



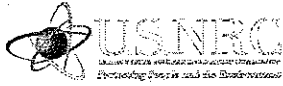
NRC Annual Performance Assessment of Susquehanna Steam Electric Station

2007 Reactor Oversight Program



Purpose of Today's Meeting

- **Discuss Susquehanna's Plant Performance for CY 2007**
- **Provide PPL the opportunity to respond to the NRC's Annual Performance Assessment and to identify new or existing programs to continue to improve performance**
- **Provide stakeholders the opportunity to engage the NRC staff on plant performance issues and our role in ensuring safe plant operations**



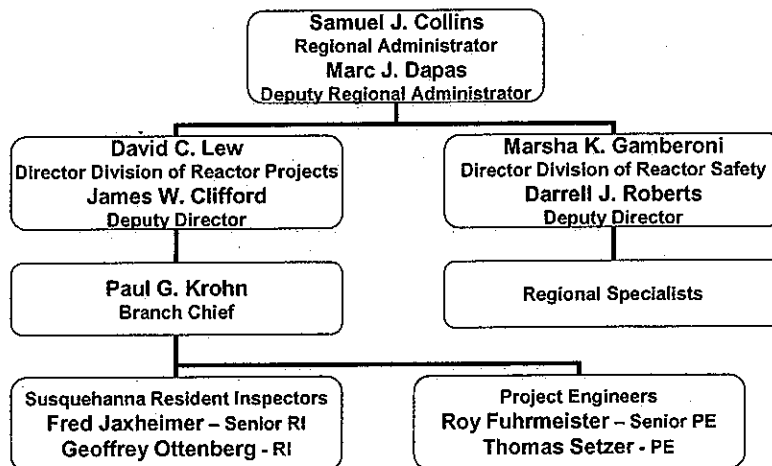
Agenda

- Introduction
- NRC Organization and Performance Goals
- Reactor Oversight Process (ROP)
- National Summary of Plant Performance
- Susquehanna's Plant Performance Assessment
- PPL Response and Remarks
- NRC Closing Remarks
- Break
- NRC available to address public questions

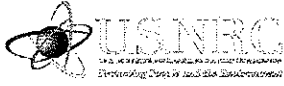
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Region I Organization

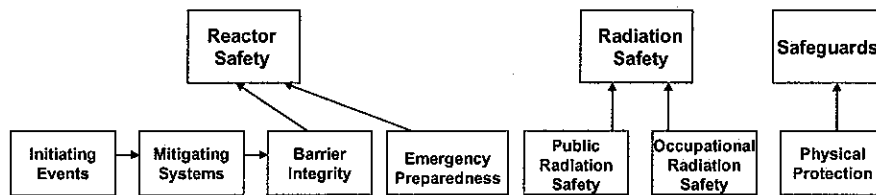


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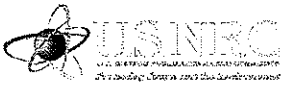


Reactor Oversight Process

3 Strategic Areas & 7 Cornerstones



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NRC Strategic Plan Goals

- **Safety:** Ensure adequate protection of public health and safety and the environment
- **Security:** Ensure adequate protection in the secure use and management of radioactive materials

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NRC Values

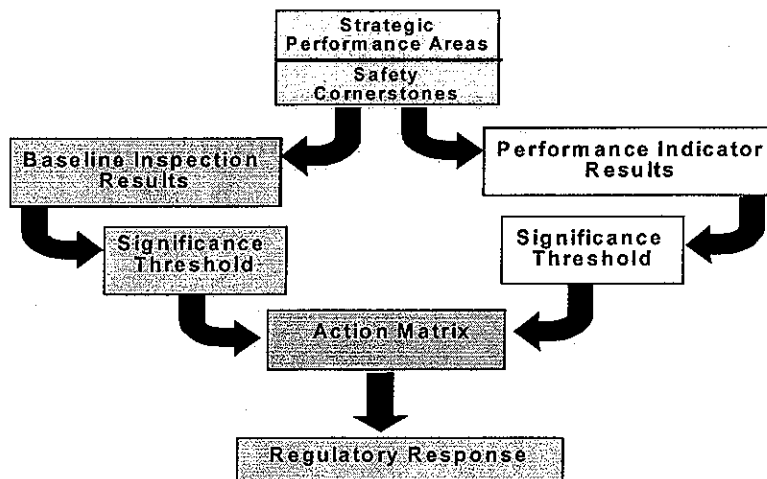
The safe use of radioactive materials and nuclear fuels for beneficial civilian purposes is enabled by the agency's adherence to the principles of good regulations –

- Independence
- Openness
- Efficiency
- Clarity
- Reliability

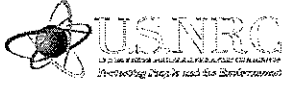
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Reactor Oversight Process



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Typical Baseline Inspection Areas

- **Equipment Alignment**
- **Maintenance**
- **Fire Protection**
- **Operator Response**
- **Emergency Preparedness**
- **Radiation Release Controls**
- **Worker Radiation Protection**
- **Corrective Action Program**
- **Corrective Action Case Reviews**

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Significance Threshold

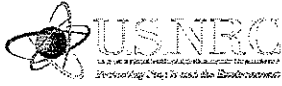
Performance Indicators

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

Inspection Findings

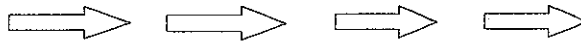
- **Green** **Very low safety issue**
- **White** **Low to moderate safety issue**
- **Yellow** **Substantial safety issue**
- **Red** **High safety issue**

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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

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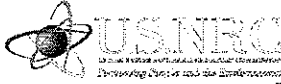


National Summary

(at end of 2007)

Licensee Response	87
Regulatory Response	8
Degraded Cornerstone	8
Multiple/Repetitive Degraded Cornerstone	1
Unacceptable	0
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Total	104

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National Summary (at end of 2007)

Performance Indicator Results

➤ Green	1954
➤ White	8
➤ Yellow	2
➤ Red	0

Total Inspection Findings

➤ Green	918
➤ White	9
➤ Yellow	2
➤ Red	0

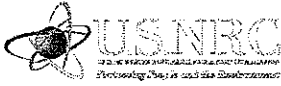
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NRC Inspection Activities at **Susquehanna**

- **5680 hours of inspection and related activities**
- **2 resident inspectors on-site**
- **11 regional inspections**
- **1 major team inspection:**
Component Design Bases Inspection

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Safety Significant Pls / Findings

- **All Performance Indicators were Green for CY2007**
- **11 Green inspection findings for CY2007**

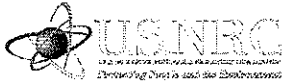
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NRC Example Inspection Findings

- **Green – Failure to take timely corrective actions to address an ‘E’ Emergency Diesel Generator jacket water cooling leak. Violation of 10 CFR 50 Appendix B Criterion XVI, “Corrective Action.”**
- **Green – Inadequately secured transport of condensate pump, Violation of 10 CFR 71.5, “Transportation of Licensed Material.”**
- **Green – Inadequate design control of Fuel rechanneling activities (Grid spacer damage). Violation of 10 CFR 50 Appendix B Criterion III, “Design Control.”**

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NRC Annual Assessment Summary **Susquehanna**

- **PPL operated the plant safely and in a manner that preserved public health and safety and protected the environment**
- **Susquehanna remained in the Licensee Response column of the NRC's Action Matrix for all four quarters of 2007**
- **All cornerstone objectives were fully met**
- **NRC plans baseline inspections at Susquehanna for the remainder of CY 2008**

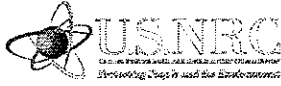
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Licensee Response and Remarks

Mr. Britt McKinney
Senior Vice President & CNO
PPL Susquehanna, LLC

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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

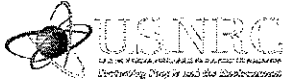
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NRC Representatives

- **Paul G. Krohn, Branch Chief**
 - (610) 337-5120
- **Fred Jaxheimer, Senior Resident Inspector**
 - (570) 542-2134
- **Geoffrey Ottenberg, Resident Inspector**
 - (570) 542-2134
- **Roy Fuhrmeister, Senior Project Engineer**
 - (610) 337-5059
- **Thomas Setzer, Project Engineer**
 - (610) 337- 5165

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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>

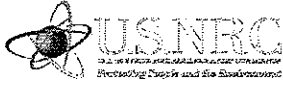
- **Public Document Room**
1-800-397-4209 (Toll Free)

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End of the Presentation

**Nuclear Regulatory Commission – Region I
King of Prussia, Pennsylvania
April 16, 2008**



NRC Performance Indicators

Initiating Events PIs

- Unplanned Scrams
- Unplanned Scrams with Complications
- Unplanned Power Changes

Mitigating Systems PIs

- Emergency AC Power System
- High Pressure Injection System
- Residual Heat Removal System
- Cooling Water Support Systems
- Safety System Functional Failures

Barrier Integrity PIs

- Reactor Coolant System Specific Activity
- Reactor Coolant System Leakage

Emergency Planning PIs

- Drill / Exercise Performance
- Emergency Response Organization Participation
- Alert and Notification System

Radiation Protection PIs

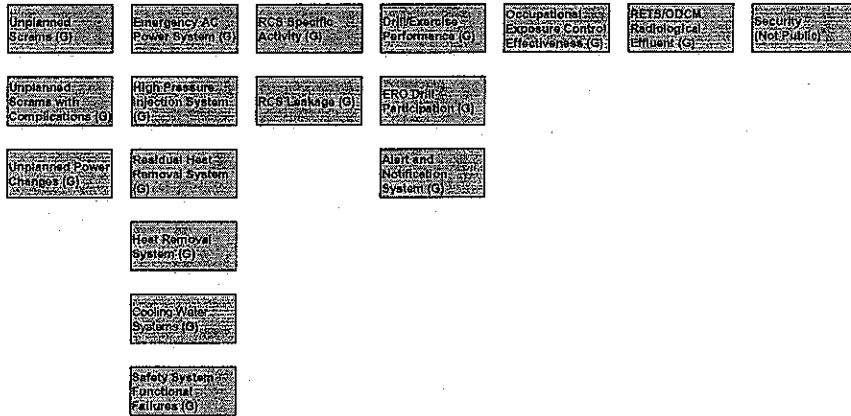
- Occupational Exposure Control Effectiveness
- RETS / ODCM Radiological Effluent

Security PIs are not Publicly Available

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Susquehanna Units 1 and 2 Performance Indicators



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