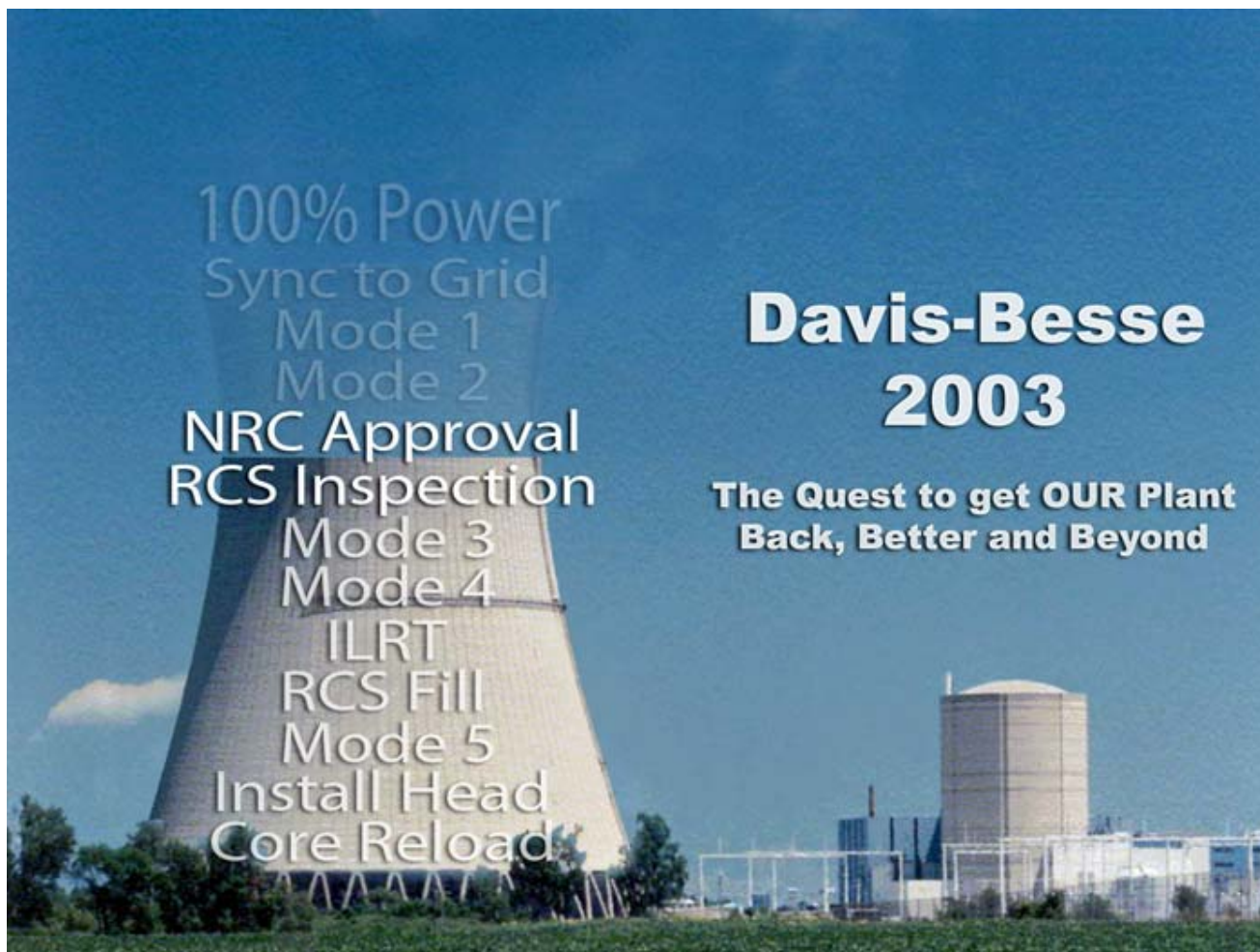


Davis-Besse Nuclear Power Station



IMC 0350 Meeting

Desired Outcomes

- 
- A faded, blue-tinted image of a nuclear power plant with two large cooling towers and various industrial structures.
- Provide an update of our progress toward restart
 - Update key areas for improvement prior to restart
 - Calculations
 - Corrective Action Program
 - Operations Improvement Action Plan

Lew Myers
Chief Operating Officer - FENOC

Meeting Agenda

- Progress Toward Restart.....Lew Myers
- Calculation Improvements... ..Jim Powers
- Corrective Action Program Improvements.....Bob Schrauder
- Final NOP Test Conclusions.....Mark Bezilla
- Operations Improvement Action Plan..... Mike Roder
- NOP Inspection Results.....Craig Hengge
- Station Key Events.....Clark Price

Lew Myers
Chief Operating Officer - FENOC

Progress Toward Restart



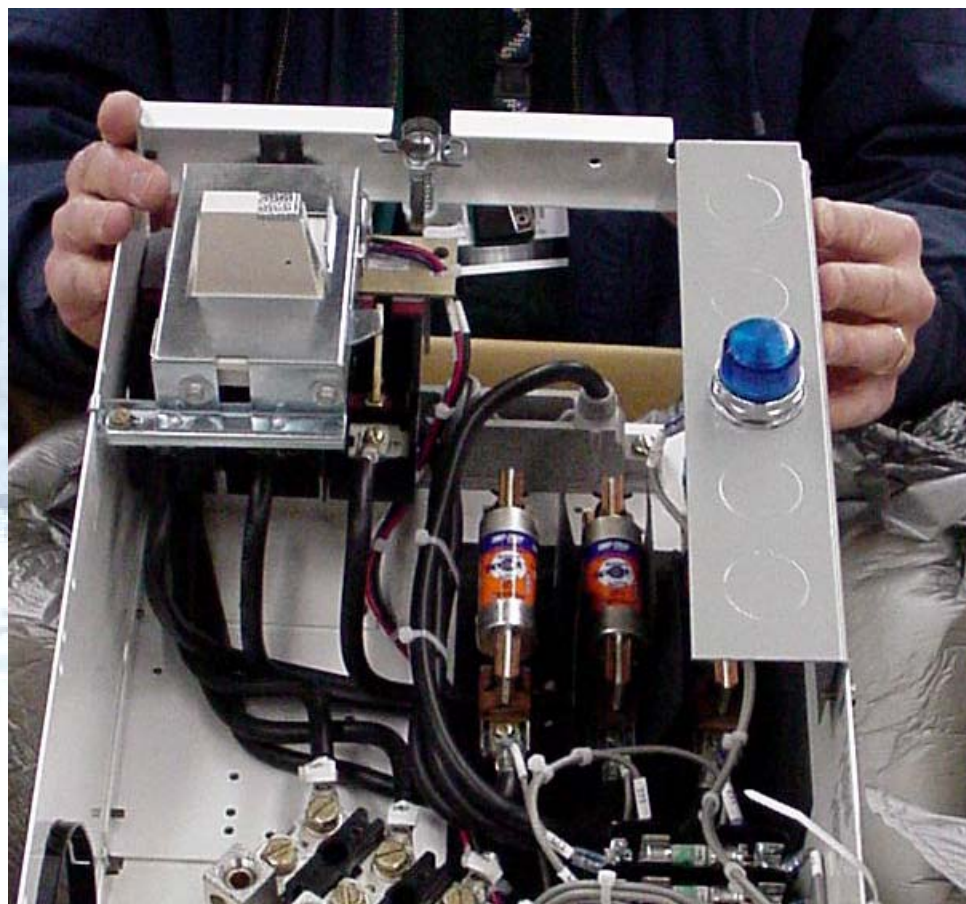
Lew Myers
Chief Operating Officer - FENOC

Progress Toward Restart

- Completed four NRC Restart Checklist Items
 - 2.d Extent of Condition of Boric Acid in Systems Outside of Containment
 - 3.c Quality Audits and Self-Assessment of Programs
 - 3.i Completeness and Accuracy of Required Records and Submittals to the NRC
 - 5.a Licensee's Restart Action Plan
- Completed 22 items; 9 remaining

Progress Toward Restart

- Actions completed
 - Restart Test Plan
 - High Pressure Injection Pumps #2 installed
 - Electrical breaker coordination modifications underway



Progress Toward Restart

- Actions completed (continued)
 - Employee alignment training
 - First all-employee survey on Safety Culture
 - Safety Conscious Work Environment survey
 - Management walk-down of open work orders
 - Restart Overview Panel conditional restart approval
 - Emergency Preparedness

Progress Toward Restart

- Items for next ROP meeting
 - Power Ascension Plan
 - Electric System Co-ordination Improvement
 - Service Water Resolution
 - Containment Air Coolers
 - High Pressure Injection Pumps
 - Containment Readiness
 - Procedure Use and Adherence Training
 - Operations Improvement Action Plan
 - Emergency Preparedness at Restart
 - Cycle 14: Operational Improvement Plan (Engineering and Maintenance Backlog, Equipment Reliability, Engineering Calculations)

Calculation Improvements



Jim Powers
Director - Engineering

Calculation Improvements

- Calculation Review and Assurance History
 - System Health Assurance Plan Review
 - Safety Function Validation Project (SFVP)
 - Purpose was to provide assurance of the adequacy of the design for plant safety functions
 - Review of systems providing significant contribution to core damage frequency (CDF)
 - Design basis calculations demonstrated safety functions in a majority of cases
 - Calculations improved as required; e.g. ETAP Analysis

Calculation Improvements

- Calculation Process Improvements
 - NOP-CC-3002, Calculations issued March, 2003
 - Procedure change training provided
 - New requirements for Design Interface Evaluation and 50.59
 - Detailed Design Verification checklist included
- Independent assessment by Architect/Engineer (A/E), October, 2003
 - Benchmarked against A/E and large mid-west utility
 - Identified areas for improvement
 - Process and implementation

Calculation Improvements

- Immediate Improvement Actions
 - Design Engineering realignment and reaffirmation meetings
 - Procedure types and adherence expectations
 - Review of A/E assessment results
 - Supervisors
 - Engineers
 - Collective Significance Condition Report issued
 - CATI and A/E issues included
 - Each unit reviewed their issues
 - Assessed affects on results or conclusions
 - Corrective Actions for Case Study and Model Calculations

Calculation Improvements

- Immediate Improvement Actions (continued)
 - Engineering Assessment Board Calculation Review
 - Detailed review using checklist
 - Specific objectives developed
 - Calculation quality Performance Indicator
 - Requirement to validate older calculations prior to use
 - Approved funding for electronic calculation index and ATLAS Electronic Design Basis Information Projects
 - Initiated both projects
 - Design control improvements

Calculation Improvements

- Calculation Improvement Plan
 - Operational Improvement Plan initiation
 - Details in Design Basis Assessment Report
 - Procedure improvements
 - Implementation performance improvement
 - Critical (Tier 1) calculation meet high quality standards

Calculation Improvements

- Summary
 - System Health Building Block reviews completed
 - System Design Bases support restart
 - Barriers to ensure calculations quality are in place
 - Continued improvements ongoing

Corrective Action Program Improvements

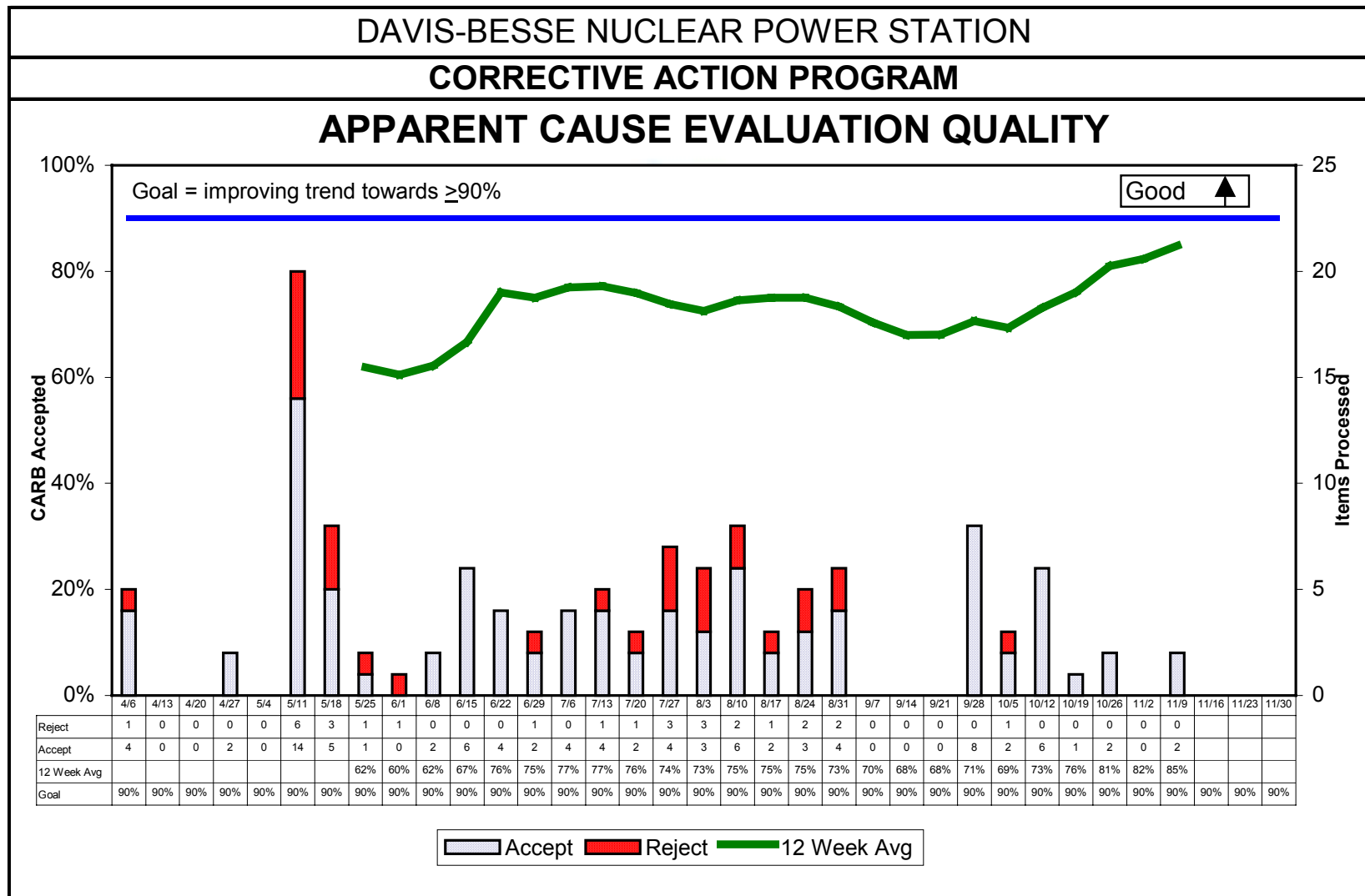


Bob Schrauder
Director - Support Services

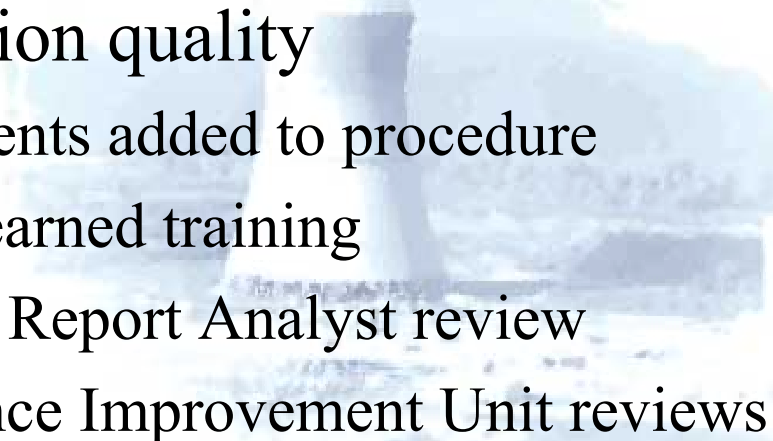
Corrective Action Program Improvements

- Apparent Cause Quality
 - Corrective Action Review Board (CARB) review
 - Enhanced procedural requirements
 - Select group of Apparent Cause Evaluators
 - Established Qualifications
 - Initial training
 - Continued training
 - Proficiency requirements
 - Condition Report Analysts
 - Strengthened roles and responsibilities
 - Attendance at CARB
 - Long-term responsibility for quality

Corrective Action Program Improvements



Corrective Action Program Improvements

- 
- A faded, light blue background image of a nuclear power plant, showing the containment domes and surrounding structures.
- Documentation quality
 - Requirements added to procedure
 - Lessons learned training
 - Condition Report Analyst review
 - Performance Improvement Unit reviews

Corrective Action Program Improvements

- Management involvement
 - Business Practice for implementation expectations
 - Reinstated Management Communication and Teamwork Meeting
 - Section Manager at CARB for Sections Apparent Causes
 - Manager review of all open Condition Reports
 - Senior Leadership Team review of Significant Conditions Adverse to Quality (SCAQs)
 - Executive leadership review of SCAQs as selected by COO
 - Company Nuclear Review Board independent review of selected Apparent Causes

Corrective Action Program Improvements

- Trending

- Quarterly Trend Summary Reports resumed
- System Health Reports resumed
- FENOC Manager of Equipment Reliability
- CREST Statistical Process Control interface created
- Section assessments planned

Corrective Action Program Improvements

- Summary

- FENOC has a good Corrective Action Program
- Implementation of the Corrective Action Program at Davis-Besse is improving

- Actions Taken to Assure Restart Readiness

- On-going CARB review of Condition Reports with specific criteria
- Increased management involvement in process
- Select qualified Apparent Cause Evaluators
- Provide training and strengthen roles and responsibilities of CR analysts
- CNRB independent review of Apparent Causes

Normal Operating Pressure Test Conclusions



Mark Bezilla
Vice President

Overall NOP Test Conclusions

•Desired Outcome

- Provide you with our conclusions of the 7 Day RCS Integrity Test (Nuclear Operating Pressure (NOP) Test)
 - Conduct walkdowns of systems
 - Inspect RCS Leakage
 - Validate New RCS Leakage Procedure/ FLÜS Leak Monitoring System
 - Correct identified problems
 - Goal of achieving Lowest Attainable RCS Leakage
 - Completion of Post-Maintenance Test Matrix
 - Operational Readiness Assessment
 - Organization Structure
 - Management Effectiveness
 - Operations Effectiveness

Overall NOP Test Conclusions

- NOP Test successfully accomplished the stated objectives
 - Areas for improvement were identified



**No leakage on incore nozzles
(bottom of reactor vessel)**

Overall NOP Test Conclusions

•Plant

- Integrity of the Reactor Coolant System was verified
- Sensitivity of the RCS Leakage Monitoring System was confirmed
- Sensitivity of the FLÜS Leak Monitoring System was confirmed



No leakage noted on CRDM nozzles

Overall NOP Test Conclusions


- People

- Predominately exhibited the characteristic and attitude which established an overriding priority towards nuclear safety activities and ensured that issues received the attention warranted by their significance
- Our assessments were critical of our performance
- Identified our shortfalls and areas for improvement



Employee alignment training

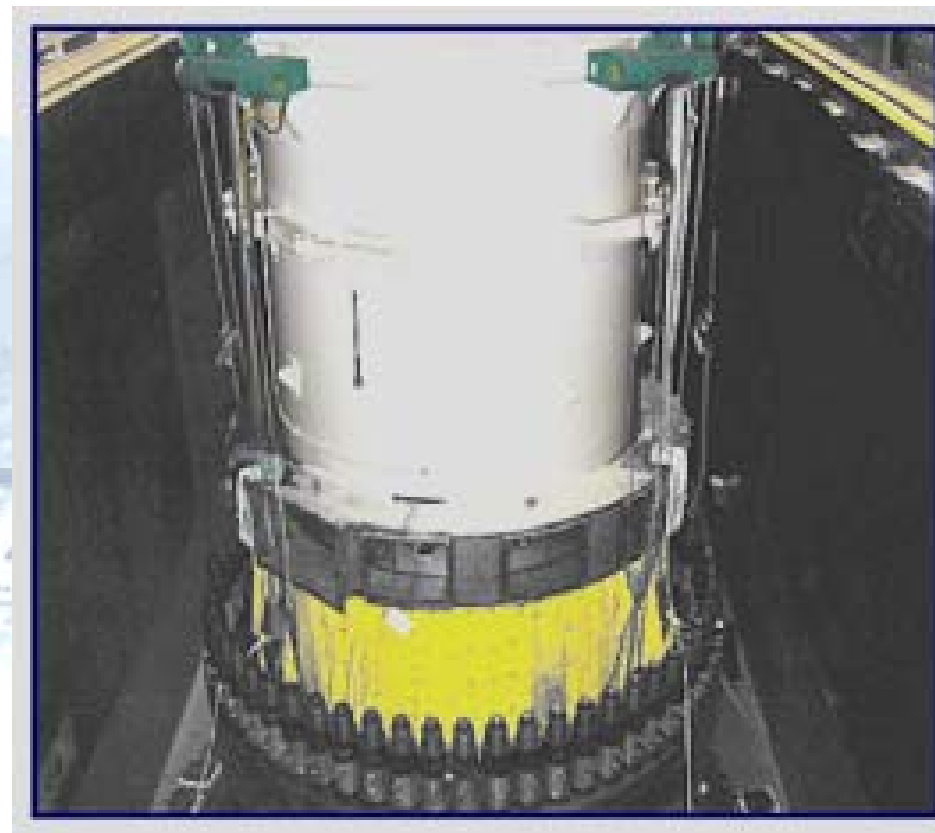
Overall NOP Test Conclusions

- 
- A faded, light blue background image of a nuclear power plant, showing a large containment dome and cooling towers.
- Processes
 - Support safe and reliable plant operation
 - Identified areas for improvement

Overall NOP Test Conclusions

- Conclusion

- NOP Test was a success
- Areas for improvement identified
- Operations Improvement Action Plan established



**Overall leak rate of RCS
was best in the history of plant**

Operations Improvement Action Plan



Mike Roder
Manager - Plant Operations

Collective Significance Review

- Established team
- Reviewed Condition Reports
- Reviewed observation data base
- Reviewed training records
- Five Areas of Improvement
 - Operations oversight and leadership
 - Transition to operational focus
 - Implementation of standards and expectations
 - Strengthen knowledge and skills
 - Improvements in Condition Report investigation

Operations Improvement Action Plan

- Operations Improvement Action Plan
 - Collective Significance
 - Industry reviews
 - Operational Readiness Assessment report
 - Nuclear Quality Assurance Assessment
- Designed to address four key barriers
 - Individual Barriers
 - Program/Process Barriers
 - Management Barriers
 - Oversight Barriers

Operations Improvement Action Plan

- Individual Barrier Improvements
 - Strengthen crew manning
 - Assessed understanding of expectations
 - Evaluated standards and expectations for improvements
 - Reinforcing procedure adherence expectations
 - Targeting training on integrated operations procedures

Operations Improvement Action Plan

- Program and Procedure Barrier Improvements
 - Strengthen procedures
 - Benchmarked against industry leaders
 - Incorporated lessons learned
 - Validated on simulator
 - Focusing on consistent performance
 - Improved pre-job briefs
 - Used Systematic Approach to Training to improve knowledge and skills

Operations Improvement Action Plan

- Management Barrier Improvements
 - Reinforced adherence to on-shift roles
 - Reduced Operations work hours
 - Train Site Managers to achieve more critical observations
- Oversight Barrier Improvements
 - Operational Oversight Managers

Operations Improvement Action Plan

- Effectiveness Measures

- Successful requalification of Operators
- Consistent demonstration of proficiency with plant startup, power Operations, abnormal operating and alarm conditions during training
- Operational Oversight Managers qualitative assessment

Operations Improvement Action Plan

- Summary

- Upon completion of the Operational Improvement Action Plan, we will be ready for restart

NOP Inspection Results



Craig Hengge
Engineer - Plant Engineering

Vessel Inspections

- Reactor Vessel Inspections Completed

- Incore Nozzle Inspection
- CRDM Flange Inspection
- Bare Head Inspection



Vessel Inspections

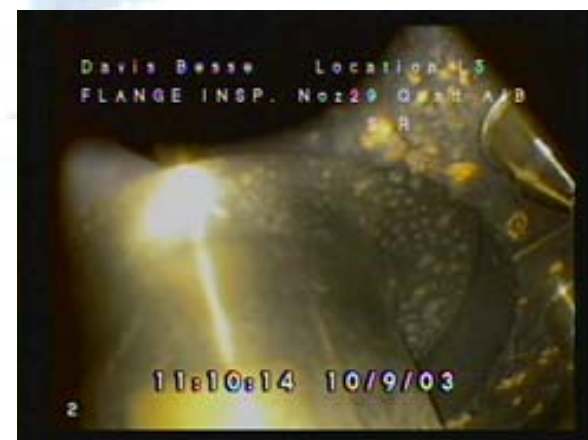


- Incore Nozzle Inspection
 - May 2003 post-cleaning baseline inspection
 - October 2003 post-NOP test inspection
 - No indication of leakage
 - No visible residue at any nozzle penetration
 - No detectable changes between inspections

Vessel Inspections

•CRDM Flange Inspection Results

- CCW drips found on stator cooling connection
- Boron found on nameplates and vent ports
- No CRDM flange leakage identified



Vessel Inspections

•Bare Head Inspection Results

- Small particles stuck in nozzle annulus
- Rust trail traced to CCW drips
- White streaks on two nozzles from CCW leak
- No indications of RCS leakage



Bare Head Inspection

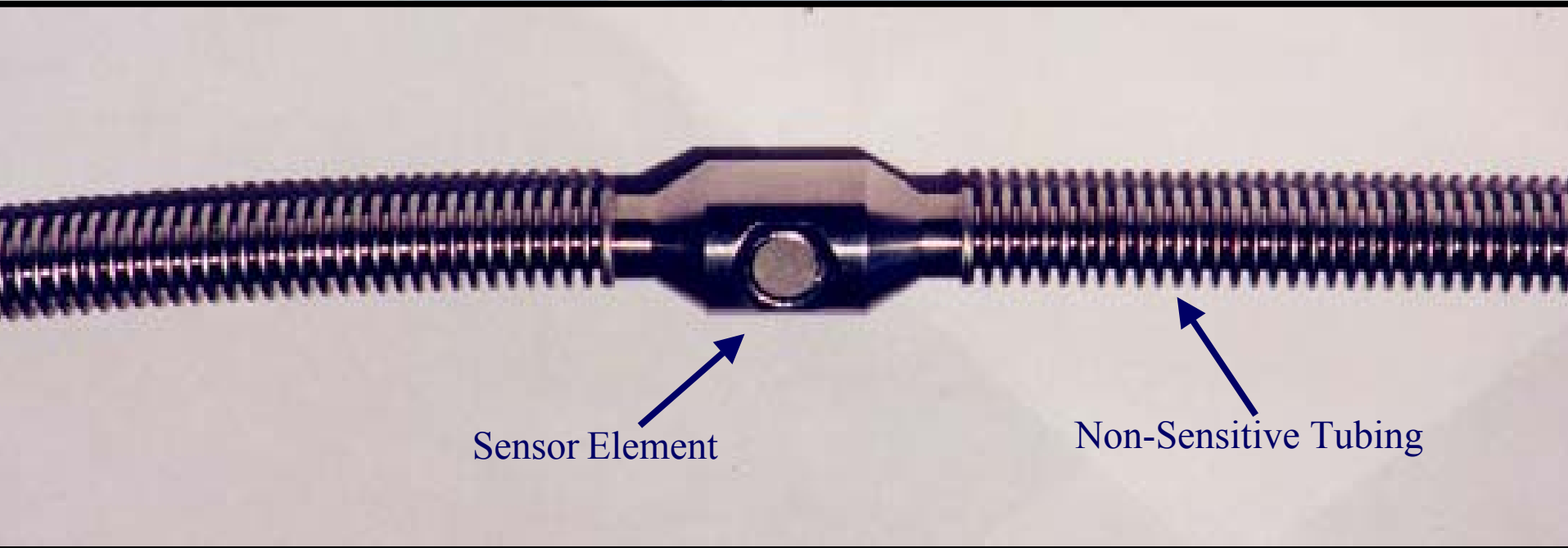


Bare Head Inspection



FLÜS Leak Monitoring System

- FLÜS Leak Monitoring System
 - First Installation in United States
 - State-of-the-Art System



Station Key Events



Clark Price Owner - Restart Action Plan

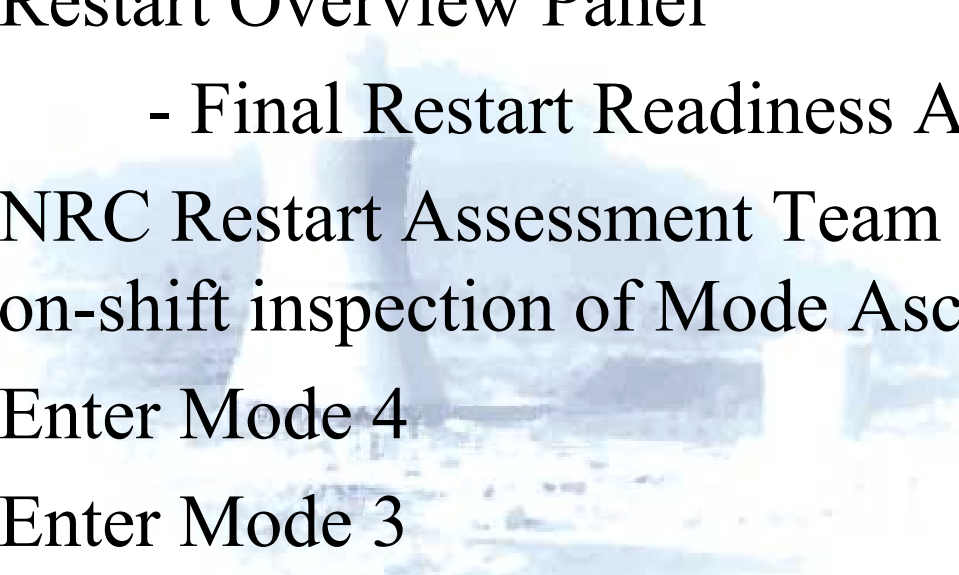
Station Key Events

- Nov 13/14
 - Mode 4/3 Restart Readiness Review Meetings
 - Safety Culture Assessment
- Nov 18
 - Mode 4/3 Restart Readiness Review Meeting
 - Systems Readiness Assessment
- Nov 20
 - Company Nuclear Review Board
 - Assessment of Restart Readiness
- Nov 24
 - Submittal of the Integrated Restart Report to NRC

Station Key Events

- Dec 1 - Transition to On-Line Work Control Schedule
- Dec 1-5 - Industry Review Team
 - Restart Readiness Assessment
- Dec 1/4 - Mode 4/3 Restart Readiness Review Meetings
 - Organizational Readiness
 - Operations Improvement Action Plan Effectiveness w/ Feedback from the On-shift Oversight
 - Readiness for Restart Overview Panel Action Items
- Dec 3 - December 0350 Public Meeting

Station Key Events

- 
- A faint, blue-tinted background image of a nuclear reactor, showing the central containment dome and surrounding structures.
- Dec 5
 - Restart Overview Panel
 - Final Restart Readiness Assessment
 - Dec 8
 - NRC Restart Assessment Team arrives for on-shift inspection of Mode Ascension
 - Dec 9
 - Enter Mode 4
 - Dec 10
 - Enter Mode 3
 - Dec 11
 - Achieve Full Reactor Coolant System Pressure and Temperature

Station Key Events

- Dec 11/12 - Mode 2 Restart Readiness Review Meetings
- Organizational Readiness
 - Operations Improvement Action Plan Effectiveness w/ Feedback from the On-shift Oversight
 - On-Line Work Control Effectiveness
 - Procedure Use & Adherence Effectiveness
 - Corrective Action Program Effectiveness
 - Final Plant Systems Readiness

Station Key Events

- Public Meeting for Request for Restart
- Enter Mode 2 (Restart)
- Enter Mode 1
- 65% Hold for Effectiveness Review
- 100% Power
- Post Restart Integrated Test Plan Critique

Closing Comments



Lew Myers
Chief Operating Officer - FENOC