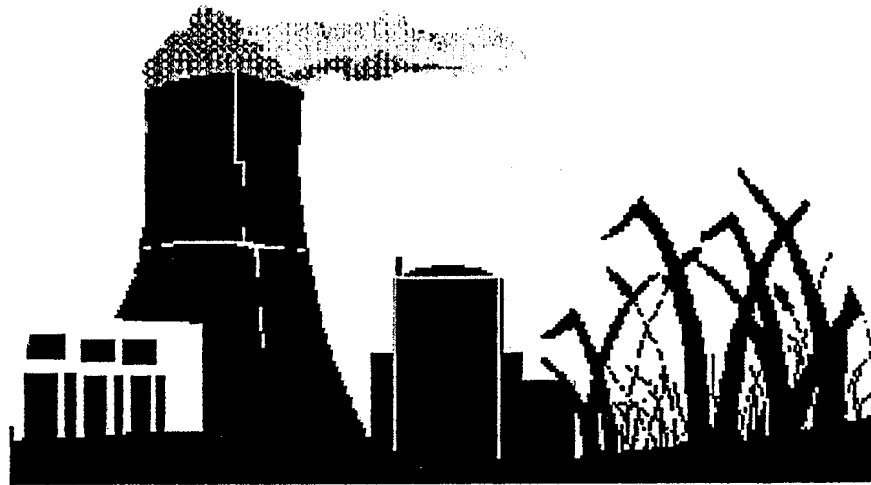


Davis-Besse Nuclear Power Station

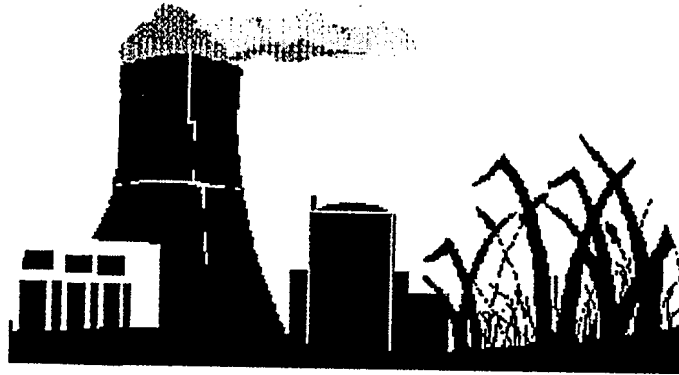


Return to Service Plan Update

July 16, 2002

FENOC

Introduction



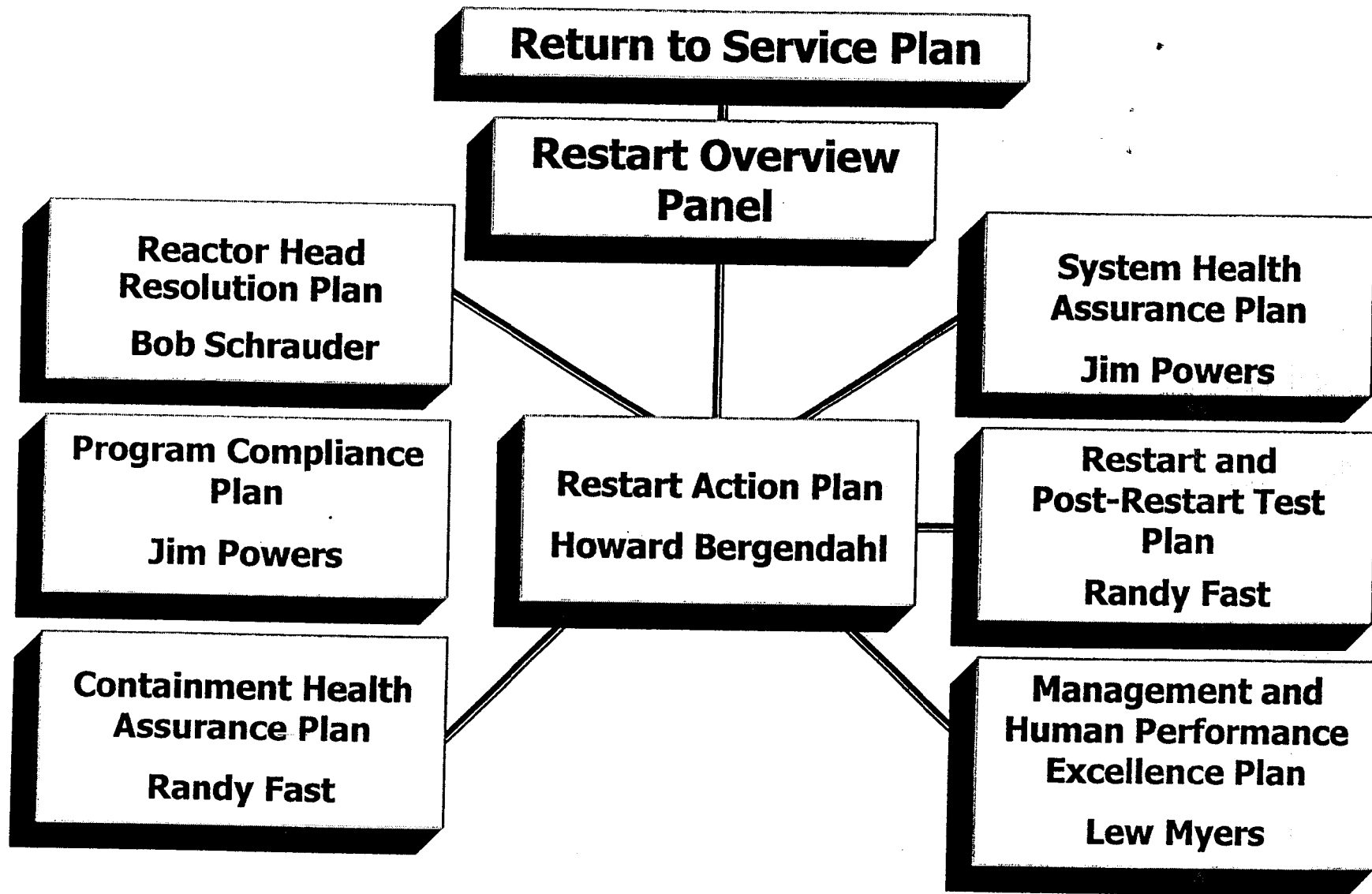
Lew Myers
FENOC Chief Operating Officer

FENOC

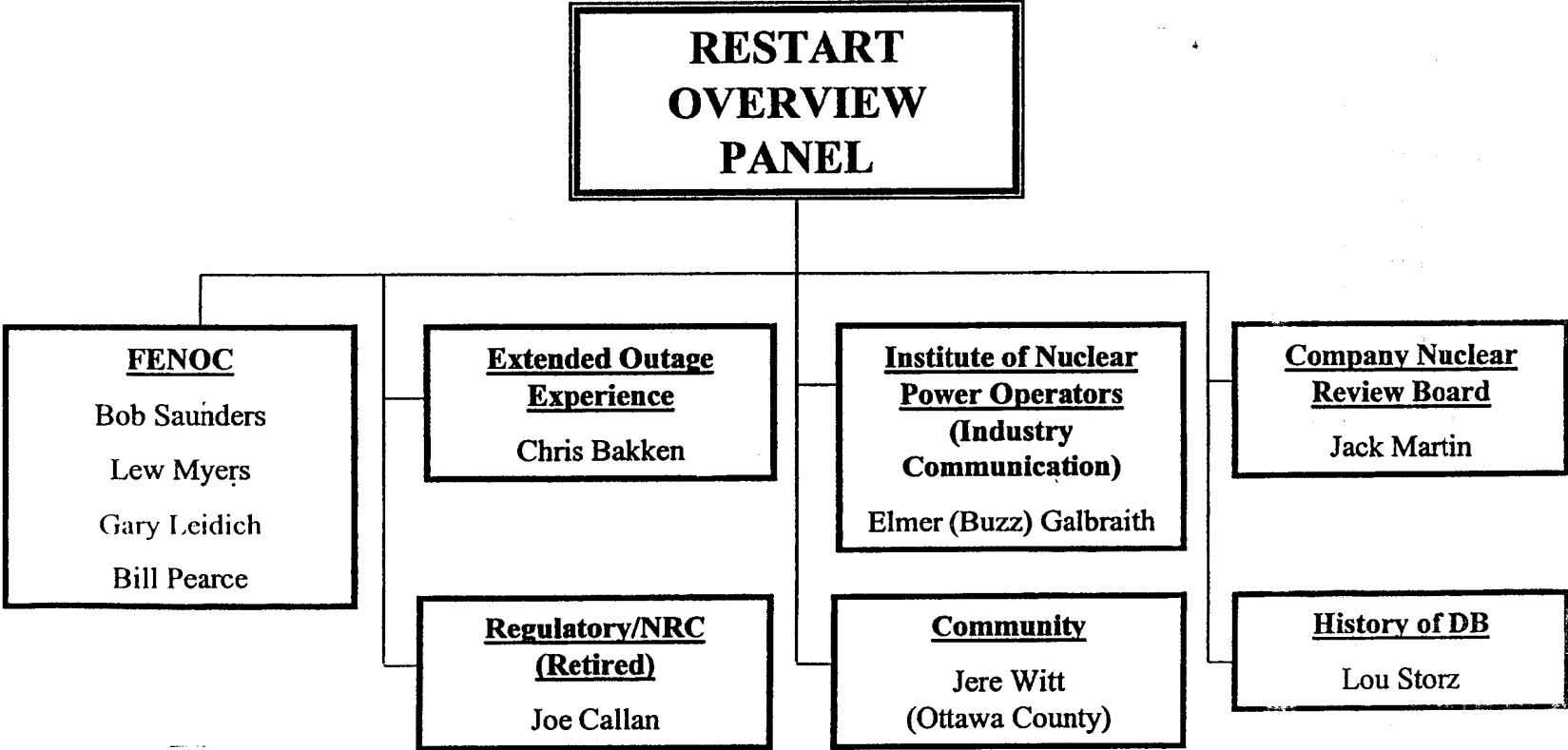
Desired Outcomes

- **Demonstrate Return to Service Plan Implementation toward safe, reliable and sustainable operation**
- **Provide status of several Building Blocks**
- **Demonstrate closure of actions from the previous meeting**
- **Introduce status of Management and Human Performance Excellence Plan**

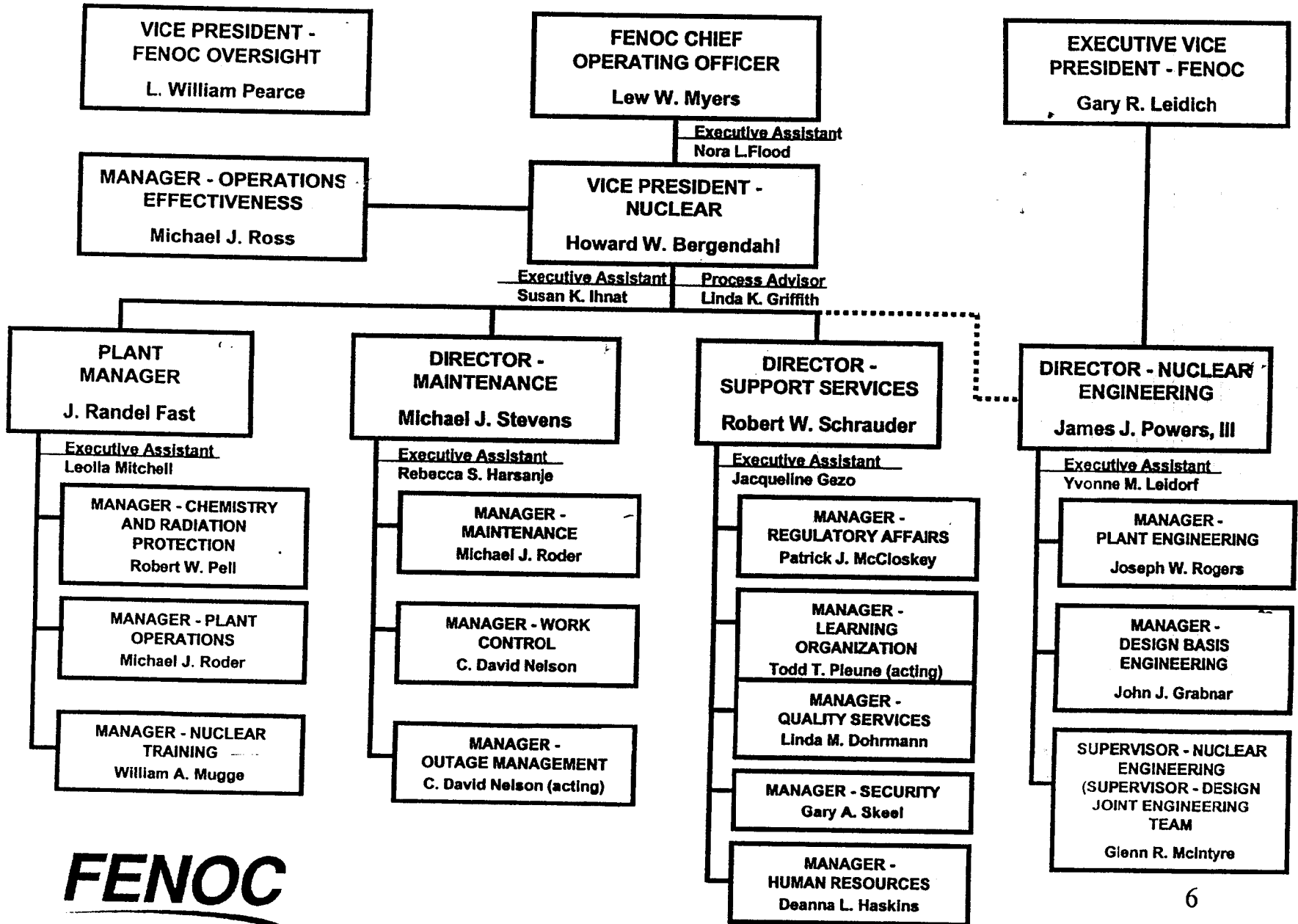
Basic Building Blocks



Restart Overview Panel



DAVIS-BESSE SITE ORGANIZATION



FENOC

Reactor Head Resolution Plan Implementation Status



Bob Schrauder

***Reactor Head Resolution
Oversight***

FENOC

Reactor Head Resolution Plan Implementation Status

Progress

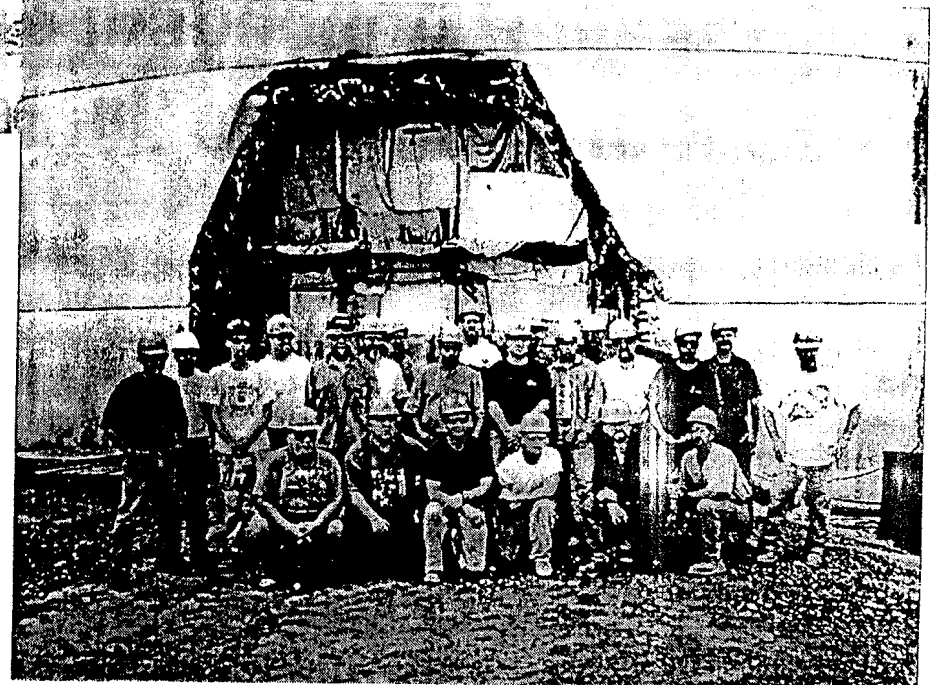
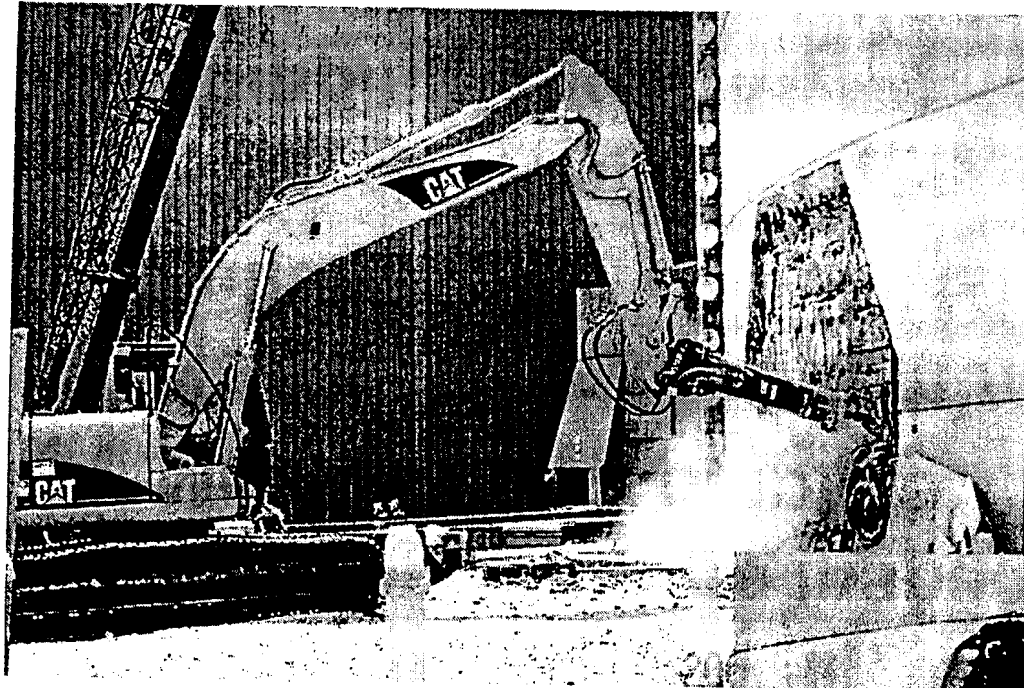
- **Replacement Head activities support safe and reliable plant return to service during Fourth Quarter 2002.**

Reactor Head Resolution Plan Implementation Status

Midland Activities

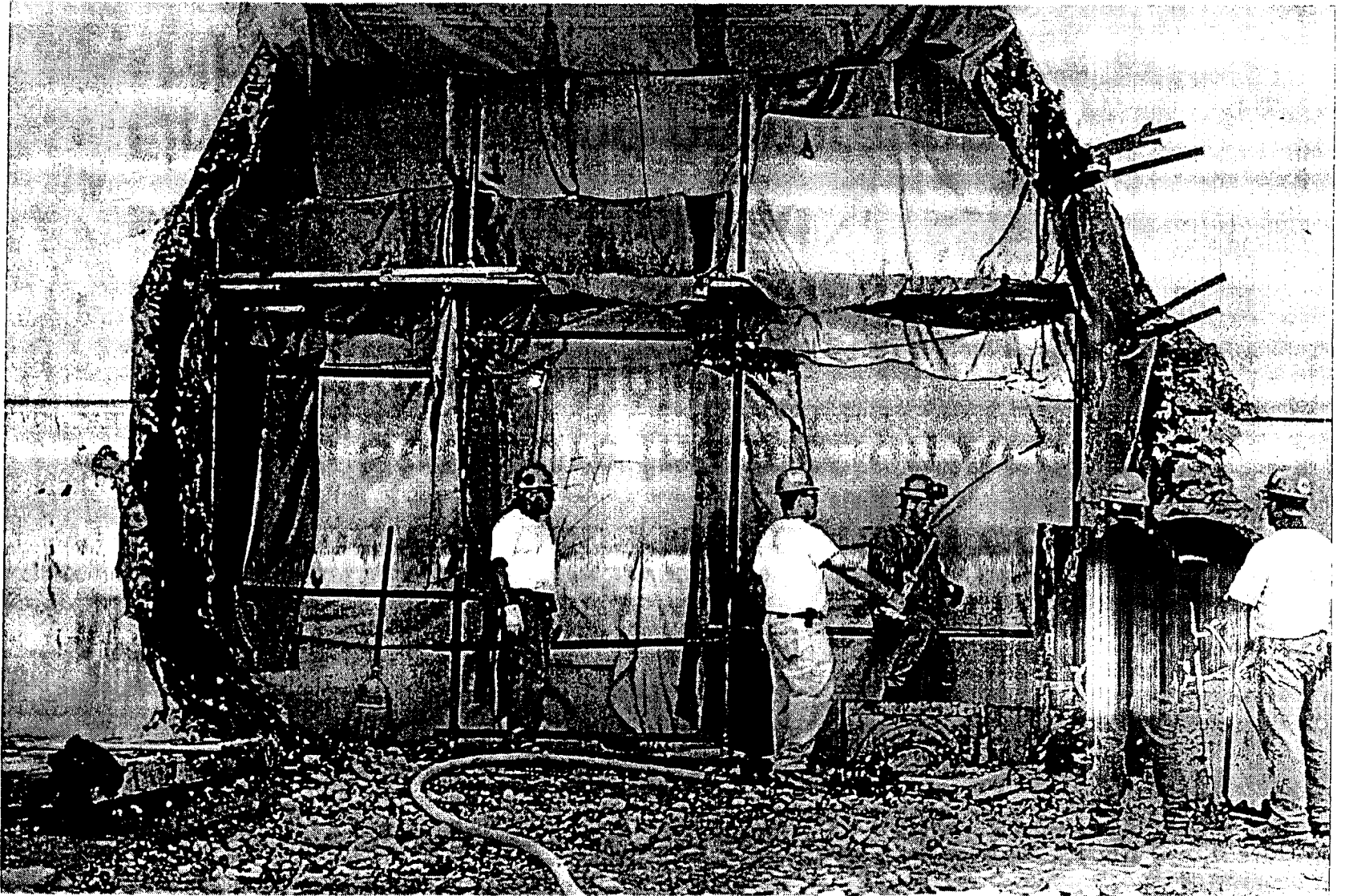
- **Containment access opening complete**
- **Service Structure Inspection Access
Modification complete**
- **Non-Destructive Examinations
satisfactorily completed**
- **Final cleaning and preparation for
shipping underway**

Cutting Containment Liner



FENOC

Containment Access Opening

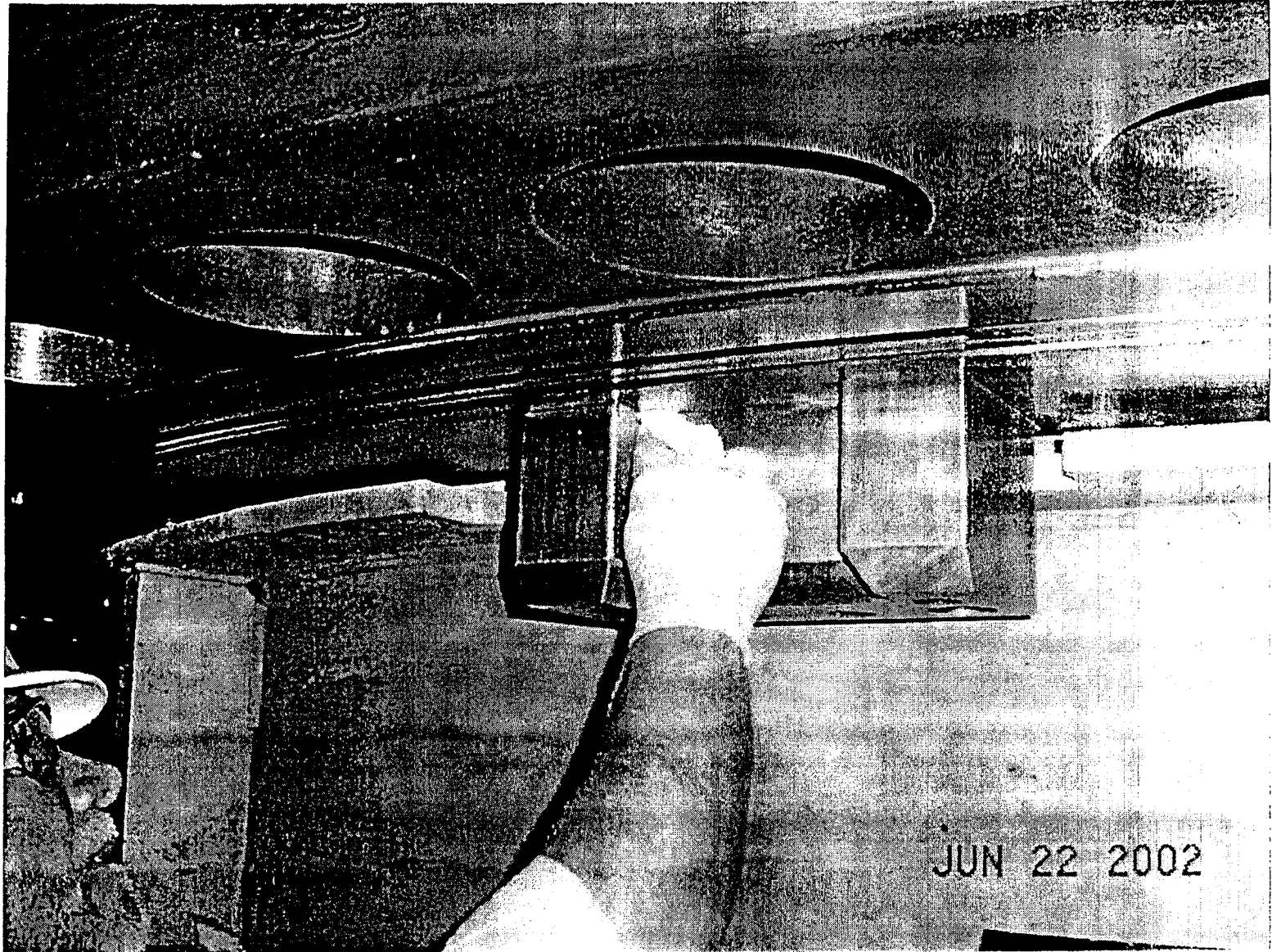


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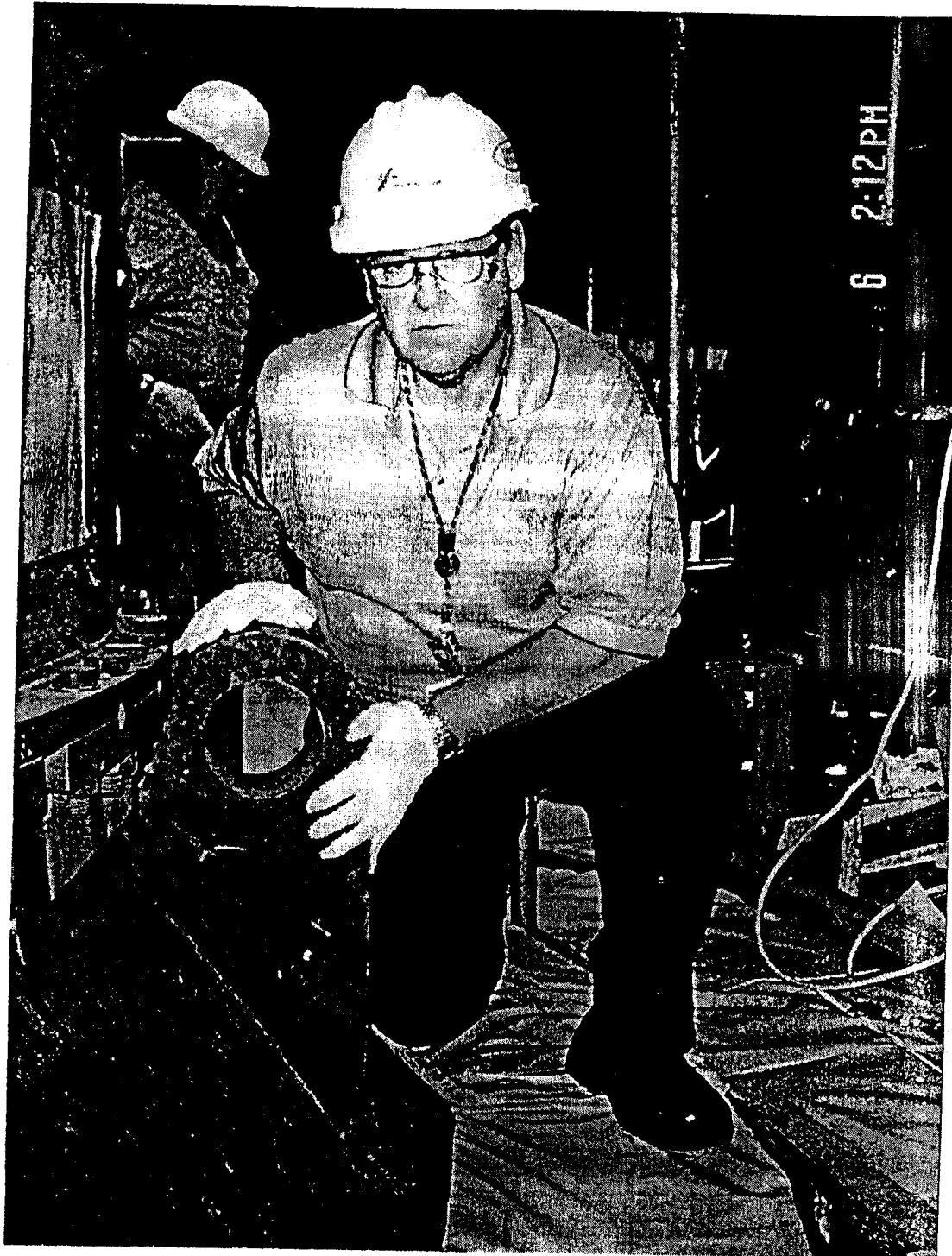
Reactor Head Resolution Plan Implementation Status

Midland Activities

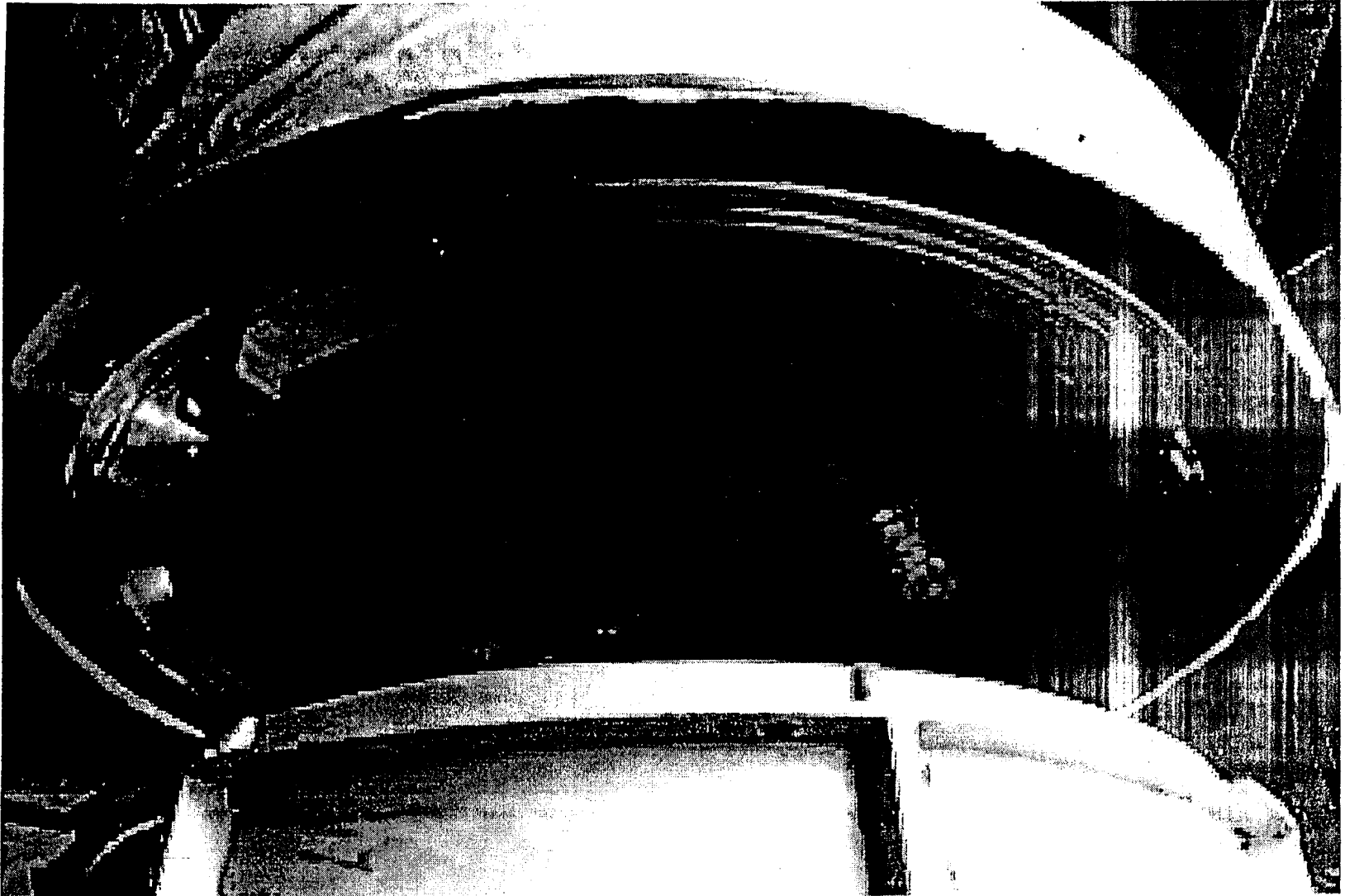
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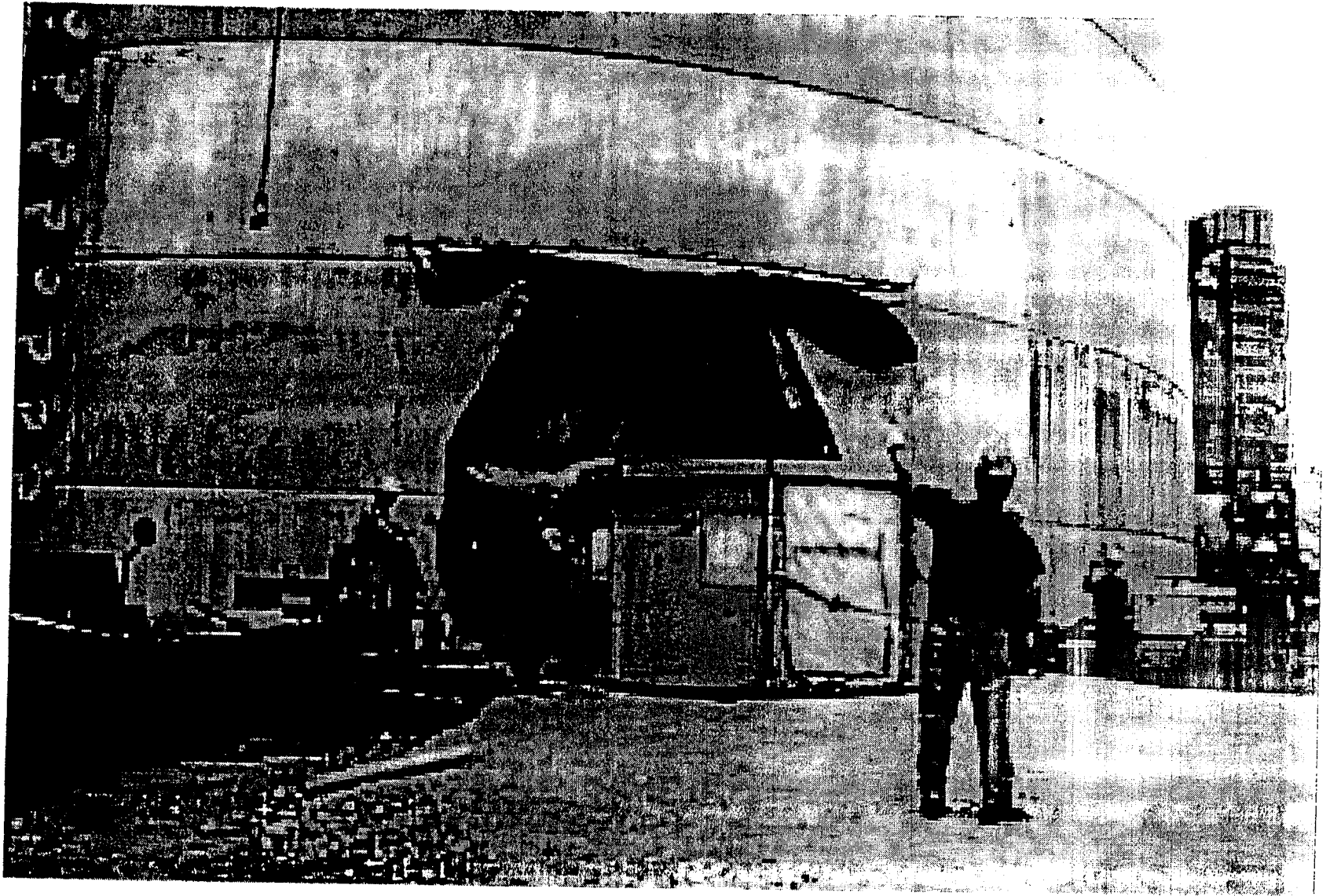
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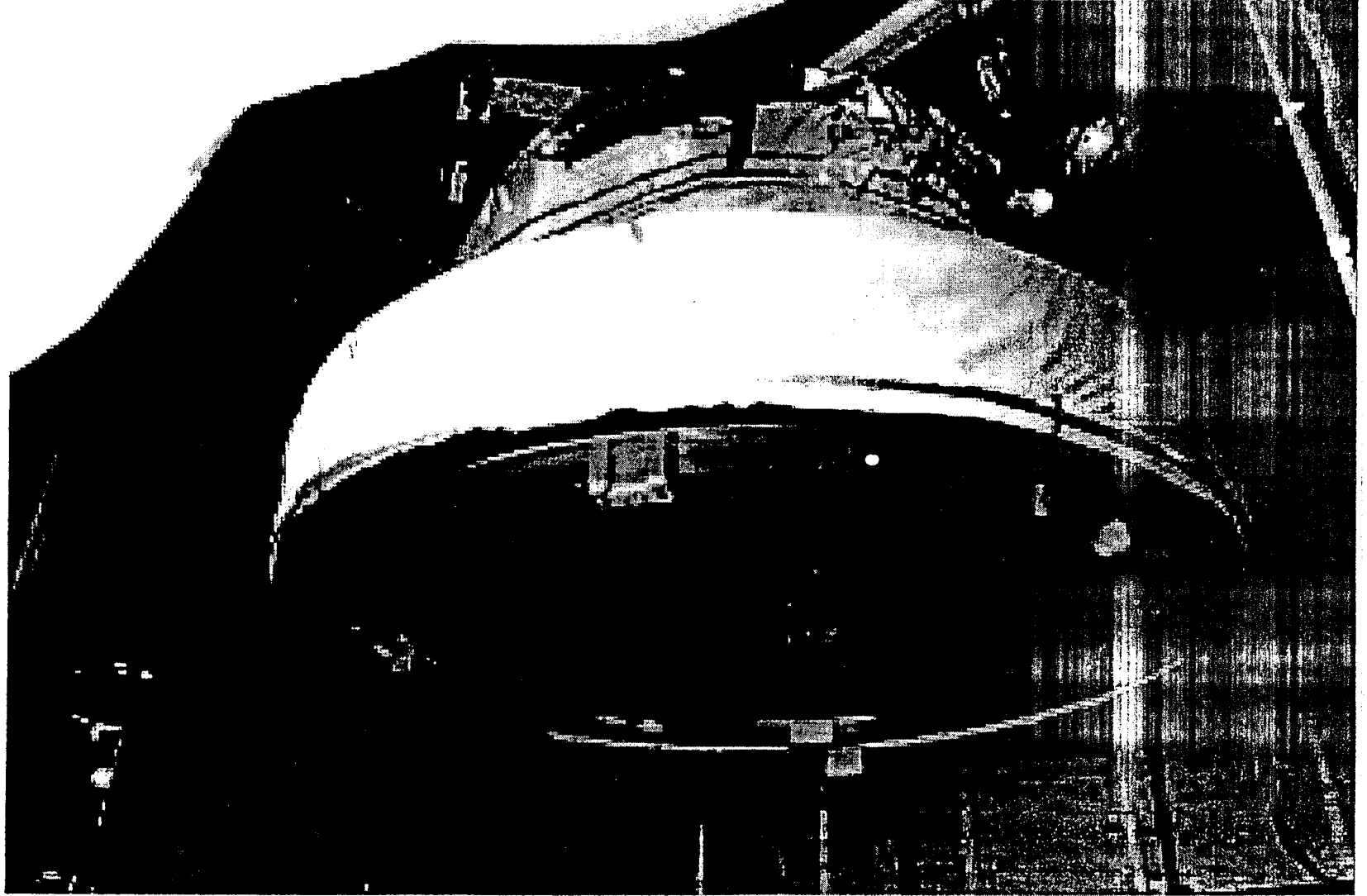
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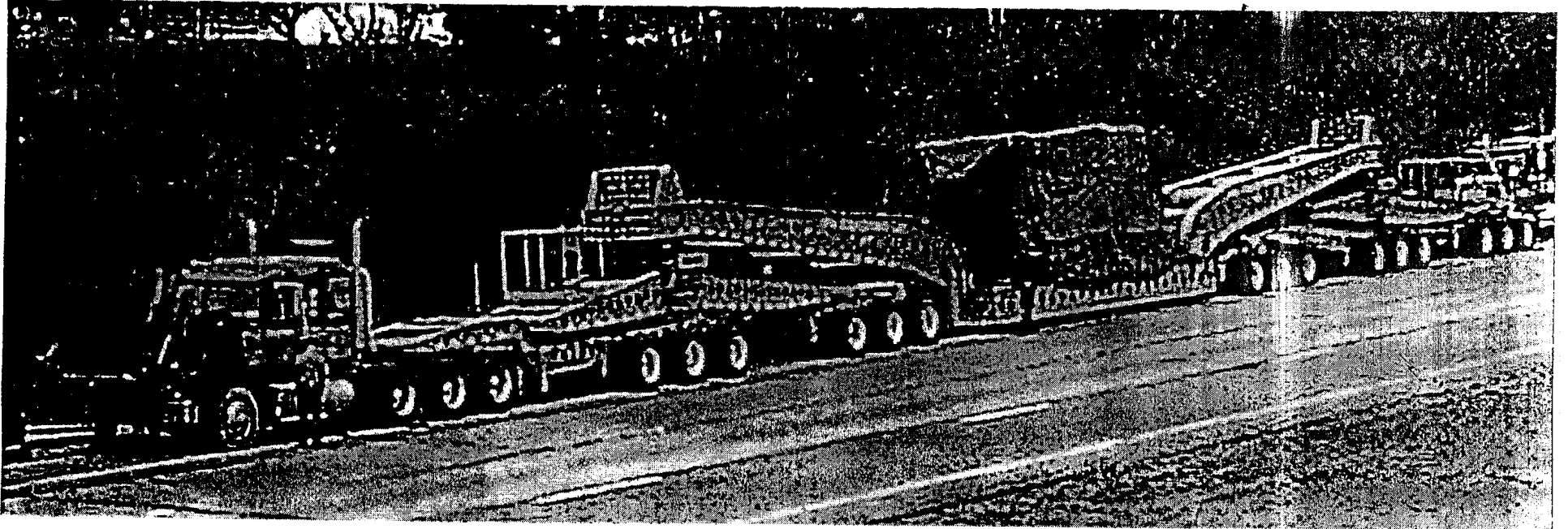
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FENOC



FENOC



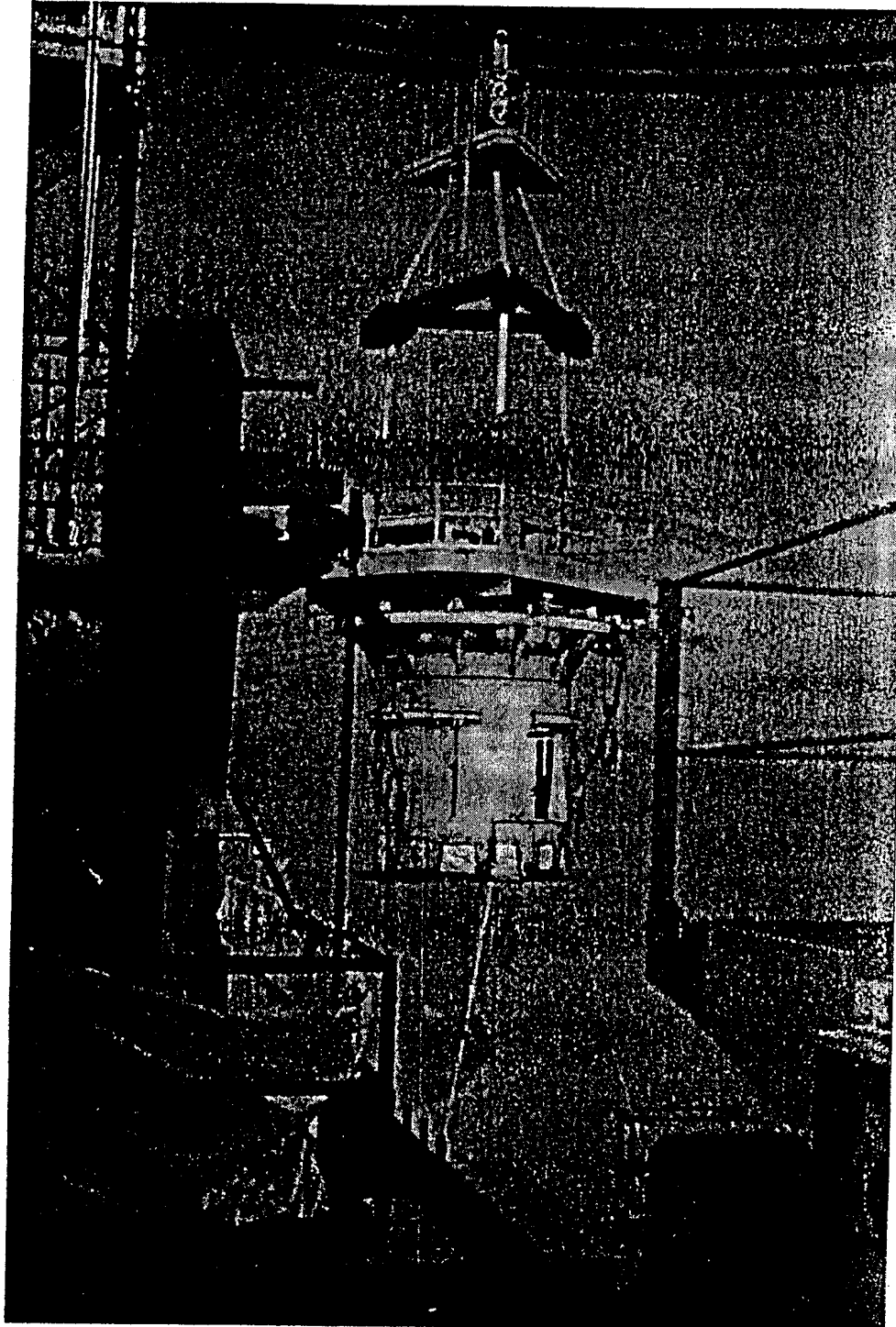
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Reactor Head Resolution Plan Implementation Status

Davis-Besse Activities

- RPV Head being prepared for removal
- Construction procedures submitted to FENOC for review and approval
- Engineering Packages nearing completion
- Containment Building opening preparation underway
- Containment restoration to include Containment Integrated Leak Rate Test to confirm Containment integrity

FENOC



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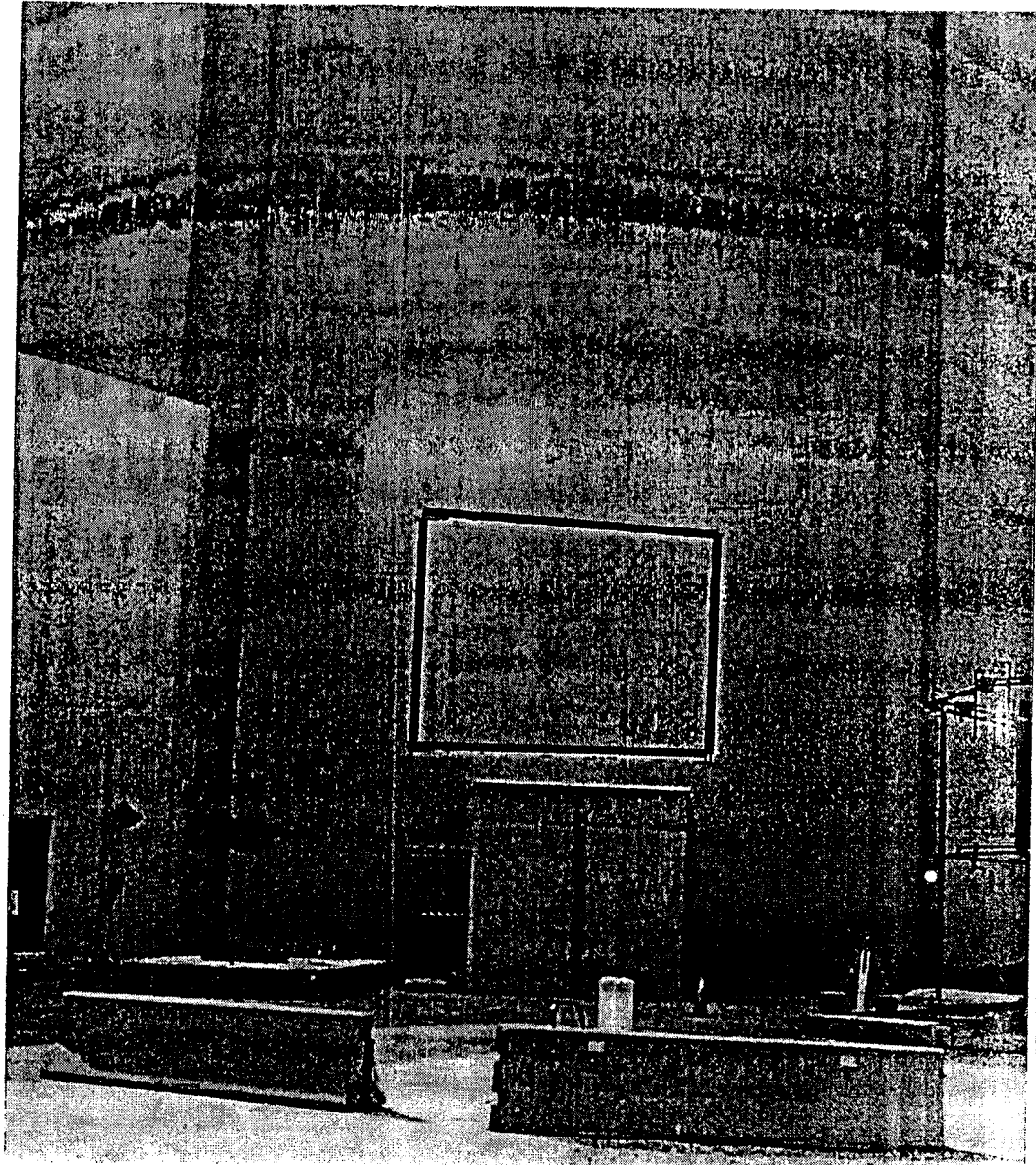
Reactor Head Resolution Plan Implementation Status

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Containment Health Plan Implementation Status



Randy Fast

Plant Manager

Jim Powers

Director - Engineering

FENOC

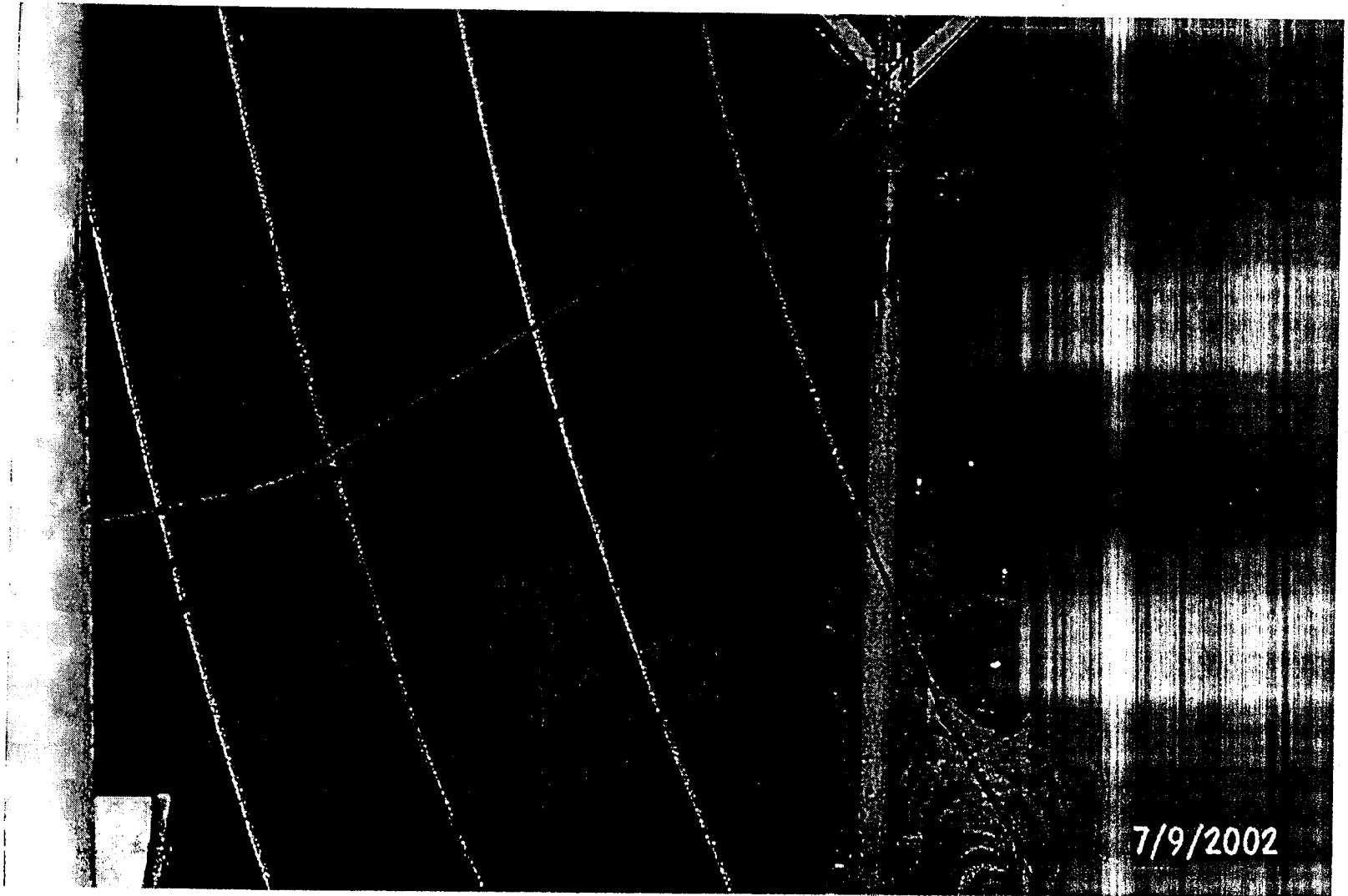
Containment Health Plan Implementation Status

- **Plan scope increased to encompass overall Containment Health**
 - Containment Vessel Evaluation
 - Environmental Qualification Equipment Evaluation
 - Containment Emergency Sump Evaluation
 - Decay Heat Valve Pit
 - Containment Air Coolers
- **System Health Plan revised to include systems outside Containment that contain boric acid**

Containment Health Plan Implementation Status

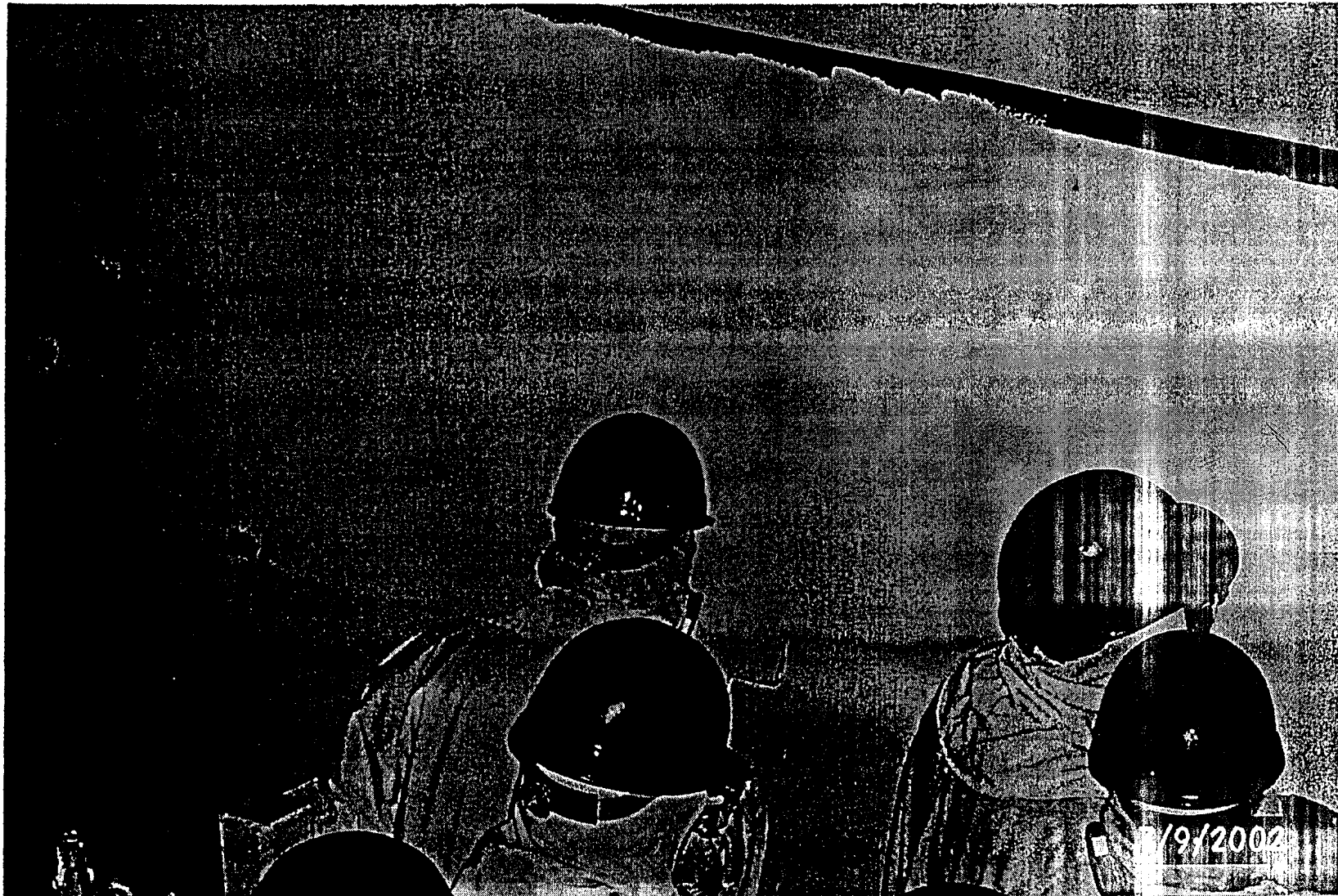
- **Revised Field Inspector Training Program**
- **Procedures in place for inspections**
- **Validation of inspections in progress**
- **Independent inspections with qualified personnel**

Qualifying Painters



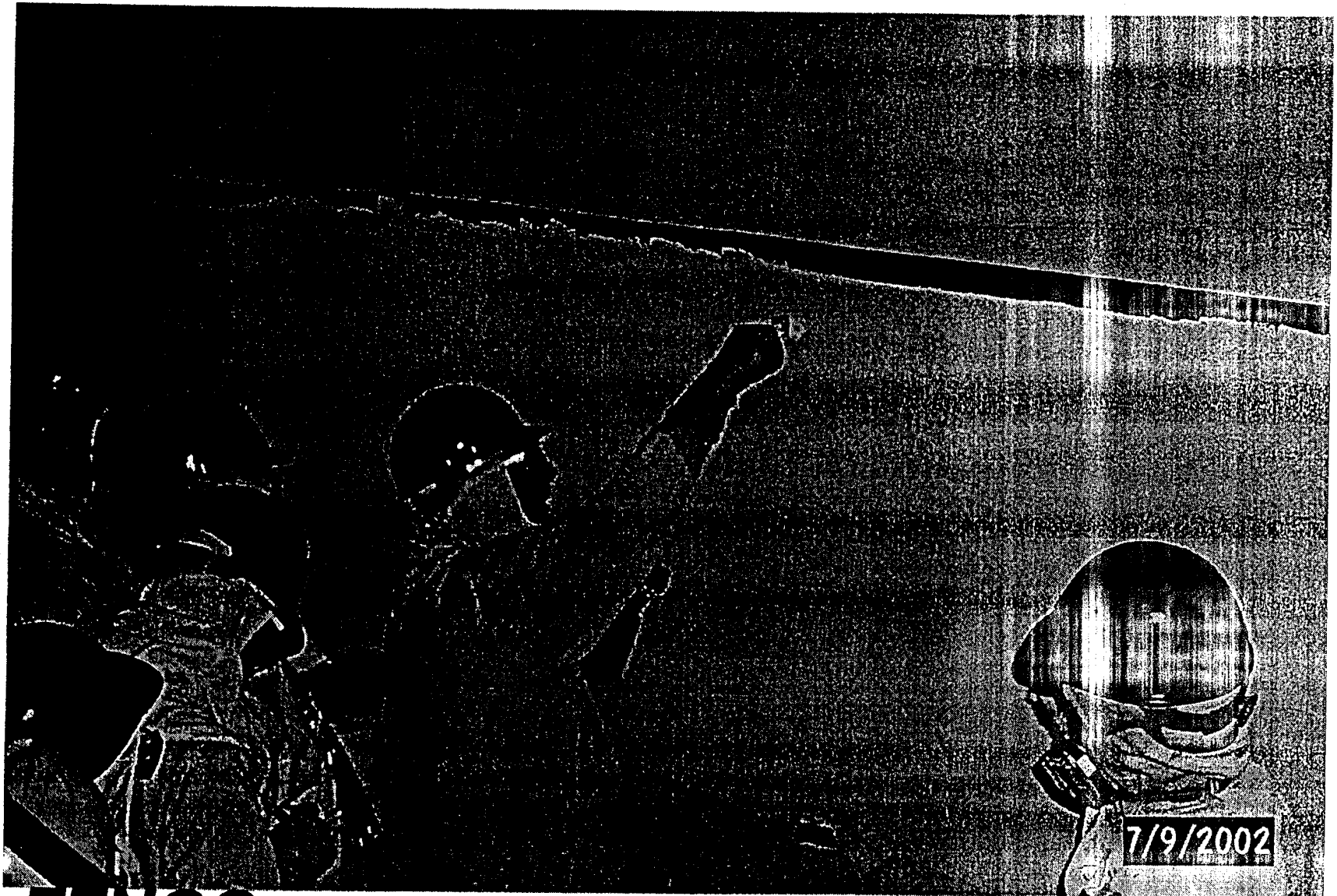
FENOC

Qualifying Painters



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Qualifying Painters



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System Health Assurance Plan Implementation Status



Howard Bergendah
Vice President - Nuclear

FENOC

System Health Assurance Plan Implementation Status

Operational Readiness Reviews

- **Complete**

System Readiness Reviews

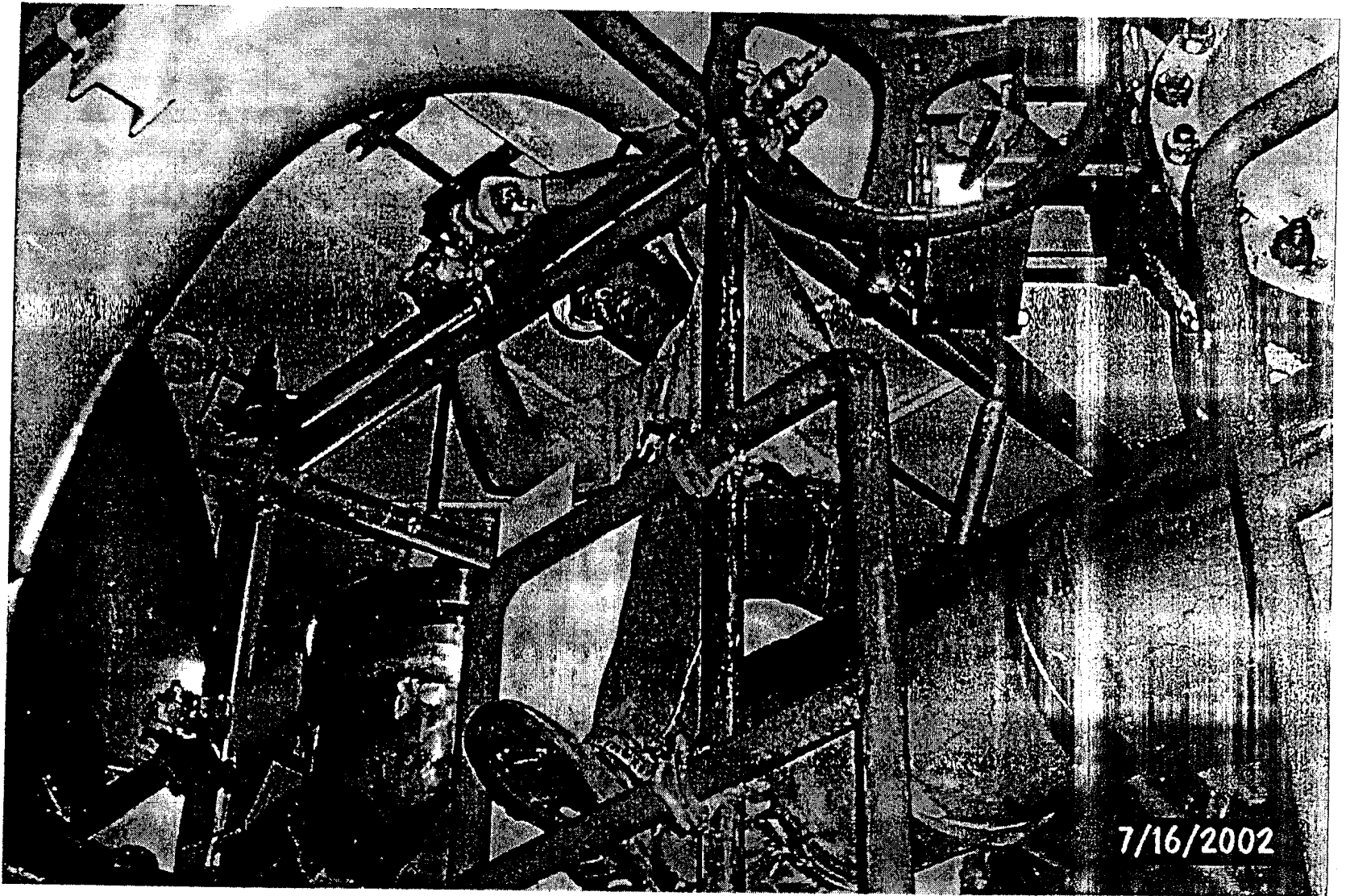
- **Risk Significant Maintenance Rule Systems**
- **Focus on material condition**
- **Include system walkdowns**

System Health Assurance Plan Implementation Status

Latent Issues Reviews

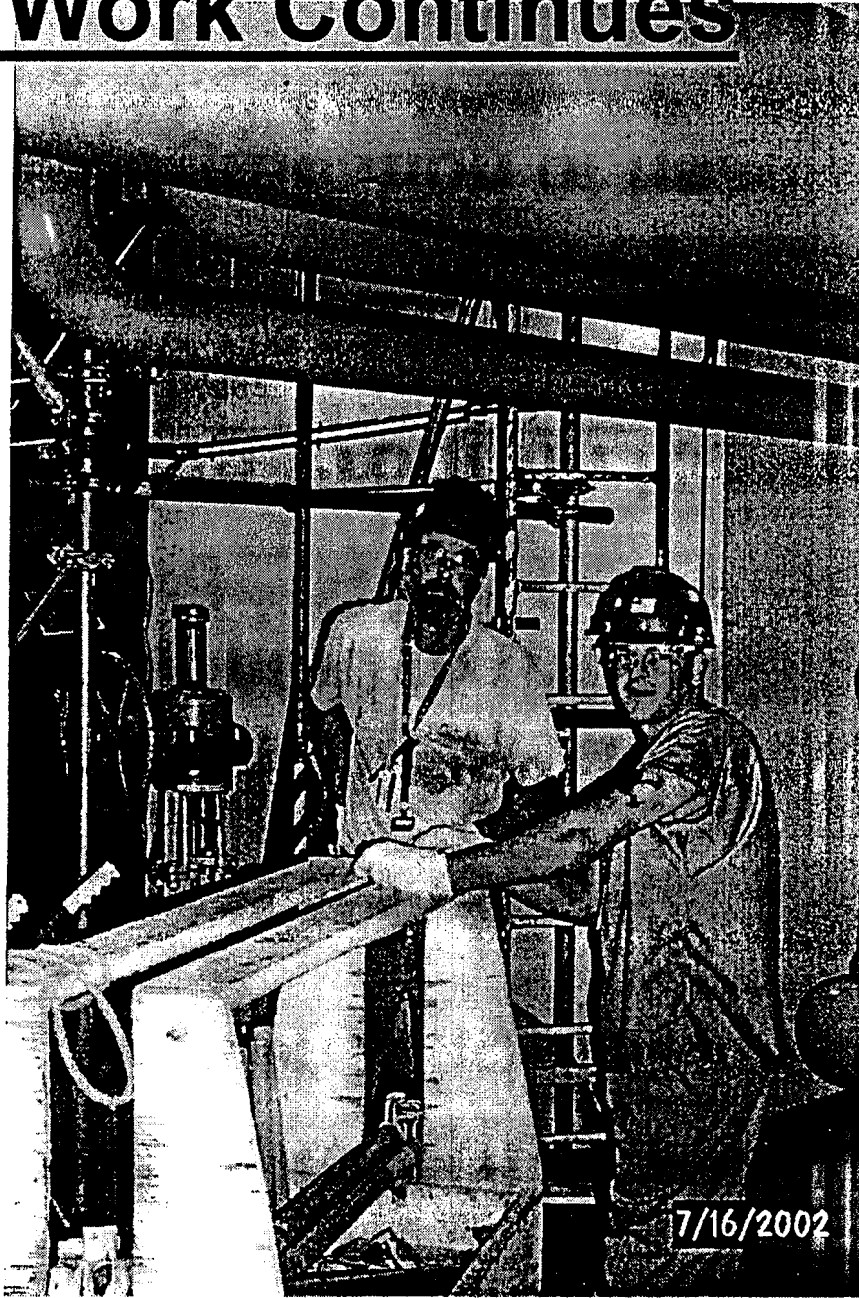
- **Detailed look at system design and include detailed system walkdowns**
 - **Reactor Coolant System**
 - **Auxiliary Feedwater System**
 - **Component Cooling Water System**
 - **Emergency Diesel Generators**
 - **Service Water System**

Decay Heat Pump Work



FENOC

Scaffold Work Continues



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Program Compliance Plan Implementation Status

Phase 1 - Program Readiness

- **Baseline assessment of plant programs**
- **Results presented to the Program Review Board**

Phase 2 - Detailed Program Reviews

- **Expectations have been established for In-Depth systematic review of programs related to degradation of head**

Program Compliance Plan Implementation Status

Phase 2 - Reviews Include:

- **Pilot Review: Probabilistic Safety Assessment Program**
- **Boric Acid Corrosion Control Program**
- **Inservice Inspection Program**
- **Plant Modification Program**
- **Corrective Action Program**
- **Reactor Coolant System Unidentified Leakage Program**
- **Operating Experience**

Management and Human Performance Excellence Plan Introduction



Lew Myers
Chief Operating Officer

FENOC

Management Root Cause Introduction

Conclusion:

- Management ineffectively implemented processes, and thus failed to detect and address plant problems as opportunities arose

Four Key Focus Areas Identified:

- Ownership
- Oversight
- Standards
- Decision-making

Management Root Cause Introduction

Initial Assessments:

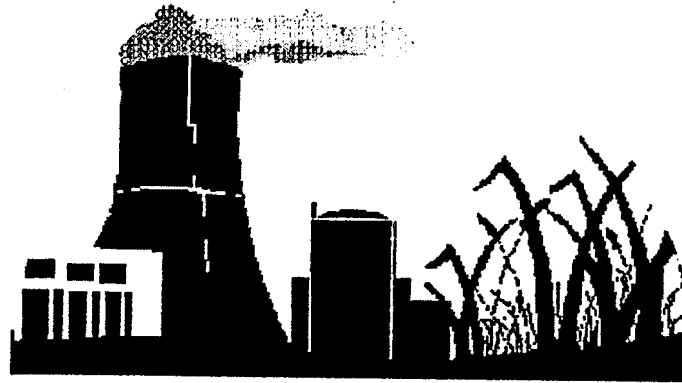
- Standards have existed for many years that lacked rigor in problem solving
- Strong management / leadership tends to improve performance, teamwork and ownership
- Lack of management oversight has resulted in lax rigor in process implementation
- Questioning attitude is not evident in decision making

Management Root Cause

Approach:

- **Baseline from Technical Root Cause**
- **Outside Experts Utilized**
- **Dedicated Investigation Team**

Management Root Cause



Steve Loehlein

Root Cause Team Leader

FENOC

Management Root Cause

Purpose:

- Understand why, over a period of years, Davis-Besse personnel failed to identify corrosion of the Reactor Pressure Vessel Head base metal.

Management Root Cause

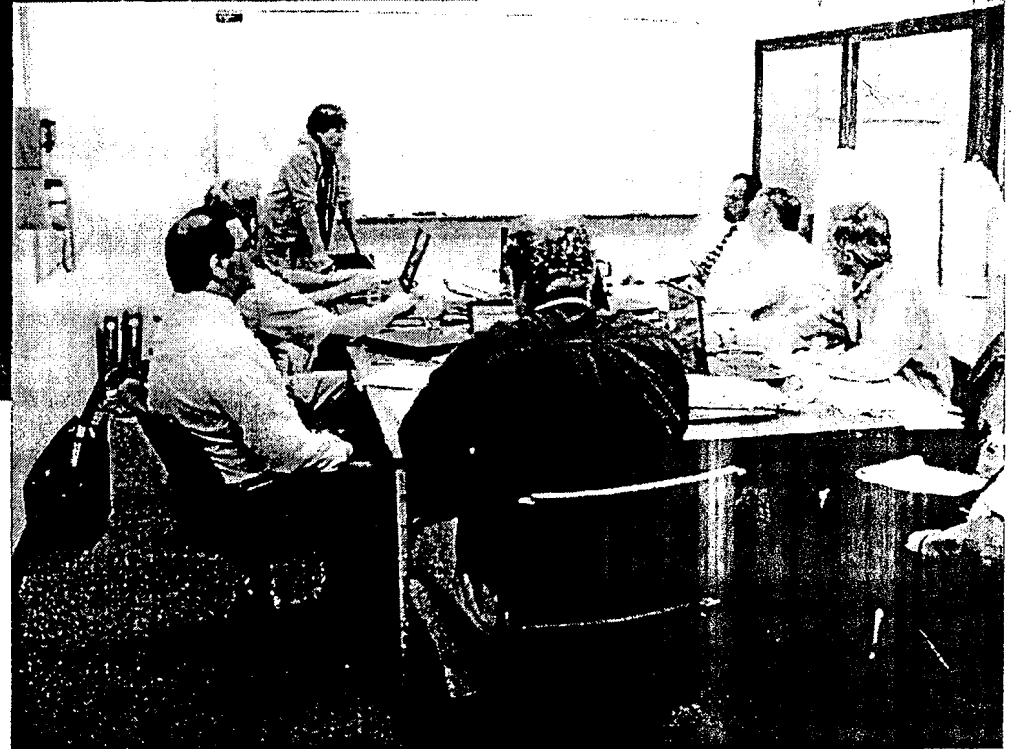
Team Composition:

- Technical Root Cause Leader
- Root Cause qualified FENOC employees
- FENOC Oversight Support
- Process Expertise -- Conger & Elsea
- Davis-Besse Management Personnel

Overview:

- INPO Organizational Effectiveness Expert

Root Cause Team



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Management Root Cause

Approach and Status:

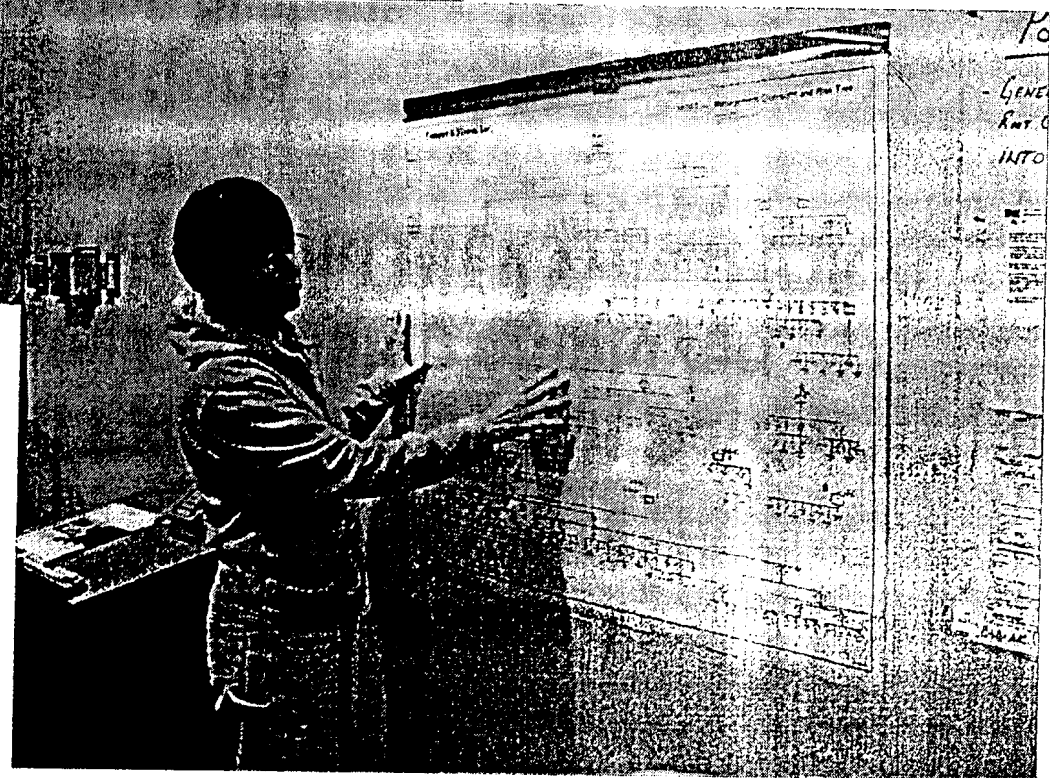
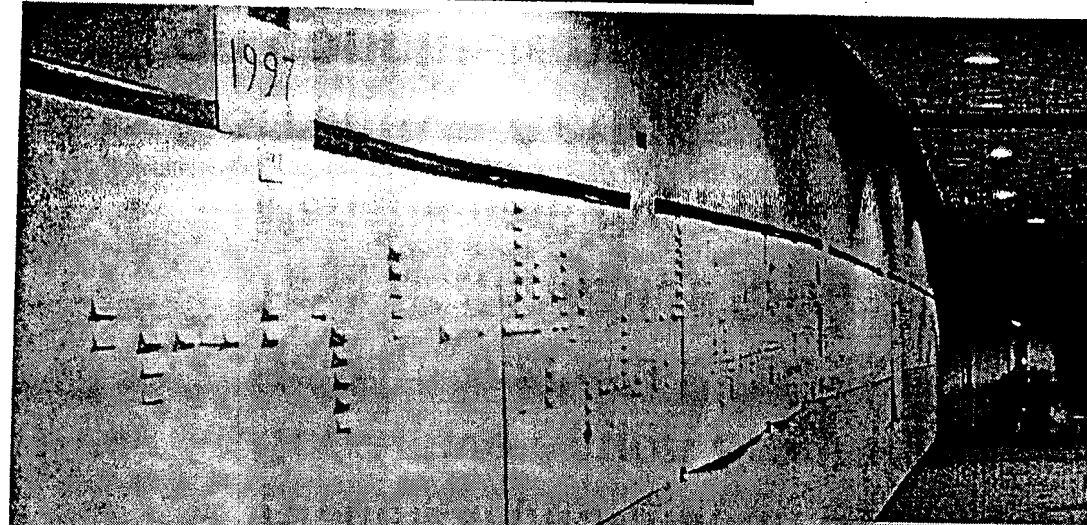
- **Scope Development**
 - **Technical Root Cause results**
 - **Four Focused areas for review:**
 - **RPV Head**
 - **Pressurizer Spray Valve (RC-2)**
 - **Containment Air Coolers**
 - **Radiation Monitor Filters**

Management Root Cause

In-Depth Evaluations:

- **Event and Causal Factors chart and Barrier Analysis techniques are being employed**
- **Management Oversight and Risk Tree (MORT) technique in process**
- **MORT Analysis Sections**
 - **Technical Information Systems**
 - **Corrective Action Program**
 - **Hazard Analysis Process**
 - **Task Performance Errors**
 - **Management Support / Oversight**
- **Corrective Actions will be recommended based on conclusions of data analysis**

MORT Analysis



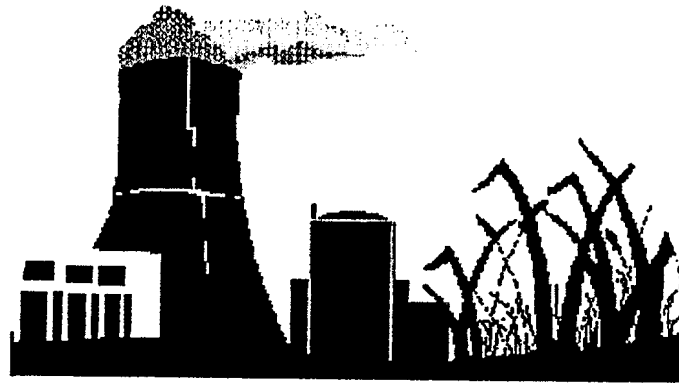
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Management Root Cause

Preliminary Insights:

- Standards have existed for many years that lacked rigor in problem solving
- Strong management / leadership tends to improve performance, teamwork and ownership
- Lack of management oversight has resulted in lax rigor in process implementation
- Questioning attitude is not evident in decision making

Closing Remarks



Lew Myers
FENOC Chief Operating Officer

FENOC

Closing Remarks

- **Demonstrated movement of our Building Blocks from Planning, Discovery, and into Implementation**
- **We have taken strong actions to incorporate comments from our Restart Oversight Panel and the NRC**
- **We are taking management actions that are substantial and demonstrative**

Closing Remarks

Management Action:

- **New positions of Chief Operating Officer, Executive Vice President of Engineering, and Vice President of Nuclear Oversight to ensure good operation and performance standards**
- **New Senior Management Team and a strong management team is now present with proven leadership**

Closing Remarks

Management Action:

- We are providing a case study with all of our employees to set an expectation that a change in ownership and standards are required
- We are re-baselining our standards and clearly reinforcing these standards in each department
 - New Engineering Standards of Excellence
 - New Engineering Assessment Board
 - Plant Manager now chairing our Corrective Action Review Board
 - New Operations leadership to ensure a plant operational focus

Closing Remarks

Management Action:

- Building Teamwork between managers and supervisors/line workers

Conclusions

We continue to be committed to a comprehensive approach to ensure Davis-Besse is ready for safe and reliable operation and sustainable performance.

