

Davis-Besse Nuclear Power Station



Return to Service Plan Update

October 16, 2002



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Introduction



*Lew Myers
FENOC Chief Operating Officer*



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Desired Outcomes

- Demonstrate that Davis-Besse continues to make progress toward restart.
- Discuss the milestones for restart, the integrated schedule, and performance indicators.
- Discuss outstanding issues related to some of the Building Blocks.
- Discuss the actions taken to-date regarding the Management and Human Performance Excellence Plan.
- Provide an update regarding the results of the Safety Conscious Work Environment survey results and corrective actions.



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Milestones, Integrated Schedule and Performance Indicators



Mike Stevens
Director - Work Management



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Restart Progress

- **Major Milestones**
 - Established
 - ~ 35 days behind (*Polar Crane return to service*)
- **Integrated Schedule**
 - Includes All Building Block Activities
 - Potential Schedule Impact
 - ✓ Containment Sump Modification
 - ✓ Bulk Work in Containment
- **Performance Indicators**
 - Schedule vs. Forecasts
 - Bulk Work
 - Emergent Work



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Major Milestones

<u>Milestone</u>	<u>Forecast</u>
– Initial System Reviews Complete	11/21
– Program Reviews Complete	11/27
– Reactor Head Installed	12/8
– System Readiness for Heatup	12/22
– Systems Pressure Inspections (NOP/NOT)	12/24



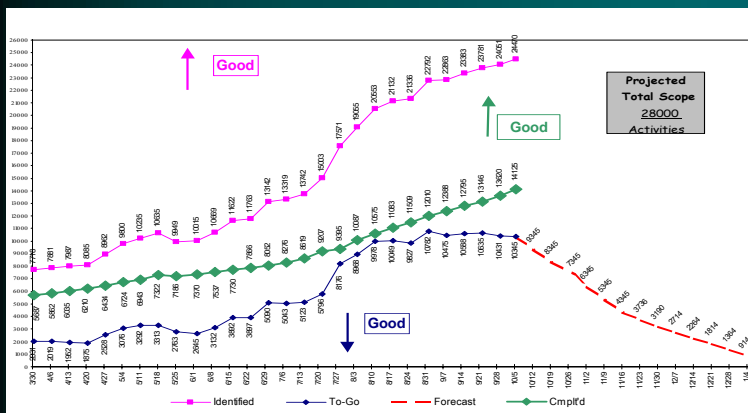
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Integrated Schedule

- **Making progress**
 - Containment Area for #1 CAC restored
 - High Pressure Feedwater Heater 1-6 removed
 - Containment Vessel restored
 - Shield Building restored
 - 50% of Containment Dome project completed
 - Condenser Coating installed
 - Polar Crane refurbished
- **Next Major Project Milestone**
 - Drain down for Reactor Coolant Pump Maintenance



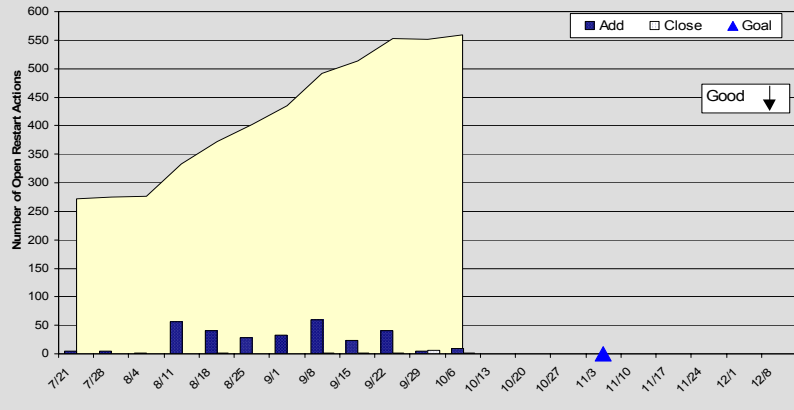
Total Activities



- **Schedule vs. Forecasts**
 - Total Activities = 24,470
 - Completed to date = 14,125
 - Typical Refueling Outage = 6,000



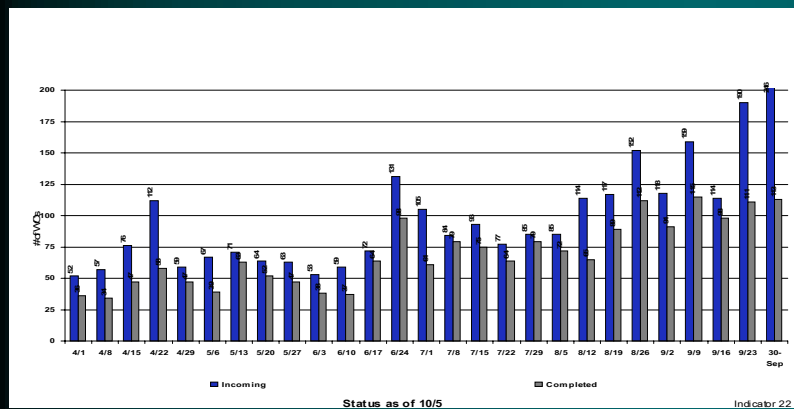
Condition Reports for Containment Health



- Bulk Work
 - 55,000 ft² Coating Resolution
 - ~ 734 Valves



Emergent Work



- Average Identification Rate = 150 / Week
- FIN Team Average Completions = 115 / Week
- Scope increase to schedule = 35 / Week



Summary

- Making progress
 - Our focus is on quality, not schedule
- Risks to the schedule are identified and plans are being formulated

Reactor Head Restoration



Bob Schrauder
Director -- Support Services

Reactor Head Resolution Plan

Replacement Head Activities

- Containment Vessel and Shield Building Restoration -- Complete
- Service Structure Installed

Reactor Head Resolution Plan

Bottom of Reactor Vessel Head Inspections

- Chemical Samples
- Framatome is completing internal safety concerns
- Framatome is developing recommendations

Vessel Weld
Inside
Containment



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Outside View - Containment Restoration



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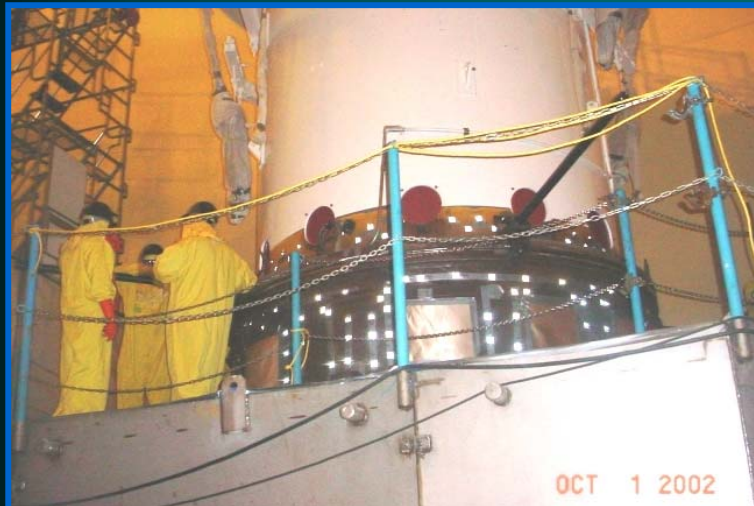
Service Structure on Reactor Vessel Head



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Service Structure on Reactor Vessel Head with Alignment Tools



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Containment Health Assurance



*Randy Fast
Plant Manager*

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Containment Health Assurance

Status:

- Containment Air Coolers
- Containment Emergency Sump
- Containment Dome Painting
- Decay Heat Pump Valve Pit
- Equipment Qualification
- Decontamination Activities
- Inspections

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Containment Health Assurance

Containment Air Coolers:

- Sponge Jet Blasting in progress on #2 and #3 to remove paint
- Painting in progress on #1
- Receipt of replacement coils in progress
- Conceptual Design determined to modify and resolve expansion and water hammer issues

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Containment Health Assurance

Containment Air Cooler Frame



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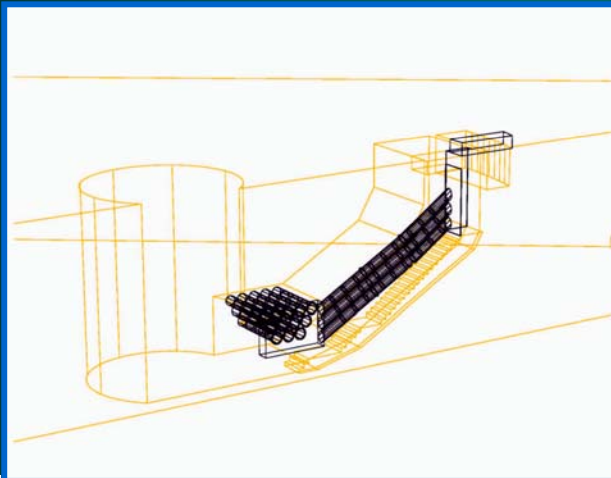
Containment Health Assurance

Containment Emergency Sump:

- Emergency Sump underway
- Demolition of existing sump in progress
- Steve Fox named as Project Manager for Emergency Sump and Decay Heat Valve Pit

Containment Health Assurance

Emergency Sump Diagram



Containment Health Assurance

Containment Dome Painting



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Containment Health Assurance

Inspections:

- Equipment Qualification in progress
- No boric acid degradation detected
- Containment cleanliness greatly improved

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System Health Assurance



Jim Powers
Director - Technical Services



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System Health Assurance

Inputs to Collective Significance

- **System Health Readiness Reviews**
 - All 31 System Health Reviews are in final stages of completion
- **Latent Issue Reviews:**
 - Service Water
 - Auxiliary Feedwater
 - Emergency Diesel Generator
 - Component Cooling Water
 - Reactor Coolant System
- **Engineering Assessment Board Reviews**
- **Self-Assessments**



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System Health Assurance

Findings Summary

- Reviews provided valuable insight
- A number of discrepancies were identified which will require evaluation prior to restart
 - Calculation Quality
 - Environmental Qualification
 - High Energy Line Break
 - Some material condition issues

System Health Assurance

Follow-On Corrective Actions

- Restart-required CRs will be resolved prior to restart
- Selected systems will receive Focused Area Latent Issue Reviews
- Functional capability assessment ongoing

Program Compliance Reviews



Jim Powers
Director - Technical Services



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Program Compliance Reviews

Status of Reviews

- 51 of 65 Program Baseline Assessments have been presented to the Program Review Board
 - 18 programs are ready for restart
 - 33 programs have Davis-Besse imposed internal restart restraints
- 2 of 6 detailed Program Reviews have been completed
 - Boric Acid Corrosion Control
 - Corrective Action Program
- Radiation Protection Program added for review



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Program Compliance Reviews

Common Issues

- Qualifications
- Standards
- Performance Indicators
- Interfaces and handoffs
- Commitment Management
- Bypasses to the CR process
- Training



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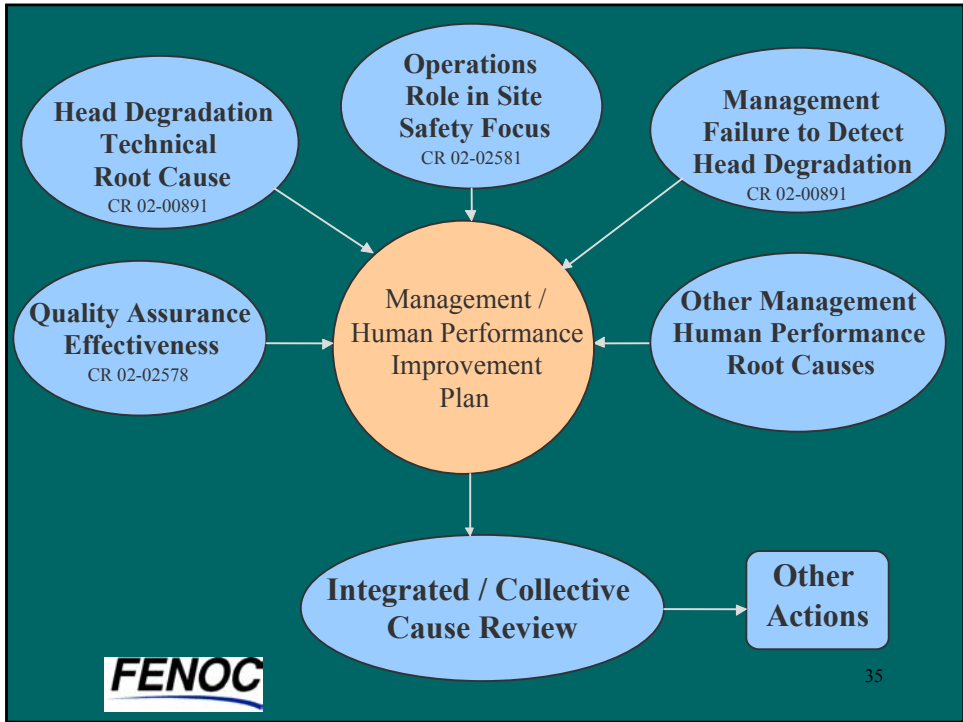
Management and Human Performance Actions



Lew Myers
FENOC Chief Operating Officer



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Management and Human Performance Actions

Completed Improvement Initiatives

- Safety Conscious Work Environment (SCWE) Surveys / SCWE Improvement Plan Development
- New FirstEnergy Corporate Leadership:
 - FENOC Chief Operating Officer
 - FENOC Executive Vice President (Engineering)
 - Vice President of FENOC Oversight



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Management and Human Performance Actions

Completed Improvement Initiatives

- New Davis-Besse Site Leadership:
 - Vice President
 - Senior Management Team (Directors)
 - Manager Level Changes
- Weekend Duty Oversight Expectations
- Corrective Action Review Board Oversight
- Project Review Committee Improvements



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Management and Human Performance Actions

Completed Improvement Initiatives

- New Management Observation Program
- Restart Overview Panel Employee Meetings
- Case Study Training
- New Standards for Management
- Quality Assessment Group Root Cause
- Company Nuclear Review Board Independent Assessment



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Management and Human Performance Actions

Completed Improvement Initiatives

- Operations Leadership Plan Development
- Establish Engineering Staff Expectations
- FENOC Hierarchy of Documents NOP
- Operations Oversight Executive.
- Decision-Making Procedure Development
- Establishment of an Engineering Assessment Board (EAB)



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Management and Human Performance Actions

In Progress / Continuing Initiatives

- Employee communication opportunities:
 - 4-C's meetings
 - ✓ Town Hall Meetings
 - ✓ Team Meetings
 - ✓ Newspaper
- Operations Leadership Plan
- Supervisory Evaluations



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Management and Human Performance Actions

In Progress / Continuing Initiative

- Leadership Development Program Changes
- Engineering Assessment Board Oversight
- Augmentation of the Engineering Staff
- Restart Overview Panel (ROP) Oversight
- Weekend Duty Oversight
- Plant standards improvements
 - Labeling / Housekeeping
 - Equipment upgrades



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Management and Human Performance Actions

In Progress / Continuing Initiatives

- Program Reviews
- System Reviews
- SCWE Improvement plan
- Assigned Management Monitoring
 - Training
 - Plant Activities

Management and Human Performance Actions

Significant Pending Activities

- Engineering Organization Assessment
- Engineering Restart Readiness Review
- Functional Area Reviews
- Collective Review and Integration of Causal Factors

Safety Conscious Work Environment



Bill Pearce
Vice President - Oversight



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Safety Conscious Work Environment

- Update on our plan
- Relationship diagram
 - High Relationship
 - Medium Relationship
 - Low Relationship



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Safety Conscious Work Environment

Issue:	Management Trust	Worker Willingness to Raise Concerns	Effectiveness of ECP Program	Effectiveness in resolving issues through normal process	Effectiveness in detecting and preventing retaliation and chilling effect
Action:					
SCWE Training for DB Management	●	●	●	●	●
SCWE Training for Contractor Supervision	●	●	●	●	●
Development / Implement Communication Plan	●	●	●	●	●
Implement "People Team"	●	●	●	●	●
Develop "Issue Management Process"	●	●	●	●	●
Create ECP/ Ombudsman Contingency	●	●	●	●	●
Monitor and Communicate Performance	●	●	●	●	●
Review / Revise policies and charters	●	●	●	●	●
Designate and Train SCWE Investigators	●	●	●	●	●
New Senior Leadership Team	●	●	●	●	●
Communicate Management Team Standards	●	●	●	●	●



● High Relationship ● Medium Relationship ● Low Relationship 47

Safety Conscious Work Environment

Issue:	Management Trust	Worker Willingness to Raise Concerns	Effectiveness of ECP Program	Effectiveness in resolving issues through normal process	Effectiveness in detecting and preventing retaliation and chilling effect
Action:					
4-C's Meetings	●	●	●	●	●
Town Hall Meetings	●	●	●	●	●
Case Study Discussions	●	●	●	●	●
Leadership in Action Training	●	●	●	●	●
Re-Baseline section standards	●	●	●	●	●
Evaluate supervisors	●	●	●	●	●
ROP employee interviews	●	●	●	●	●
Create FENOC Safety Policy	●	●	●	●	●
Management Observation Program	●	●	●	●	●
Equipment / Labeling Improvements	●	●	●	●	●



● High Relationship ● Medium Relationship ● Low Relationship 48

Town Hall Meetings



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Case Study Training



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Team Meetings



Closing Remarks



Lew Myers
FENOC Chief Operating Officer

