



**SAFE  
RELIABLE  
COST-EFFECTIVE**



**D.C. Cook  
Regulatory Performance Meeting**

April 10, 2003

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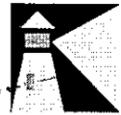


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**Introduction**

Joe Pollock  
Site Vice President





## Agenda

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- |                         |               |
|-------------------------|---------------|
| • 2002 Performance      | Joe Pollock   |
| • Human Performance     | Mike Finissi  |
| • Equipment Reliability | Jack Giessner |
| • Corrective Actions    | Tom Noonan    |
| • Wrap-Up               | Joe Pollock   |

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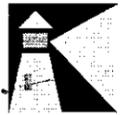
## 2002 Accomplishments

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- Safety
  - Personnel
  - ALARA
- Improved Refueling Outages
- Framatome & USA Partnerships
- License Training Class Passed 100%
- Equipment Reliability - 30 Pumps Rebuilt
- Significant Progress Reduced Backlogs
- Focus on the Plant In Mid-2002 Resulted in Operational Performance Improvements

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## 2002 Shortcomings

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- Repetitive Equipment Problems
  - 2 CD Emergency Diesel Generator
  - Reactor Control Instrumentation Power Supplies
- Poor Corrective Action Implementation
  - Auxiliary Feedwater Pump
  - Essential Service Water
- Human Performance

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## Human Performance

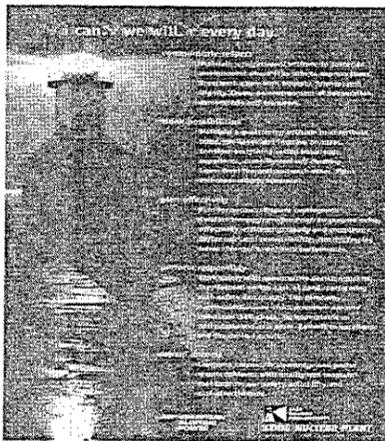
Mike Finissi  
Plant Manager





## Our Behaviors Lead the Way!

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### 2003 Focus Areas

- Accountability
- Results with Safety & Quality
- Leadership

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## On-going Efforts

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- Curriculum Development & Program Review Committees
- Days of Excellence Clock
- Human Event Review Board
- Operations Human Performance Improvement
- Maintenance Procedure Enhancements
- Cross-Organizational Effort
  - Performance Improvement Council
  - Senior Training Council

Continuing Focus on Human Performance

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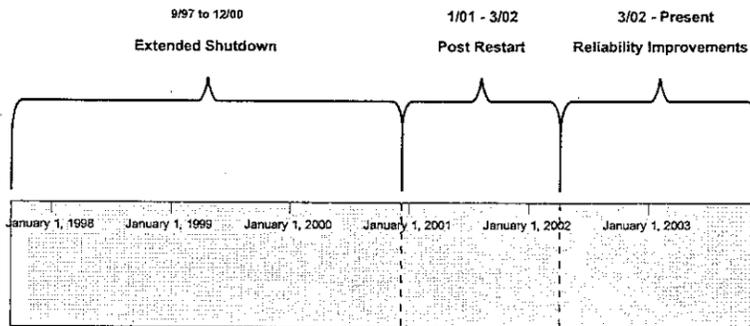
## Equipment Reliability

Jack Giessner  
Chair, Equipment Reliability  
Steering Committee



## Where Have We Been

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- Fix Primary Systems
- Reconstitute the Design Basis of Plant

- Continue Plant Improvements
- Focus on Backlog Reductions
- Maintenance Rule Program Recovery

- Continue Plant Improvements
- EQR Program Development
- Process Improvements





## Extended Shutdown Focus

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- Design and Licensing Basis Issues
- Predominately Safety Systems

Secondary Plant Considered To Be Acceptable

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## Post-Restart Activities

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	<u>2001</u>	<u>Today</u>
• Operability Determinations	105	20
• Control Room Deficiencies	319	22
• Corrective Maintenance Job Orders	2,677	236
• Modification Backlog	800	59
• Condition Reports	11,900	675

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## Equipment Reliability

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### Late 2001 -- Established Two-prong Strategy for Equipment Reliability (EQR)

- Established Foundation for Equipment Reliability Process
- Plant Improvements
  - Focus on Major Maintenance Re-work Items

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## 2002 Accomplishments

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### Plant

- Use of Water Jet Cleaning Tools in Feed Pump Condensers
- Refurbished 30 Major Pumps, Including All ESW Pumps
- Installed Hydran Monitors on 765 KV Current Transformers
- Started Study Phase for Traveling Water Screen Replacement

### Process

- Completed Characterization for ~ 90,000 Components
  - Critical, Non-critical and Run-to-failure
- Initiated Preventive Maintenance Optimization
- Instituted System Performance Tracking & Trending Expectations
- Established Cross-functional Team to Identify Key Areas Needing Improvement and to Develop Solutions

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## 2003 Improvements

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### Plant

- CW Pump & Discharge Valve Upgrades
- Emergency Diesel Generator Governor Obsolescence Issues
- Power Supply Single Point Vulnerability & Annunciation
- Design & Install at Least 2 Screens
- Implement Study Phase of Digital Feedwater & Turbine Controls

### Process

- EQR Steering Committee Sets Standards in EQR Across the Site
- Systematic Review of Select Vulnerable Systems / Components for Short Term Vulnerabilities
  - Single Point Vulnerable Items
  - Operating Experience
  - Known Plant Issues/history
  - Leveraged Off the "Blitz" Teams Established in 2002
- Communication Plan Which Aligns the Site

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## Turbine Building Sub Basement Refurbishment

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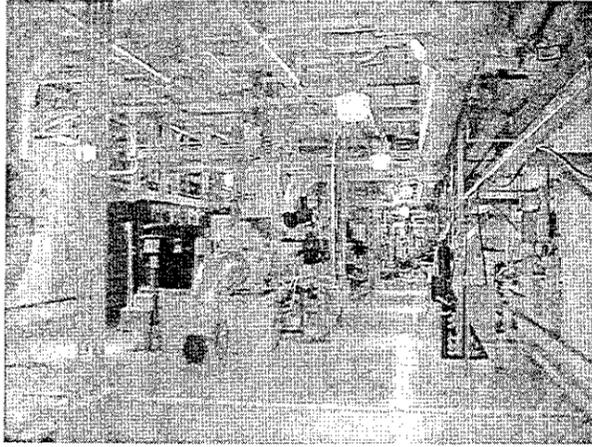
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### Turbine Building Sub Basement Refurbishment

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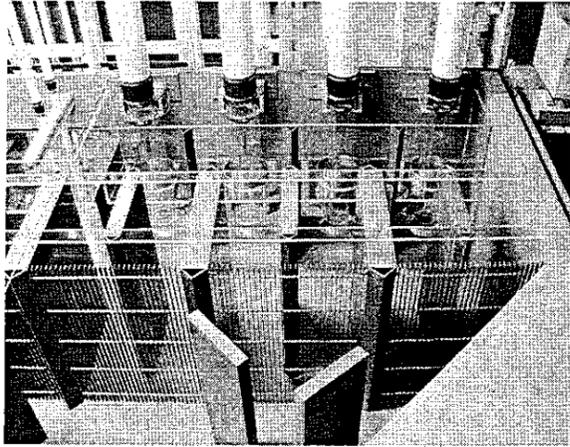


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### Traveling Water Screen Replacement Model

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## Summary

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- Continue Efforts Started in 2001 - 2002
- Direction and Guidance From Steering Committee

**Continue Building on Solid Foundation**

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## Corrective Actions

Tom Noonan  
Performance Assurance Director





## Where We Have Been

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- PI&R and 95002 Inspections
  - Issue Identification Threshold Sufficiently Low
  - Issue Evaluations Usually of Sufficient Depth
  - Corrective Action Identification Performed Reasonably Well
  - Inconsistent Corrective Action Closure

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## What We Learned

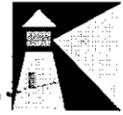
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- Root Causes Identified
  - Evaluations Sometimes Failed to Assess Organizational and Programmatic Implications
  - Weakness in Evaluating Equipment Root Causes
  - Corrective Action Closure/Follow-Up Problems Stem From Personnel Not Demonstrating Accountability

**PA Continues To Check & Adjust**

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## What We Did

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- Initial Responses To Root Causes
  - Conducted Root Cause Lessons Learned / Continuing Training
  - Reduced Number of Qualified Root Cause Specialists
  - PA Conducted Increased Observations
  - Developed Checklist to Define Proper Corrective Action Closure
  - Instituted Corrective Action Review Team

Based on Internal Assessment & NRC Feedback,  
Initial Responses Required Additional Focus

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## Where We Are Now

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- Stop Work Order Issued March 11, 2003
- Corrective Action Closure Board (CACB)
- Follow-up to 95002

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## Summary

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- We Understand Scope of Problems
- Committed to Improving Corrective Action Performance
- Short-term Emphasis on "Safety Nets"

Goal Is To Fully Embed Quality In The Line

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## Wrap-Up

Joe Pollock  
Site Vice President

