

Susquehanna Annual Assessment Meeting

Reactor Oversight Program - CY 2003



Nuclear Regulatory Commission - Region I
King of Prussia, PA
April 27, 2004

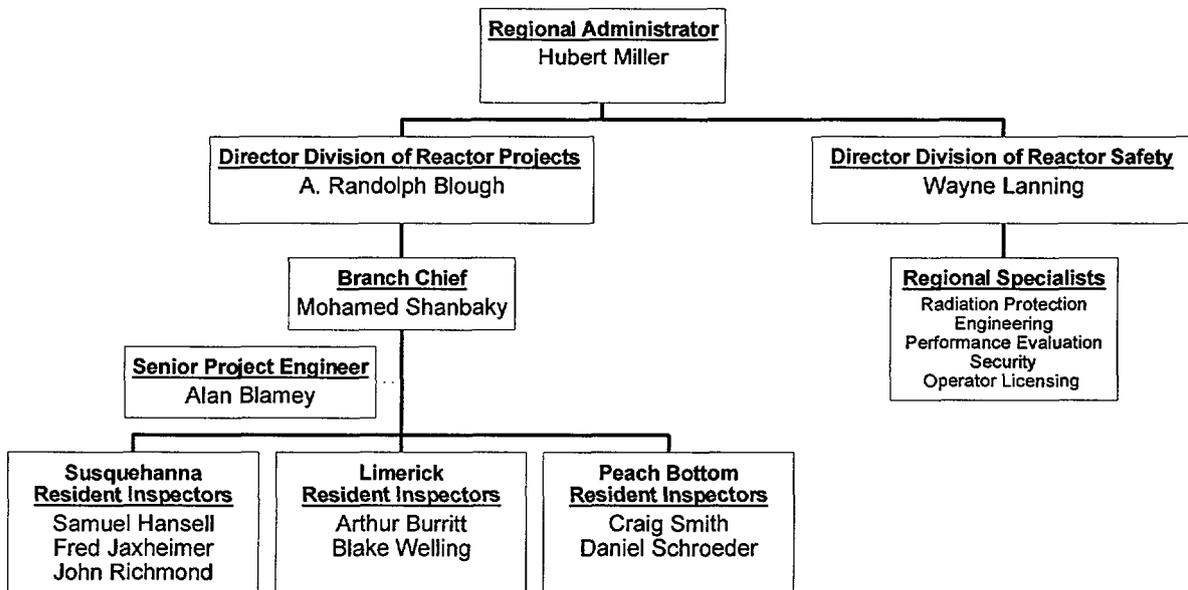
Agenda

- Introduction
- Review of Reactor Oversight Process
- National Summary of Plant Performance
- Discussion of Plant Performance Results
- PPL Response and Remarks
- Security Updates and Nuclear Industry Deregulation
- NRC Closing Remarks
- Break
- NRC available to address public questions

NRC Representatives

- Dr. Mohamed Shanbaky, Branch Chief
– (610) 337-5209
- Samuel Hansell, Senior Resident Inspector
– (570) 542-2134
- Fred Jaxheimer, Resident Inspector
– (570) 542-2134
- John Richmond, Resident Inspector
– (570) 542-2134
- Alan Blamey, Senior Project Engineer
– (610) 337-5366

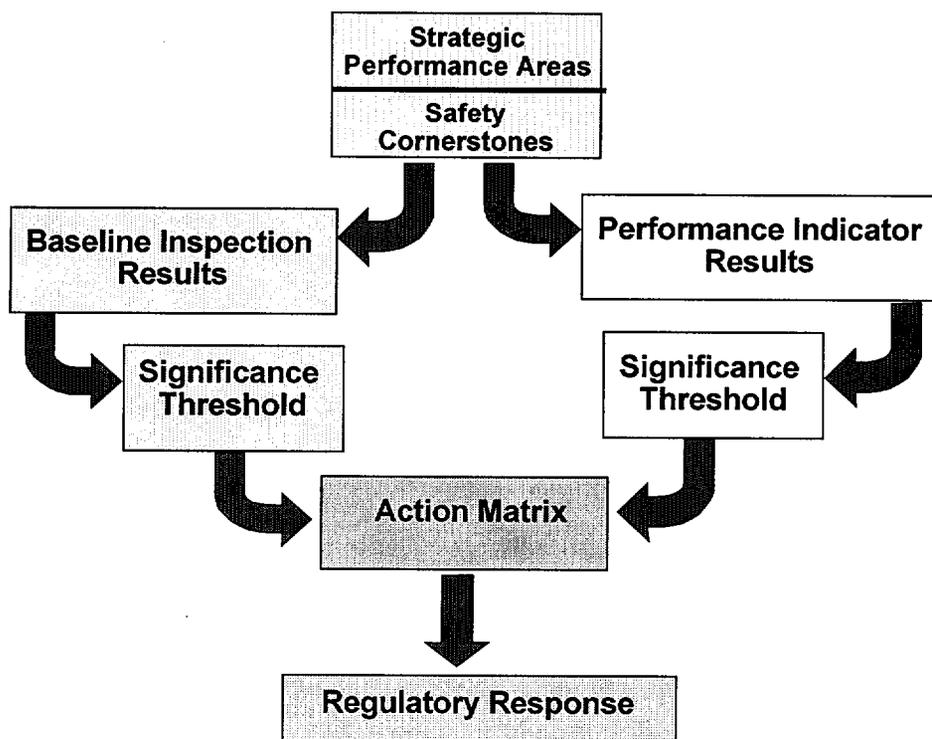
Region I Organization



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

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

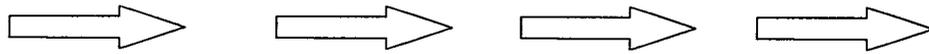
- Green:** Only Baseline Inspection
- White:** May increase NRC oversight
- Yellow:** Requires more NRC oversight
- Red:** Requires more NRC oversight

Inspection Findings

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

Action Matrix Concept

Licensee Response	Regulatory Response	Degraded Cornerstone	Multiple/Rep. Degraded Cornerstone	Unacceptable Performance
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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 2003

Licensee Response	75
Regulatory Response	22
Degraded Cornerstone	2
Multiple/Repetitive Degraded Cornerstone	3
Unacceptable	0
<div style="display: flex; justify-content: space-between;"> Total Units 102* </div>	

*Davis-Besse is in IMC 0350 process

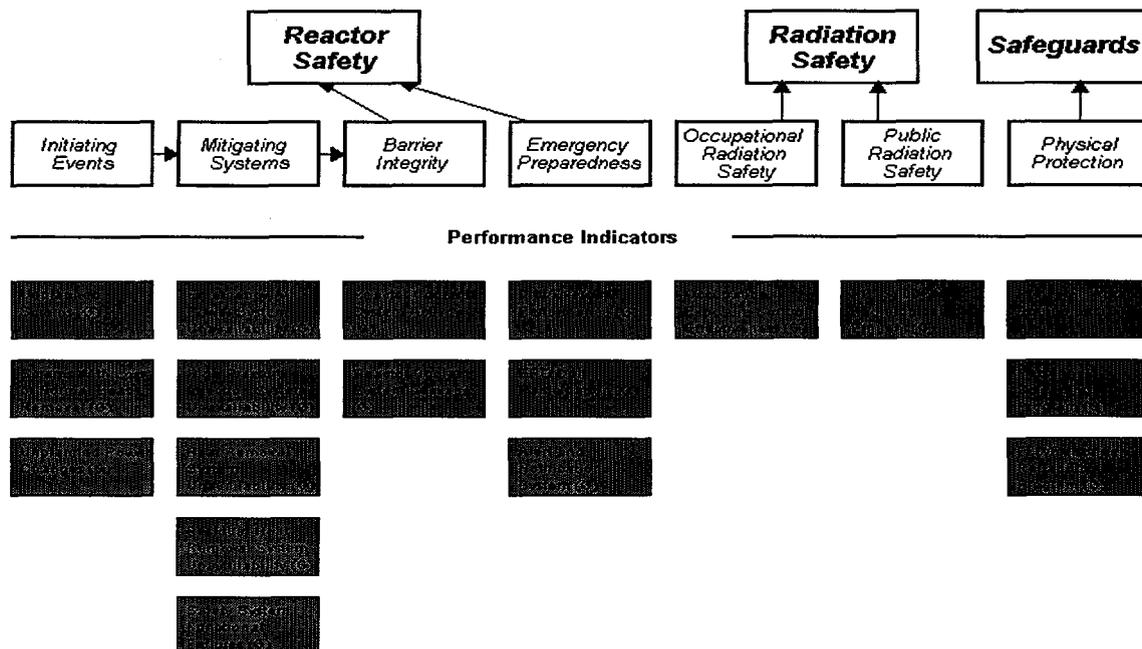
Susquehanna Assessment Results

(January 1 - December 31, 2003)

- Both units were operated safely
- Cornerstone objectives were fully met
- Licensee Response column of the Action Matrix for all four quarters of 2003
- NRC will conduct baseline inspections during the next cycle

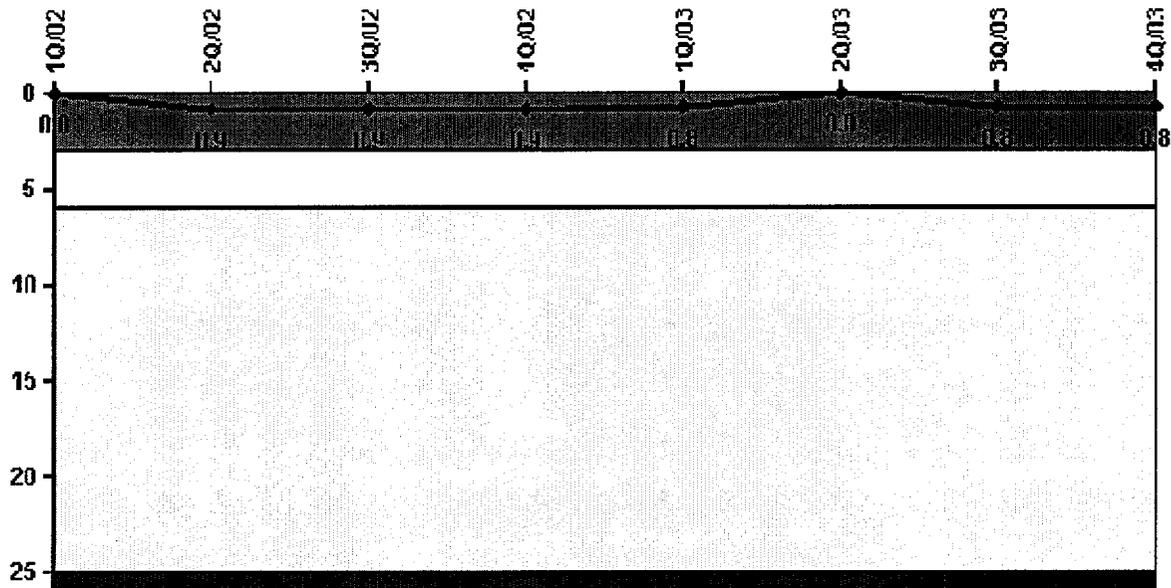
Susquehanna- Performance Indicators

www.nrc.gov/NRR/OVERSIGHT/ASSESS/ then click Susquehanna



Unit 1- Performance Indicator

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Susquehanna Inspection Activities

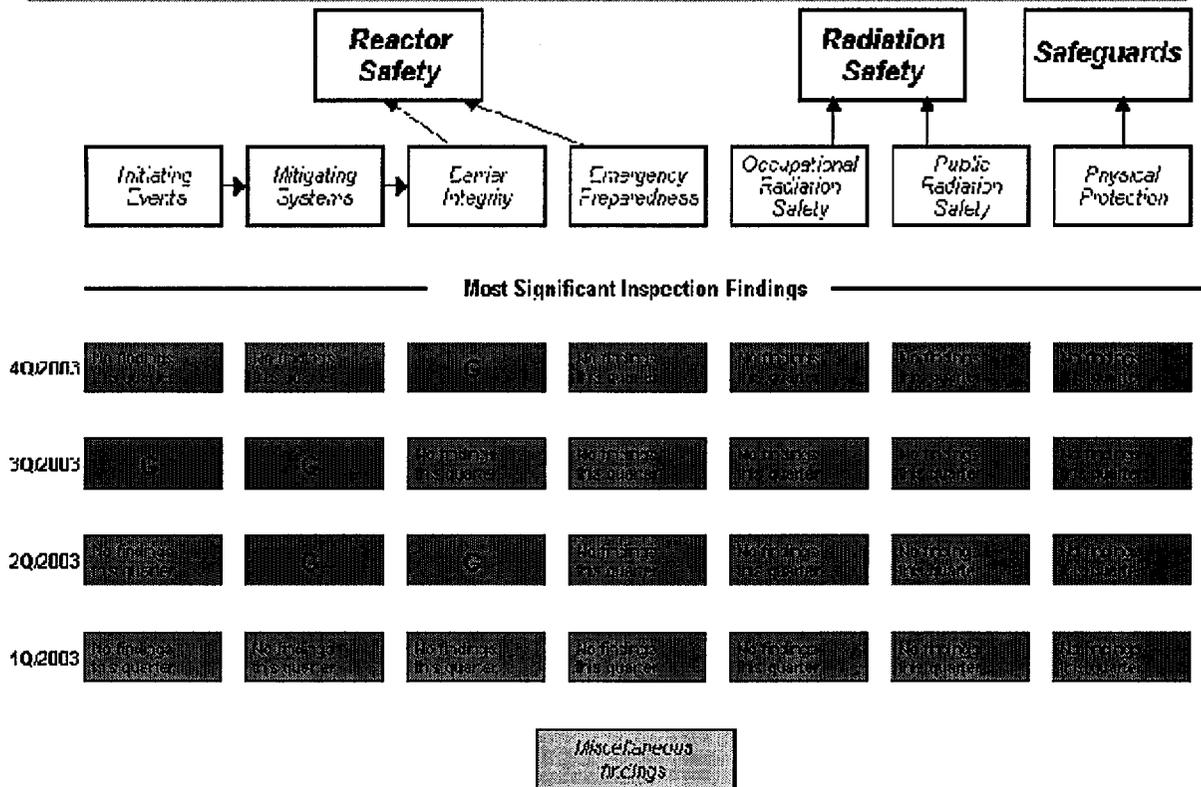
(Jan 1 - Dec 31, 2003)

- 4906 hours of inspection related activities
- 2 resident inspectors assigned to the site
- 19 regional specialist inspections
- 2 team inspections- SSDI and SEC ICM
- Inspection Findings
 - ▶ 11 finding of very low safety significance (**Green**)

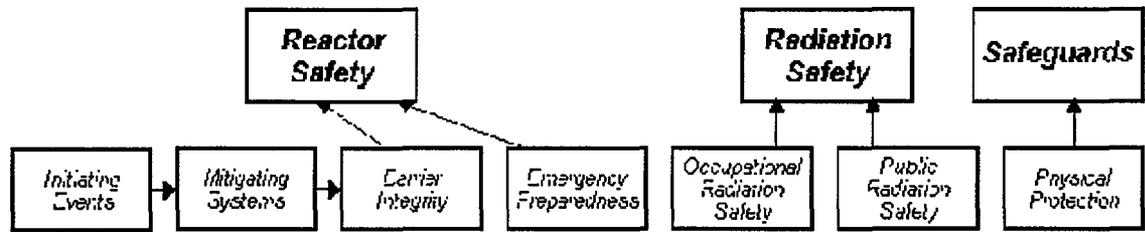
Strategic Performance Areas & Cornerstones

- Reactor Safety
 - ▶ Initiating Events (1 Green finding)
 - ▶ Mitigating Systems (4 Green findings)
 - ▶ Barrier Integrity (6 Green findings)
 - ▶ Emergency Preparedness (No findings)
- Radiation Safety
 - ▶ Occupational Radiation Safety (No findings)
 - ▶ Public Radiation Safety (No findings)
- Safeguards
 - ▶ Physical Protection (No findings)

Susquehanna Unit 1- Inspection Results



Susquehanna Unit 2- Inspection Results



Most Significant Inspection Findings

	Initiating Events	Mitigating Systems	Carrier Integrity	Emergency Preparedness	Occupational Radiation Safety	Public Radiation Safety	Physical Protection
4Q,2003	20 findings	10 findings	6	10 findings	10 findings	10 findings	10 findings
3Q,2003	20 findings	6	10 findings	10 findings	10 findings	10 findings	10 findings
2Q,2003	20 findings	6	6	10 findings	10 findings	10 findings	10 findings
1Q,2003	20 findings	6	6	10 findings	10 findings	10 findings	10 findings

Miscellaneous Findings

Substantive Cross-Cutting Issue

- One Substantive Cross-Cutting Issue Will Be Closed
- Operator Human Performance Cross-Cutting Area
- Number of Findings and Significance of Issues Were Reduced
- PPL's Corrective Action

Substantive Cross-Cutting Issue

- One Substantive Cross-Cutting Issue Opened
- Common Performance Theme
- Significant Number of Findings (6 Green Findings)
- Problem Identification and Resolution of Problems
- PPL's Corrective Action

Susquehanna Assessment Summary

(January 1- December 31, 2003)

- PPL operated Susquehanna safely and in a manner that preserved public health and safety
- Units 1 & 2 were in the Licensee Response column of the Action Matrix
- The Operator Human Performance Substantive Cross-Cutting Issue will be closed
- A Substantive Cross-Cutting Issue was opened related to Problem Identification and Resolution
- NRC will perform baseline inspections in 2004

PPL Response and Remarks

Susquehanna
Generating Station
PPL

NRC Security Program Update

- NRC has issued Orders (February 2002):
 - ▶ Increased Patrols
 - ▶ Augmented Security Capabilities
 - ▶ Added Barriers and Posts
 - ▶ Enhanced Personnel Screening for Access
 - ▶ Enhanced Security Awareness
- Office of Nuclear Security and Incident Response Formed (April 2002)
- Established Threat Advisory and Protective Measure System (August 2002)

NRC Security Program Update (continued)

- Access Authorization Order (January 2003)
- Training Order (April 2003)
- Fatigue Order (April 2003)
- Design Basis Threat (April 2003)
- Changes to Site Security plans to incorporate the requirements of the orders (April 2004)
- Expanded Force-on-Force Exercises (in progress)
- New NRC Baseline Inspection Program initiated (February 2004)

Nuclear Industry Deregulation

- Economic Deregulation throughout Region I
- Competition can spur some improvements
 - ▶ Work control, planning, coordination
- NRC must watch for any negative impacts
- NRC activities
 - ▶ Performance Indicators
 - ▶ Corrective Action Program Inspections
 - ▶ Maintenance Inspections
 - ▶ Modification Inspections
 - ▶ Safety Conscious Work Environment Assessment

Approaches for Continued Performance Success

An NRC Perspective

- Strong corrective action program
 - ▶ Continued low threshold for problem identification
- Effective engineering & technical support
- Penetrating internal self-assessments & employee surveys
- Commitment to high standards -- Maintaining a long-term view on resources

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)

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