

Annual Assessment Meeting Limerick Generating Station

Reactor Oversight Program - Year 2002



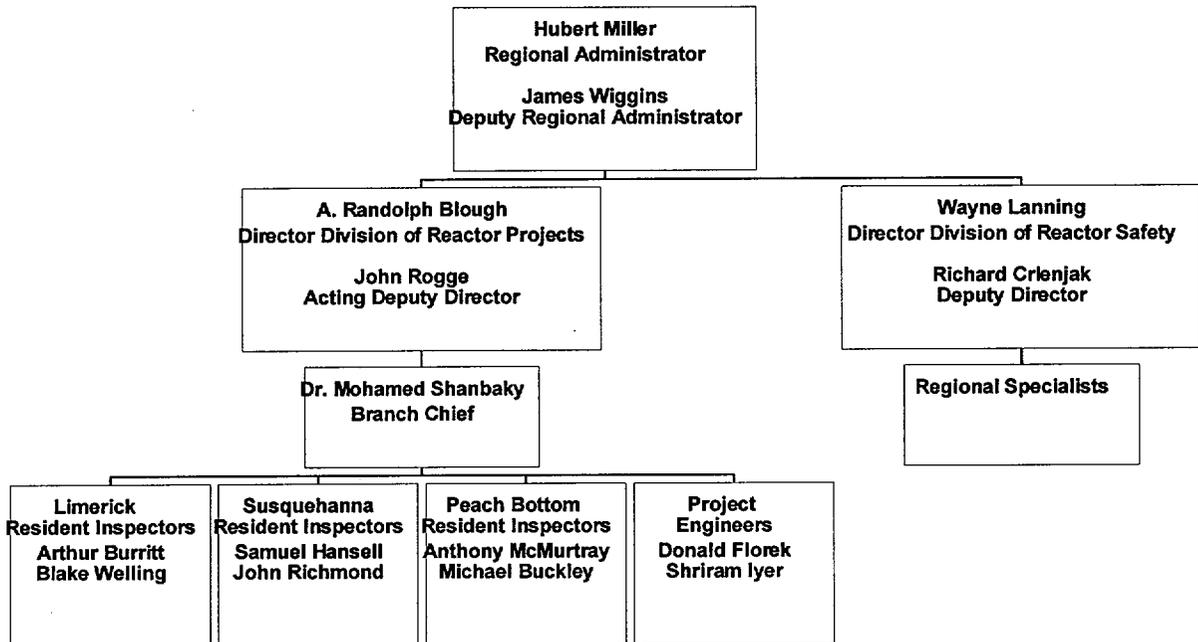
**Nuclear Regulatory Commission - Region I
King of Prussia, PA**

Agenda



- **Introduction**
- **Review of Reactor Oversight Process**
- **National Summary of Plant Performance**
- **Limerick Performance Results**
- **Exelon Response and Remarks**
- **NRC Security Update**
- **Break**
- **Public Comments and Questions**

Region I Organization



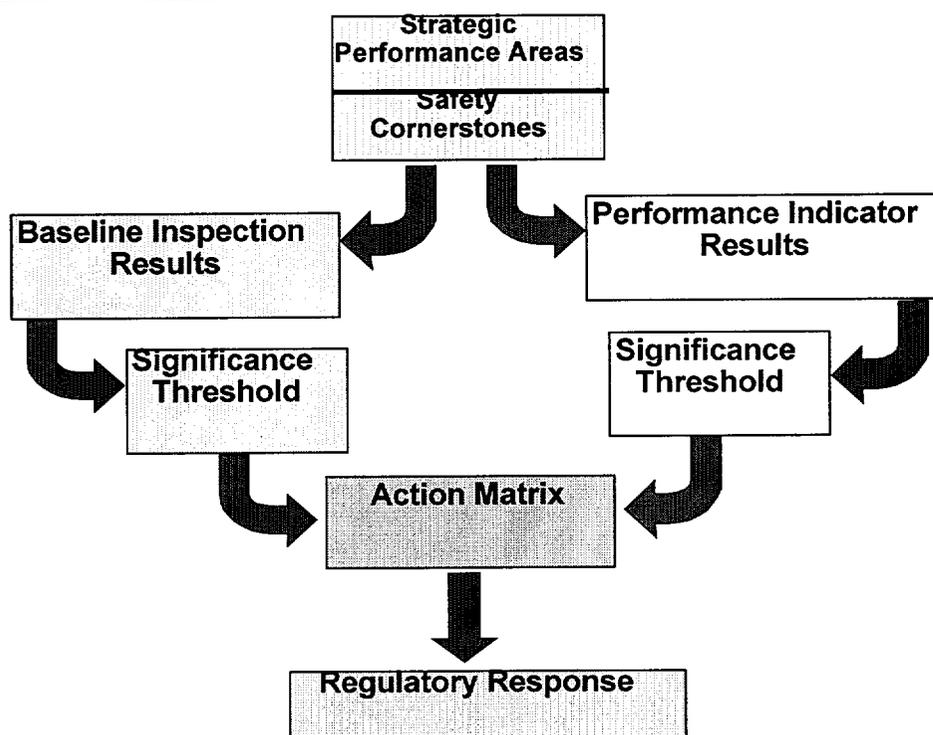
NRC Representatives



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Reactor Oversight Process (ROP)



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
- Radiation 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

Examples of Performance Indicators

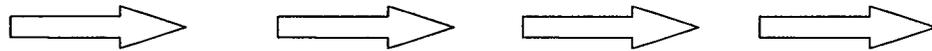


- Scrams with Loss of Normal Heat Removal
- Unplanned Power Changes
- Emergency AC Power Safety System Unavailability
- Alert and Notification System Reliability



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 2002

Licensee Response	75
Regulatory Response	24
Degraded Cornerstone	2
Multiple/Repetitive Degraded Cornerstone	1
Unacceptable	0
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Total Plants	102

*Davis-Besse is in IMC 0350 process

National Summary



-
- Performance Indicator Results (at end of ROP Cycle 3)
 - ▶ **Green** 1835
 - ▶ **White** 5
 - ▶ **Yellow** 0
 - ▶ **Red** 0

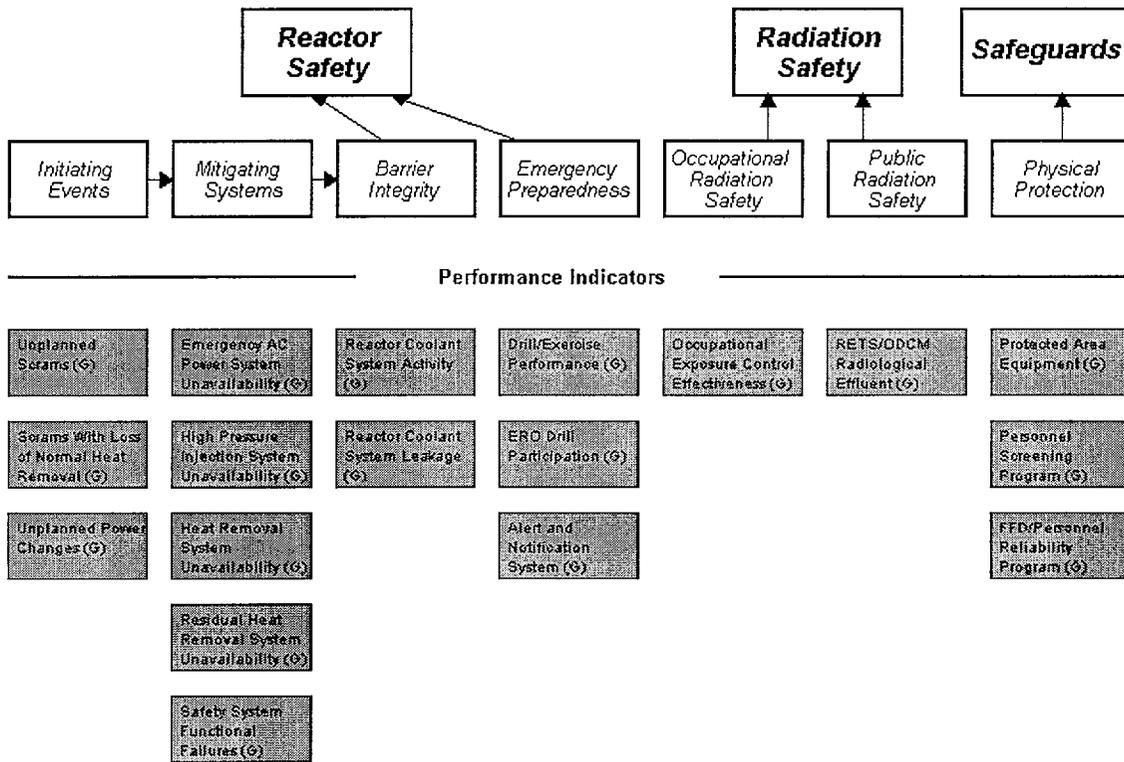
 - Total Inspection Findings (ROP Cycle 3)
 - ▶ **Green** 783
 - ▶ **White** 30
 - ▶ **Yellow** 1
 - ▶ **Red** 2

Limerick Assessment Results (Jan 1 - Dec 31, 2002)



-
- Operated Safely
 - Met all cornerstone objectives
 - Graded in the “Licensee Response” column of the Action Matrix for the most recent quarter
 - NRC will conduct baseline inspections in 2003

Limerick - Performance Indicators



Limerick Inspection Activities



(Jan 1 - Dec 31, 2002)

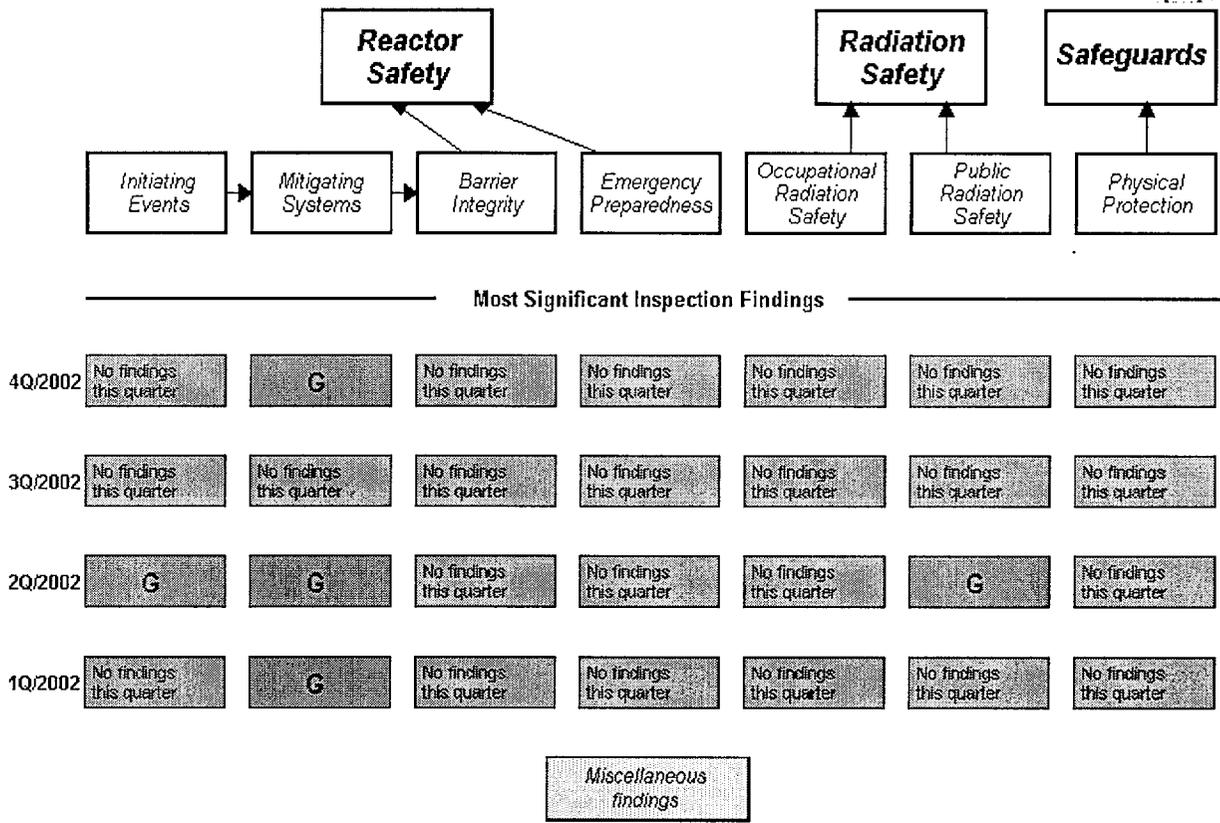
- 2865 hours of inspection related activities
- 2 resident inspectors assigned to the site
- 24 Regional Inspector visits
 - ▶ Included 3 team inspections
- Inspection Findings
 - ▶ 11 findings of very low safety significance (Green)

Strategic Performance Areas & Cornerstones

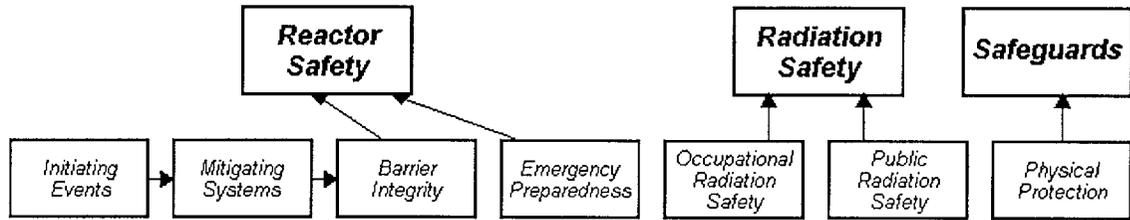


- Reactor Safety Area
 - ▶ Initiating Events Cornerstone (3 Green findings)
 - ▶ Mitigating Systems Cornerstone (6 Green findings)
 - ▶ Barrier Integrity Cornerstone (No findings)
 - ▶ Emergency Preparedness Cornerstone (No finding)
- Radiation Safety Area
 - ▶ Occupational Radiation Safety Cornerstone (No finding)
 - ▶ Public Radiation Safety Cornerstone (1 Green finding)
- Safeguards Area
 - ▶ Physical Protection Cornerstone (No findings)
- Miscellaneous (1 Green finding)

Limerick Unit 1- Inspection Results



Limerick Unit 2- Inspection Results



Most Significant Inspection Findings

Quarter	Initiating Events	Mitigating Systems	Barrier Integrity	Emergency Preparedness	Occupational Radiation Safety	Public Radiation Safety	Physical Protection
4Q/2002	No findings this quarter	No findings this quarter	No findings this quarter				
3Q/2002	G	No findings this quarter	No findings this quarter	No findings this quarter			
2Q/2002	G	G	No findings this quarter	No findings this quarter	No findings this quarter	G	No findings this quarter
1Q/2002	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



Limerick Assessment Summary

- Operated Safely
- Preserved Public Health and Safety
- Highest Performance Category

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)**
- **Threat Advisory and Protective Measure System (August 2002):**
 - ▶ NRC established a five level threat advisory and protective measure system based on Homeland Security Advisory System

NRC Security Program Update (continued)



- **Access Authorization Order (January 7, 2003)**
- **Force-on-Force Exercises (February 2003)**
- **Training Order (TBD)**
- **Fatigue Order (TBD)**
- **Design Basis Threat (TBD)**



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)

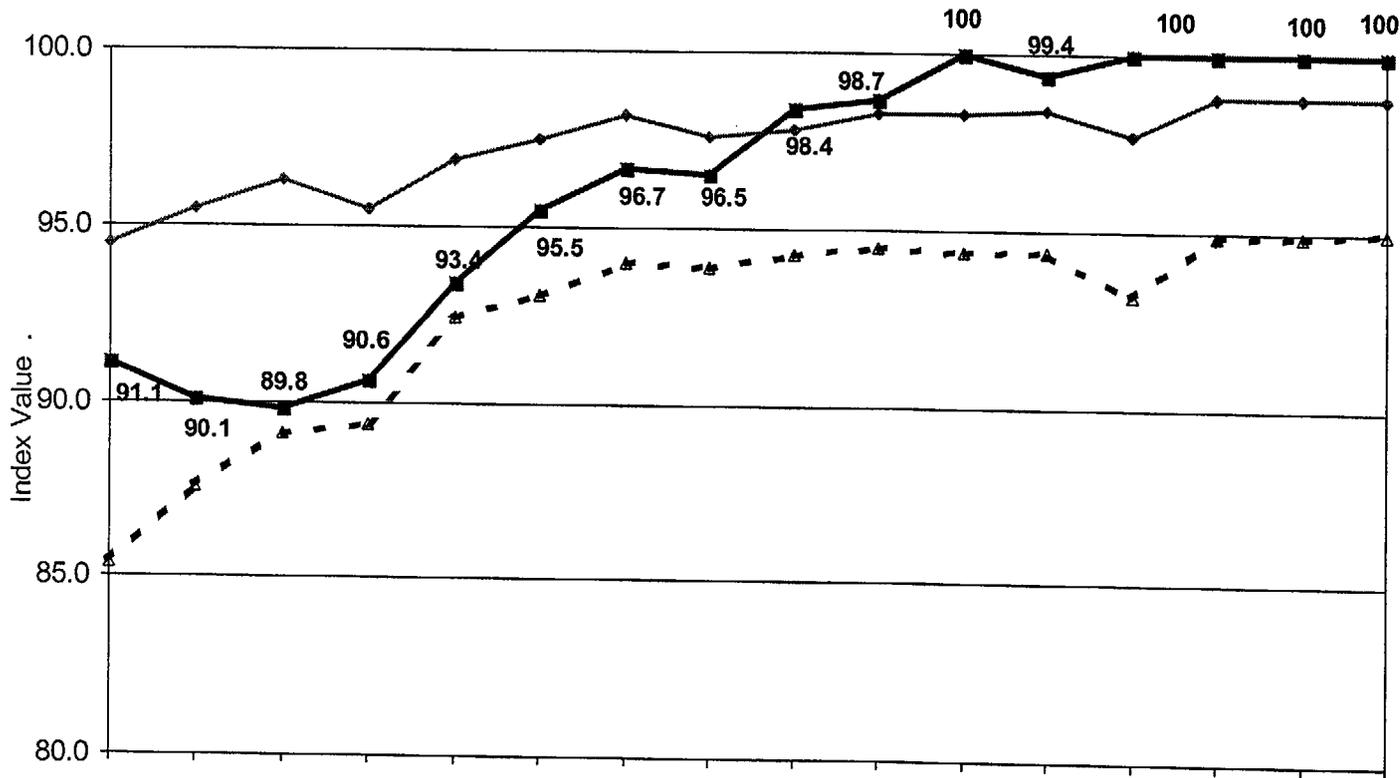
End of Presentation

Limerick Generating Station

NRC Public Meeting

April 3, 2003

INPO Performance Index



Unit 1 = 100
Unit 2 = 100
Station = 100
Best Quartile = 98.8



Year 2002-Accomplishments

- ☞ Safe and Reliable Operation of the Units
- ☞ Industry Top Quartile Performance
 - Industrial Safety
 - Safety System Reliability
 - Radiation Exposure
- ☞ Material Condition Improvements
 - System Health Improvement Plan
 - Plant Health Committee
 - Project Review Committee

Focus Areas

- ☞ Security
- ☞ Operational Execution Fundamentals
- ☞ Equipment Reliability
- ☞ Corrective Action Program