

Three Mile Island, Unit 1 Annual Assessment Meeting

Reactor Oversight Program - CY 2004



Nuclear Regulatory Commission - Region 1

King of Prussia, PA

April 13, 2005

Agenda

- Introductions
- Review of Reactor Oversight Process
- National Summary of Plant Performance
- Discussion of Plant Performance Results
- AmerGen Response and Remarks
- NRC Closing Remarks
- Break
- NRC available to address public questions

Purpose of Today's Meeting

- NRC will address licensee performance as identified in our annual assessment
- AmerGen will respond to our assessment and inform the NRC of new or existing programs to maintain or improve performance
- NRC comments on security, public involvement
- NRC will respond to questions from the public after the discussion with AmerGen

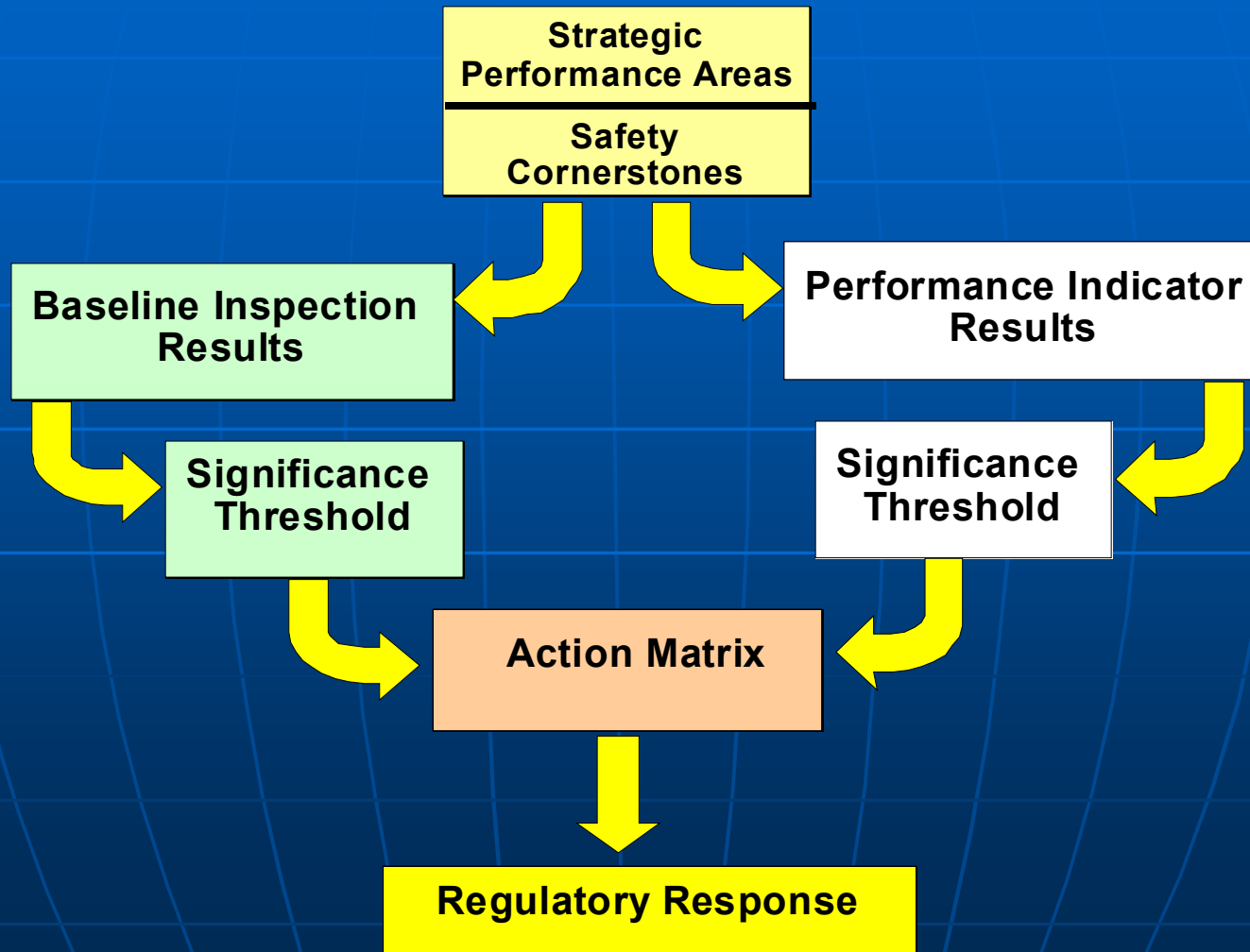
NRC Representatives

- Randy Blough, Director
Division of Reactor Projects
– (610) 337-5229
- Arthur Burritt, Acting Branch Chief
– (610) 337-5069
- David Kern, Senior Resident Inspector
– (717) 948-1165
- Javier Brand, Resident Inspector
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NRC Performance Goals

- Safety: Ensure protection of public health and safety and the environment
- Security: Enhance the secure use and management of radioactive materials
- Openness: Ensure openness in our regulatory process
- Effectiveness: Ensure that NRC actions are effective, efficient, realistic and timely
- Management: Ensure excellence in agency management to carry out the NRC's strategic objective

Reactor Oversight Process



Examples of Baseline Inspections

- Equipment Alignment ~92 hrs/yr
- Triennial Fire Protection ~200 hrs every 3 yrs
- Operator Response ~125 hrs/yr
- Emergency Preparedness ~80 hrs/yr
- Rad Release Controls ~100 hrs every 2 yrs
- Worker Radiation Protection ~100 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:	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

Action Matrix Concept



- Increasing Safety Significance
- Increasing NRC Inspection Efforts
- Increasing NRC/Licensee Management Involvement
- Increasing Regulatory Actions

National Summary of Plant Performance

Status at End of CY 2004

Licensee Response	78
Regulatory Response	21
Degraded Cornerstone	0
Multiple/Repetitive Degraded Cornerstone	3
Unacceptable	0

Total Units 102*

*Davis-Besse is in IMC 0350 process

National Summary

Performance Indicator Results (at end of CY 2004)

Green	1834
White	6
Yellow	0
Red	0

Total Inspection Findings (CY 2004)

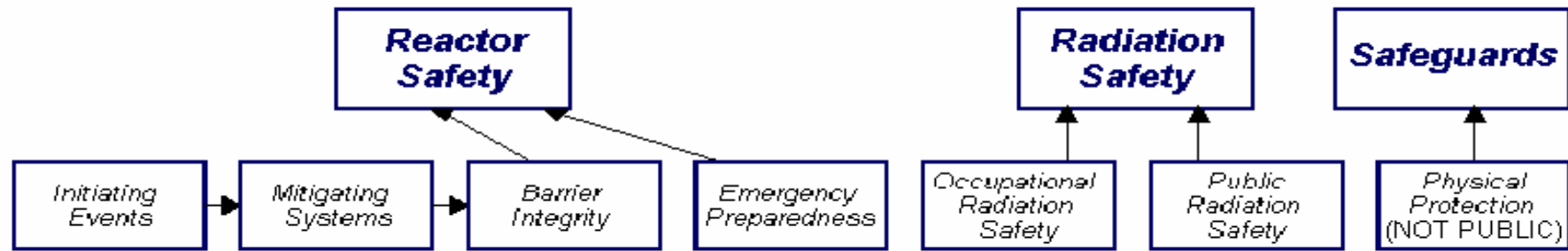
Green	778
White	11
Yellow	0
Red	0

Three Mile Island, Unit 1 Assessment Results

(Jan 1 - Dec 31, 2004)

- Operated safely
- Met all cornerstone objectives
- Three Mile Island (TMI), Unit 1 in the Licensee Response Column of the Action Matrix for all four quarters of 2004
- NRC will continue to conduct baseline inspections in 2005

Three Mile Island - Unit 1, Performance Indicators

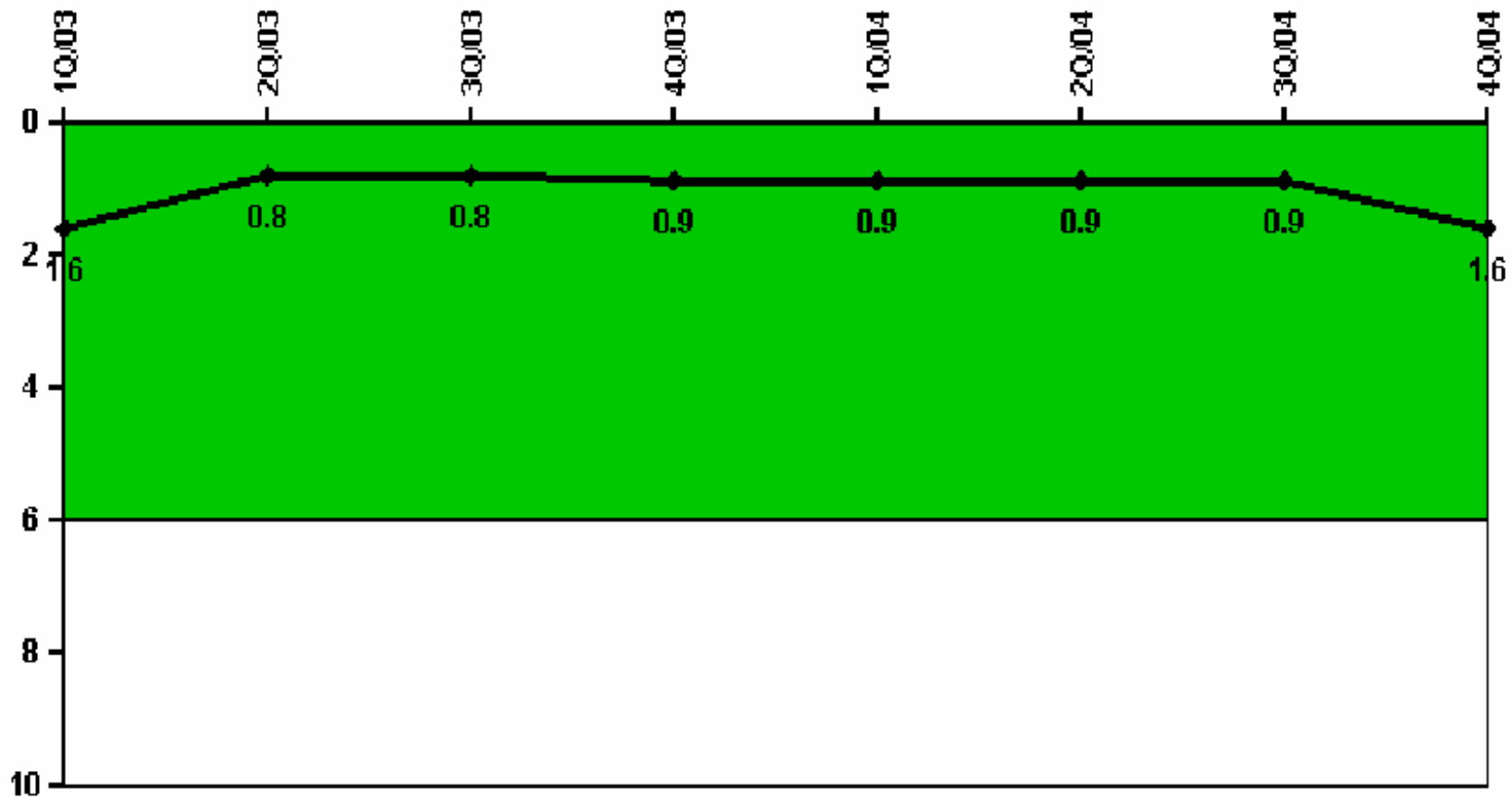


Performance Indicators

Unplanned Scrams (G)	Emergency AC Power System Unavailability (G)	Reactor Coolant System Activity (G)	Drill/Exercise Performance (G)	Occupational Exposure Control Effectiveness (G)	RETS/DDCM Radiological Effluent (G)
Scrams With Loss of Normal Heat Removal (G)	High Pressure Injection System Unavailability (G)	Reactor Coolant System Leakage (G)	ERO Drill Participation (G)		
Unplanned Power Changes (G)	Heat Removal System Unavailability (G)		Alert and Notification System (G)		
	Residual Heat Removal System Unavailability (G)				
	Safety System Functional Failures (G)				

TMI Unit 1, Sample PI

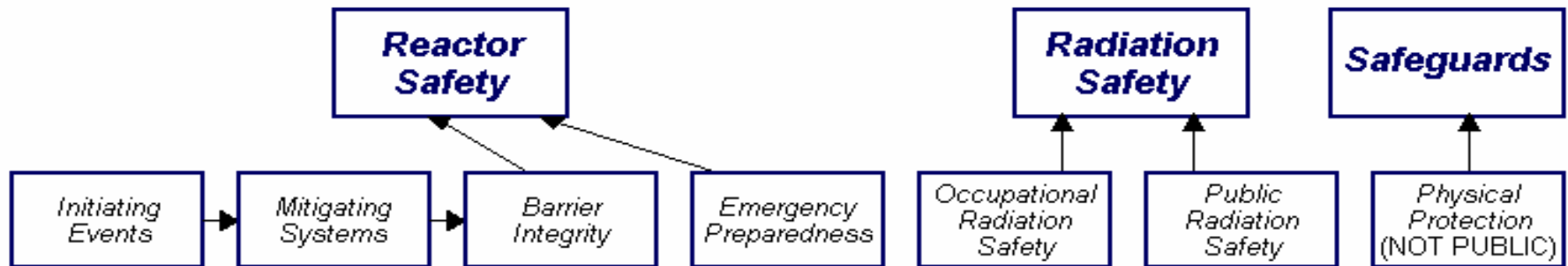
Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

TMI Unit 1, Inspection Findings

www.nrc.gov/NRR/OVERSIGHT/ASSESS/ then click **TMI 1**



Most Significant Inspection Findings

Quarter	Initiating Events	Mitigating Systems	Barrier Integrity	Emergency Preparedness	Occupational Radiation Safety	Public Radiation Safety	Physical Protection (NOT PUBLIC)
4Q/2004	No findings this quarter	G	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
3Q/2004	No findings this quarter	G	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
2Q/2004	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/2004	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

Miscellaneous findings

Sample Inspection Findings

- 25 Percent of the Operating Crews did not pass the Simulator Portion of the Operator Requalification Exam
- Untimely Identification and Correction of Equipment Conditions, including:
 - Nuclear River Water Pump “1C” Elevated Vibration
 - Emergency Diesel Generator “A” Fuel Injector Line Degraded
 - Control Building Ventilation Exhaust Fan Elevated Vibration
 - Main Steam Isolation Valve Support Snubber Oil Reservoir Low
 - Incorrect Main Steam Line Instrument Fitting
- Plant Modification Affected Emergency Plan Effectiveness Without Prior NRC Approval

TMI, Unit 1, Inspection Activities

(Jan 1 - Dec 31, 2004)

- 5,250 hours of inspection-related activities
- 2 resident inspectors assigned to the site
- 10 regional inspections
- 1 team inspection - Problem Identification and Resolution
- Inspection Findings
 - Twelve (12) findings of very low safety significance (Green)
 - Two (2) severity level IV non-cited violations

Substantive Cross-Cutting Issues

- Three cross-cutting categories: 1) Problem Identification & Resolution, 2) Human Performance and 3) Safety Conscious Work Environment
- Issues involve (cross-cut) multiple ROP cornerstones
- Three factors must exist for the NRC to determine that a substantive cross-cutting issue is present:
 - Multiple Green or safety significant inspection findings within the 12 month assessment period
 - Causal factors have a common theme (e.g., PI&R - identification) as indicated by >3 findings
 - NRC's concern with licensee's scope of efforts or progress in addressing the cross-cutting deficiency

TMI Unit 1, Assessment Summary

(Jan 1 - Dec 31, 2004)

- Operated safely
- Preserved Public Health and Safety
- Highest Performance Category
- Closed the PI&R Substantive Cross-Cutting Issue

TMI Planned Inspections

(Jan 1 - Dec 31, 2005)

- 13 regional inspector visits scheduled
- 2 team inspections scheduled
 - Safety System Design Inspection
 - Triennial Fire Protection Team

AmerGen Response and Remarks

Three Mile Island Nuclear Power Station

Unit 1

AmerGen Energy Company, LLC

NRC Security Program Update

Full implementation of four Orders issued in 2003:

- Access Authorization Order (January 2003)
- Training Order (April 2003)
- Fatigue Order (April 2003)
- Revised Design Basis Threat Order (April 2003)

- Changes to Site Security plans to incorporate the requirements of the orders were reviewed and approved
- Expanded Force-on-Force Exercises (ongoing)
- New NRC Security Baseline Inspection Program initiated (February 2004)

Ways for the Public To Become Informed & Involved in the Regulatory Process

Examples

- Participate in NRC Public Meetings
 - Sign up to be on our mailing list
- Visit the NRC website on a regular basis
- Publically comment on proposed licensing actions or file a Petition for Rulemaking
- 10 CFR 2.206 petition process
- Contact the NRC via E-mail, mail or phone to address questions or areas of concern
- Participate in open NRC/industry symposiums
- Freedom of Information Act (FOIA) requests

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)
- **Public Comment & Involvement in Rulemaking**
<http://ruleforum.llnl.gov/>
- **NRC brochure: “Protecting Our Nation“**
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0314/>

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