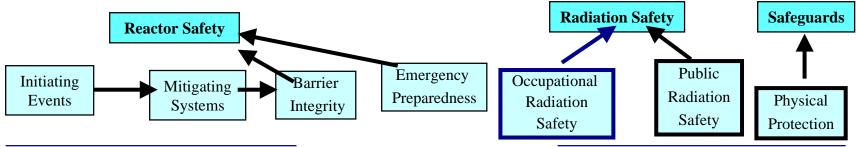
Examples of BaselineInspections

- Plant safety tours
- Plant control room tours
- Maintenance and alignment of equipment
- Worker radiation protection
- Controls for radiation releases
- Plant security

Event Follow-up and Supplemental Inspection

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

The three <u>Strategic Performance Areas</u> are subdivided into seven <u>Cornerstones</u> which are subdivided into 39 <u>Inspection Procedures</u>



Inspection Procedures

Adverse Weather

Evaluation of Changes

Equipment Alignment

Fire Protection

Flood Protection

Heat Sink Performance

In-service Inspection

Operator Requalification

Maintenance Rulse Implementation

Maintenance Risk Assessment

Non-routine Plant Events

Operability Evaluation

Operator Workarounds

Permanent Plant Modifications

Post Maintenance Testing

Refueling & Outage

Safety System Design

Surveillance Testing

Temporary Modifications

Reactor Safety-Emergency

Preparedness

Event Follow-up

Performance Indicator

Verification

Problem Identification &

Resolution

Exercise Evaluation

Alert and Notification

System

Emergency Response

Organization Augment

Emergency Action

and Plans

Emergency Preparedness

Drill Evaluation

Occupational Radiation Safety

Access Control

Radiation Monitoring Instrumentation

Public Radiation

Safety

Radiation Effluents

Treatment

Radiation

Transportation

Environmental

Monitoring

Security Access

Authorization

Security Search

Security Response

Security Plan Change

Key Aspects of Assessment Program

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

Colorization Scheme for Performance Indicators and Inspection Findings

PERFORMANCE INDICATORS

Green: Performance requiring no NRC oversight beyond Baseline

Inspection

White: Performance may result in increased NRC oversight

Yellow: Performance that minimally reduces safety margin and

requires more NRC oversight

Red: Performance that represents significant reduction in safety,

requires more NRC oversight, but provides adequate

protection to public health and safety

INSPECTION FINDINGS

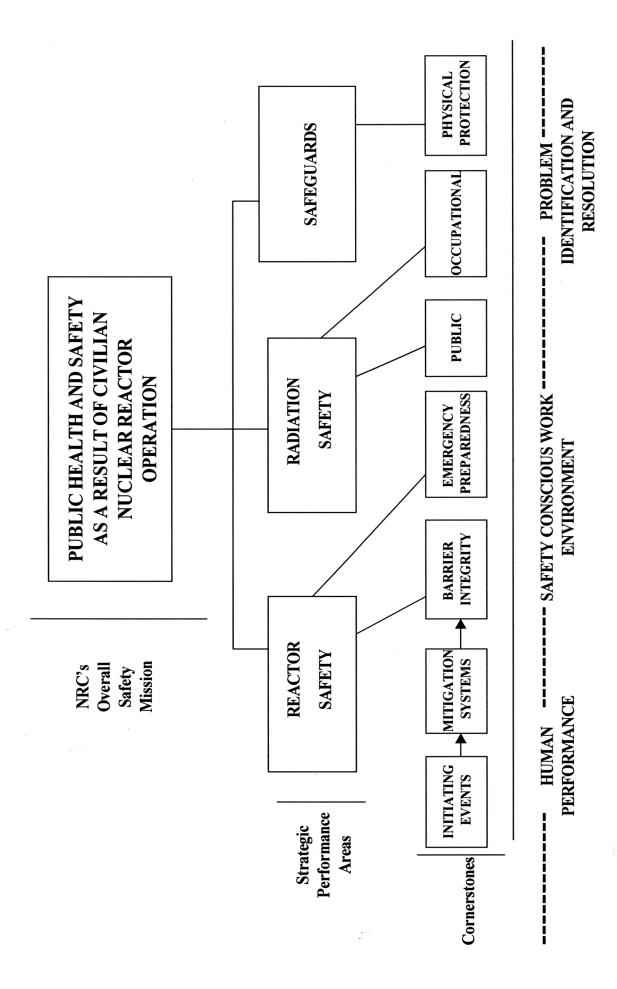
Green: Very low safety issue

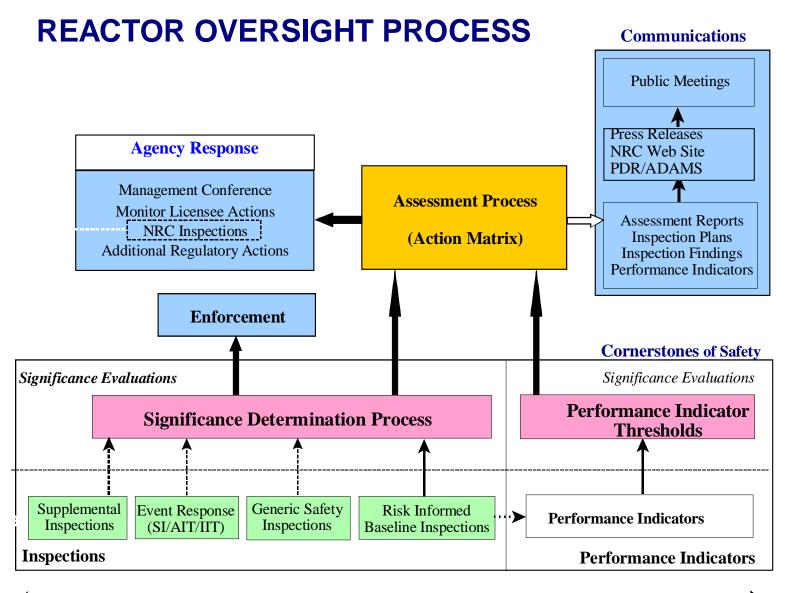
White: Low to moderate safety issue

Yellow: Substantial safety issue

Red: High safety issue

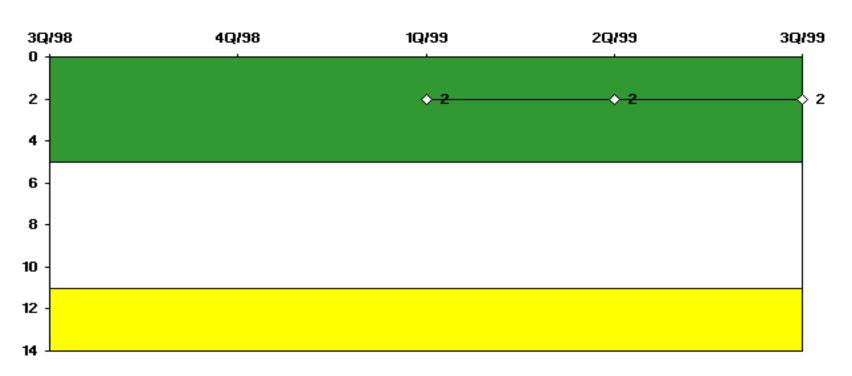
REGULATORY FRAMEWORK





A <u>Performance Indicator</u> uses objective data to monitor performance in each <u>Cornerstone area</u>

Occupational Exposure Control Effectiveness



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

	Licensee Response Regulatory Response Degraded Cornerstone Multiple/ Repetitive Column Column Column Degraded Cornersto Column		U nacceptable ne Perform ance Colum n			
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