

NRC/Perry Management Meeting

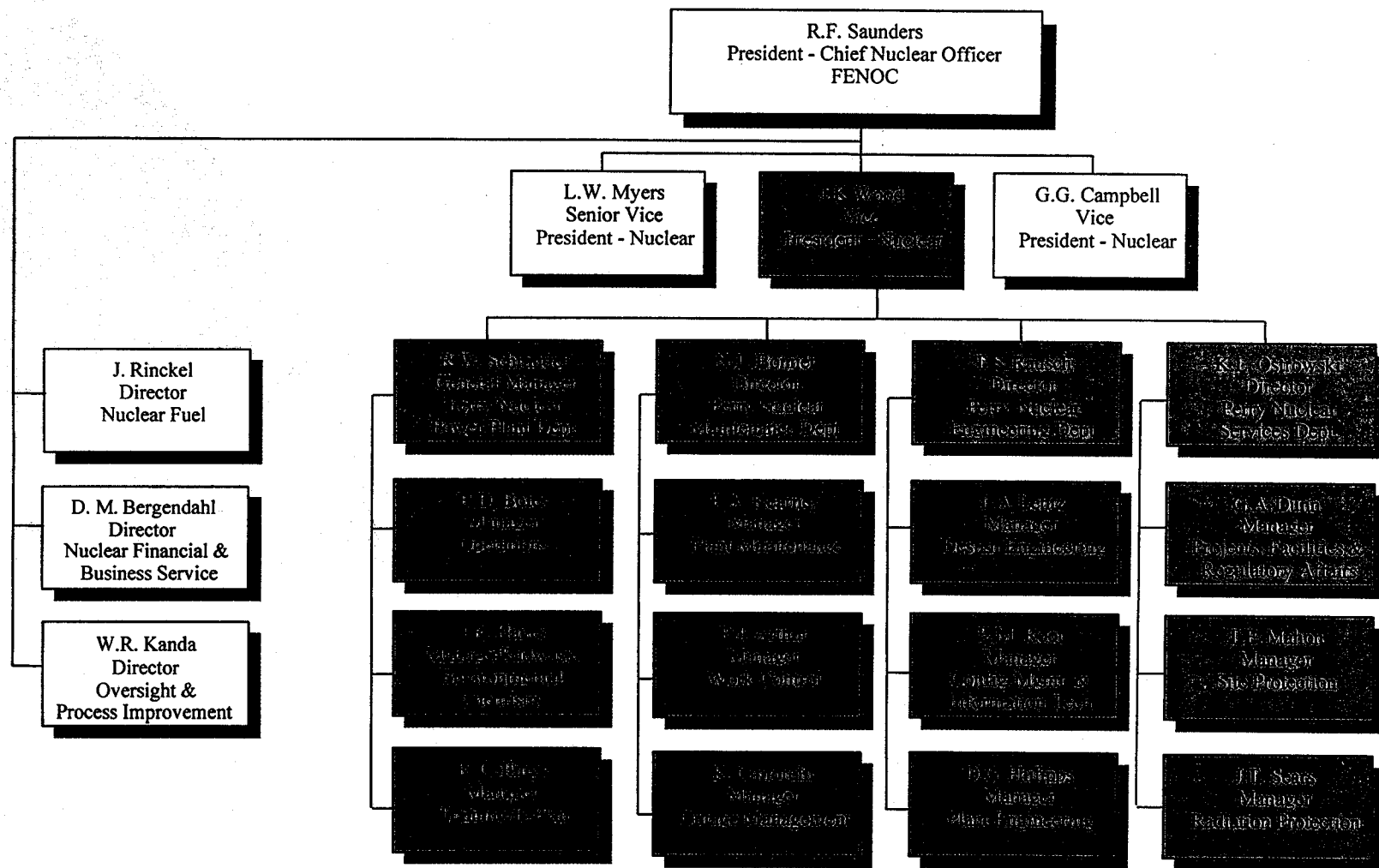
February 8, 2001



Introductions

- John K. Wood, Vice-President
- William R. Painter, Mechanic - Maintenance
- Robert W. Schrauder, Plant General Manager
- Kevin L. Ostrowski, Director - Nuclear Services
- Timothy S. Rausch, Director - Engineering
- Peter J. Arthur, Manager - Work Control
- Gregory A. Dunn, Manager - Projects, Facilities, and
Regulatory Affairs
- Bruce A. Luthanen, Engineer - Regulatory Affairs

Perry Organization

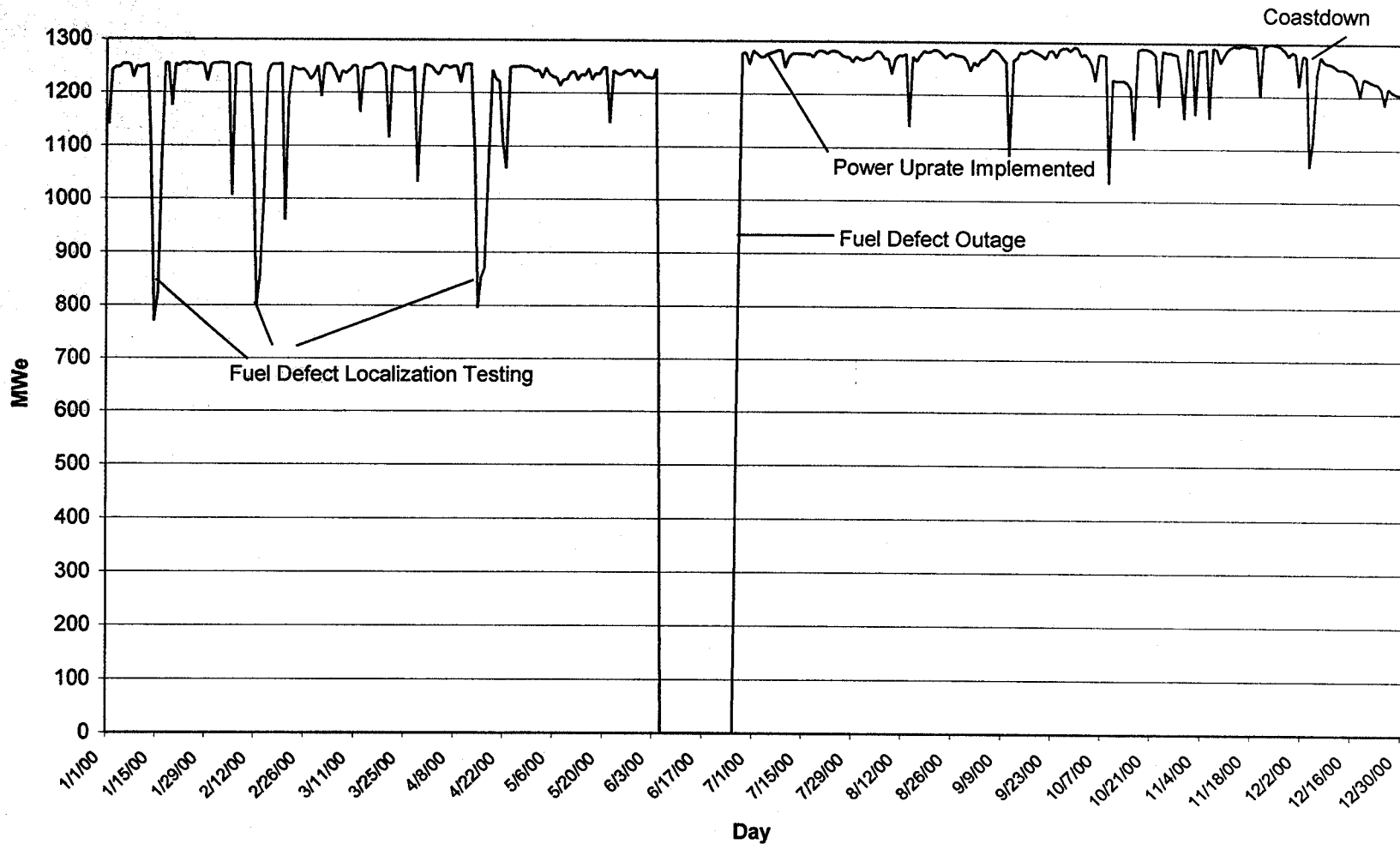


Meeting Objectives

- Year 2000 Review
 - ◆ Key Events
 - ◆ Challenges
- Refuel Outage 8
- Technical Issues
- Cycle 9 Critical Success Area Initiatives

2000 Key Events

Daily Average Gross Output



2000 Chronology

- March 21 Emergency Plan Evaluated Exercise
- April 2-5 OSRE And Chairman Meserve Visit
- May 8-18 WANO Peer Review
- June 1 Power Uprate Amendment Received
- June 4-15 Fuel Defect Repair Outage
- June 21 Public Plant Performance Review Meeting
- June 26 Evaluation Of Changes, Tests And Experiments
Inspection
- July 31 Problem Identification And Resolution
Inspection
- September 23 Public Open House
- October 1 Reactor Core Isolation Cooling (RCIC)
Supplemental Inspection
- October 23 Fire Protection Triennial Inspection

2000 Technical Challenges

- Hot Surge Tank Leakage
- Reactor Core Isolation Cooling (RCIC): White Performance Indicator
- Thread Engagement Issues
- Unit 2 Start-up Transformer
- Motor-Operated Valve Issues
 - ◆ Emergency Closed Cooling Water System
 - ◆ Residual Heat Removal Minimum Flow
- Diesel Generator AOT Lube Oil Cooler Water Intrusion
- Inadvertent Safety Relief Valve Opening

2000 Technical Challenges

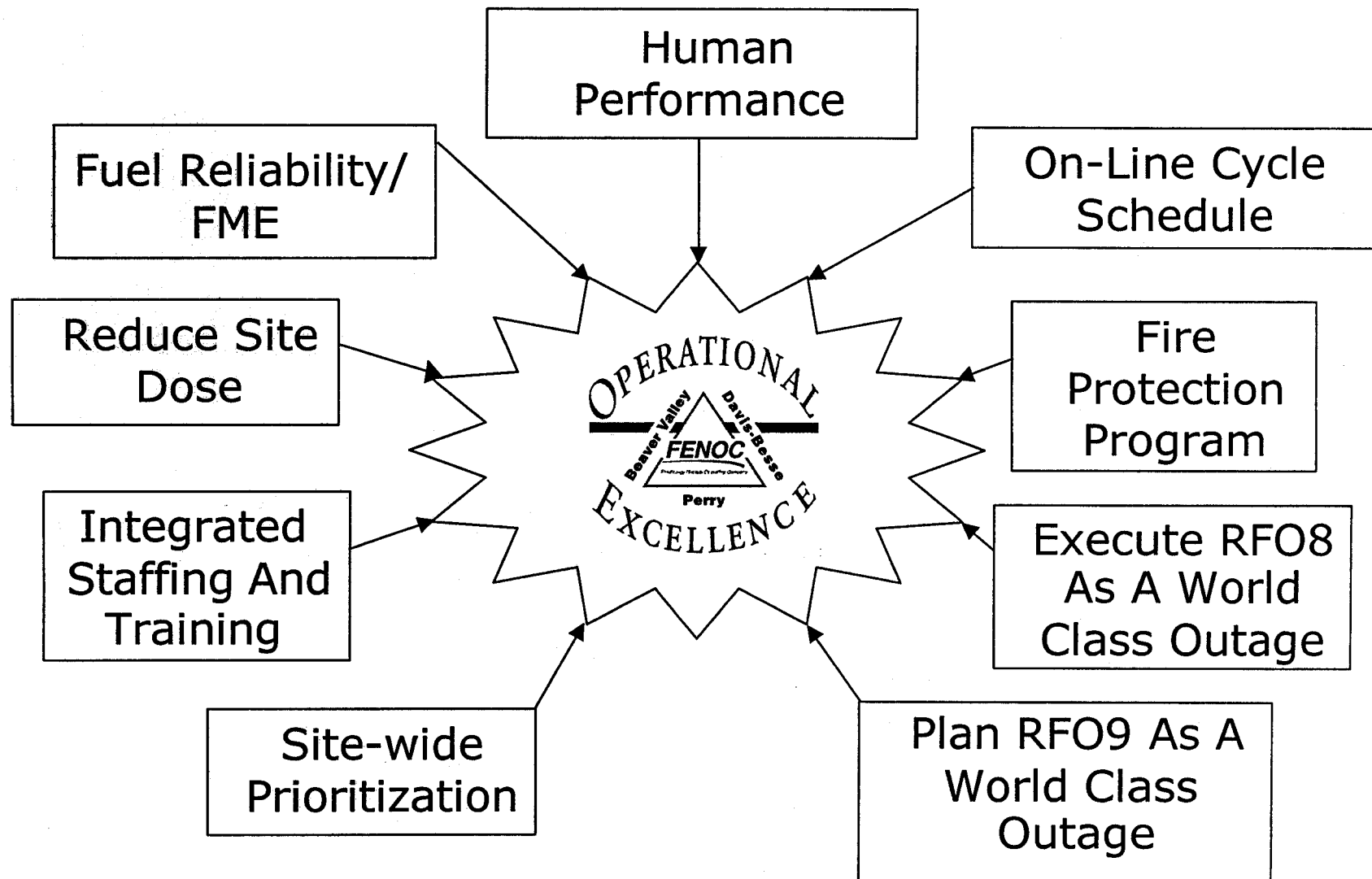
■ Five Licensee Event Reports

- ◆ 2000-01: Potential For Inadequate Suppression Pool Make-Up For The Emergency Core Cooling Systems
- ◆ 2000-02: Inadequate Data Validation Checks Result In Missed Power Distribution Limits Surveillance Requirements
- ◆ 2000-03: Battery Age Determination Results in Technical Specification Violation Of Surveillance Requirement
- ◆ 2000-04: Technical Specification 3.0.3 Entered Due To Inoperability Of Both Trains Of Annulus Exhaust Gas Treatment System
- ◆ 2000-05: Unrecognized Design Requirement For Emergency Service Water Resulted In Operation Outside The Design Bases

2000 Focus Areas in Review

- **Human Performance Improvements**
- **Management/Employee Alignment**
- **Design Basis Improvements**

Perry Critical Success Area Initiatives - 2001

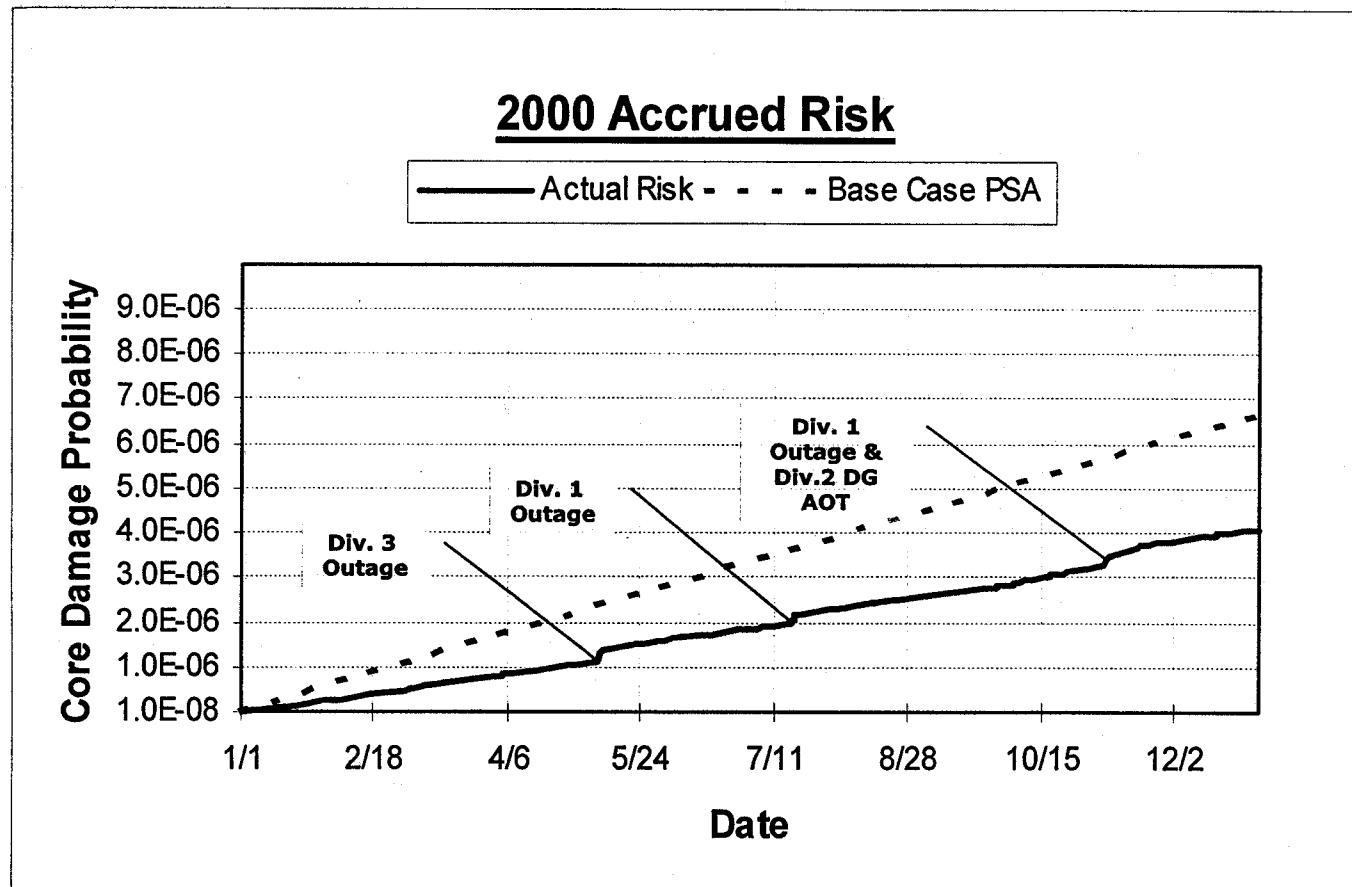


Plant Overview

Robert W. Schrauder

- **Current Status**
 - ◆ Identified And Suppressed One Fuel Defect
 - ◆ Jet Pump Fouling
 - ◆ License Exams
- **SAFETY - Radiological, Industrial, Risk Management**
- **Plant Material Condition**
 - ◆ Two Maintenance Rule a(1) Systems
 - ✦ Containment
 - ✦ Containment Venting Via Spray Headers

Risk Profile - 2000



Division 1 and 2:

Diesel Generator
Residual Heat Removal
Emergency Service Water
Emergency Core Cooling
Associated Support Equipment

Division 3:

High Pressure Core Spray
Diesel Generator
Emergency Service Water
Associated Support Equipment

Refuel Outage 8

Peter J. Arthur

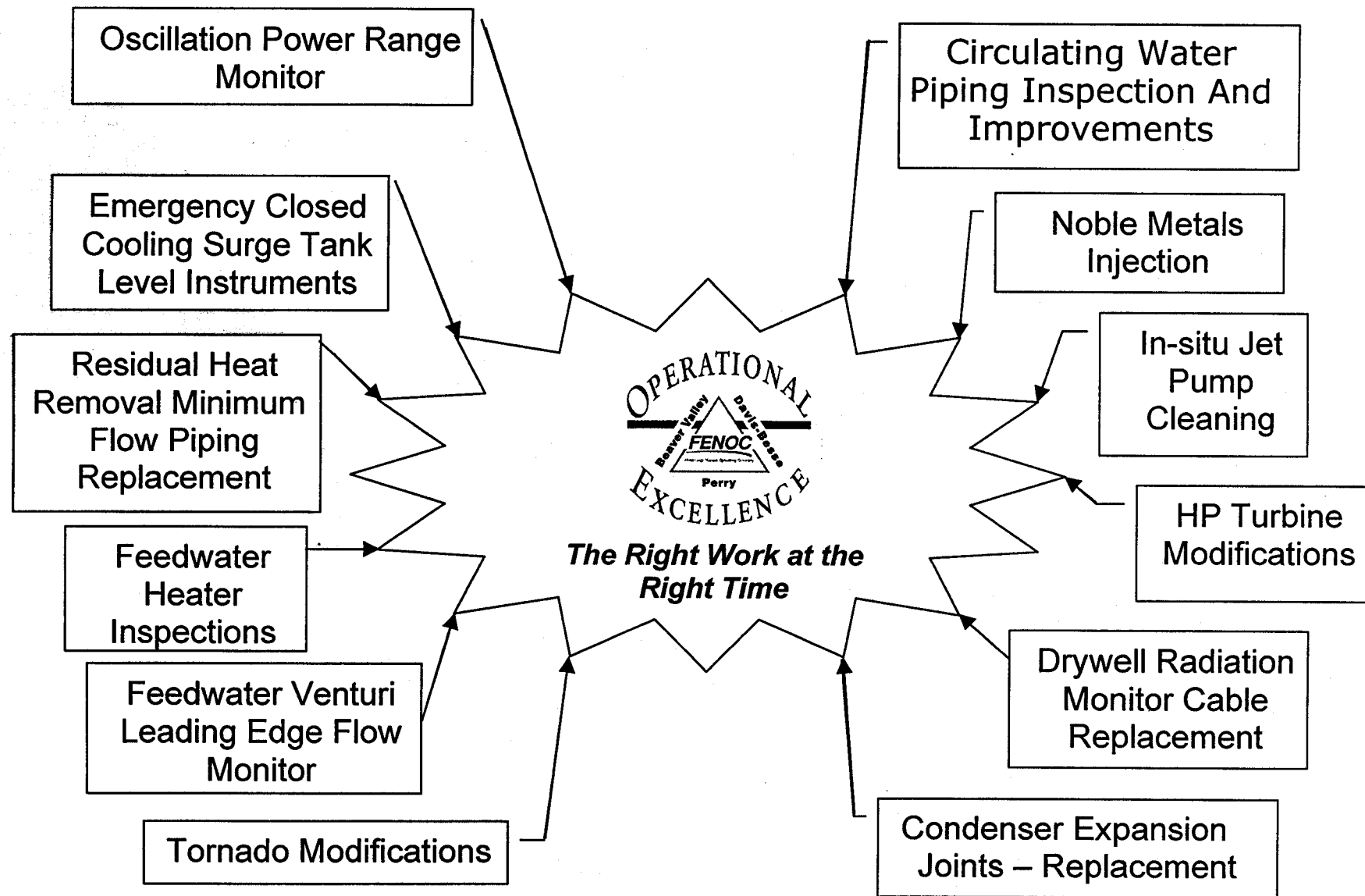
- Total Work Orders: 2824
(2516 in RFO7)
 - ◆ General /Corrective Maintenance: 620
(695 in RFO7)
 - ◆ Preventive Maintenance: 1420
(1094 in RFO7)
 - ◆ Surveillance: 784
(727 in RFO7)

- Committed To Do The Right Work At The Right Time

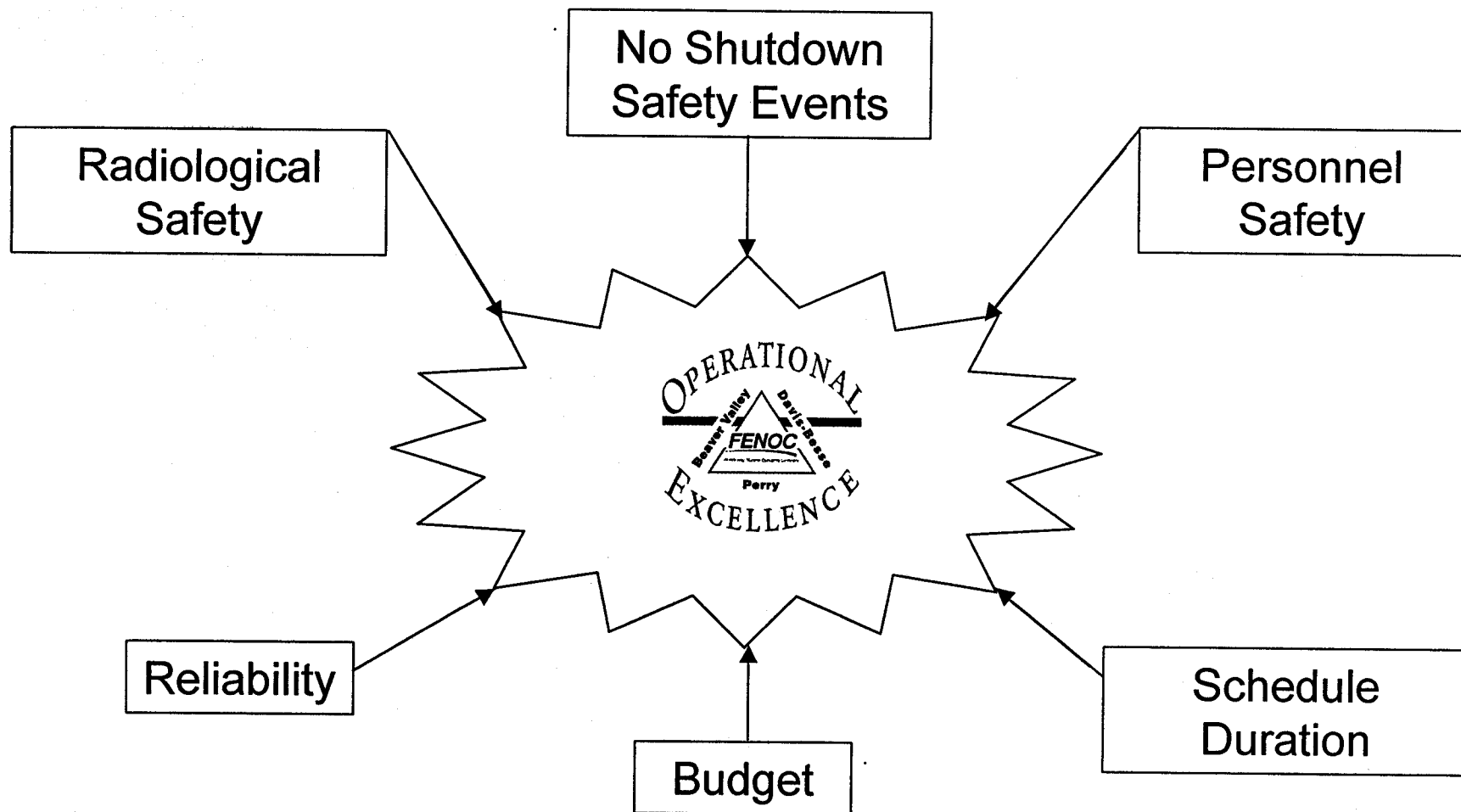
Refuel Outage 8 Overview

- Outage Begins February 17
- Using New Perry Shutdown Risk Model
 - ◆ Shutdown Safety Work Practices
- Dose Reduction - RFO8 initiatives
 - ◆ System Flushing
 - ◆ Permanent Shielding Installation
 - ◆ Remote Monitoring
- Fuel Reliability
 - ◆ Major Emphasis In RFO8
 - ◆ Enhanced FME Control For The Refueling Floor And Fuel Handling Building
 - ◆ Fuel Inspection For 44 Reload Assemblies
 - ◆ Fuel Sipping

Major Refuel Outage Projects



Refuel Outage 8 Goals



Regulatory Activities Supporting RFO8

■ Received:

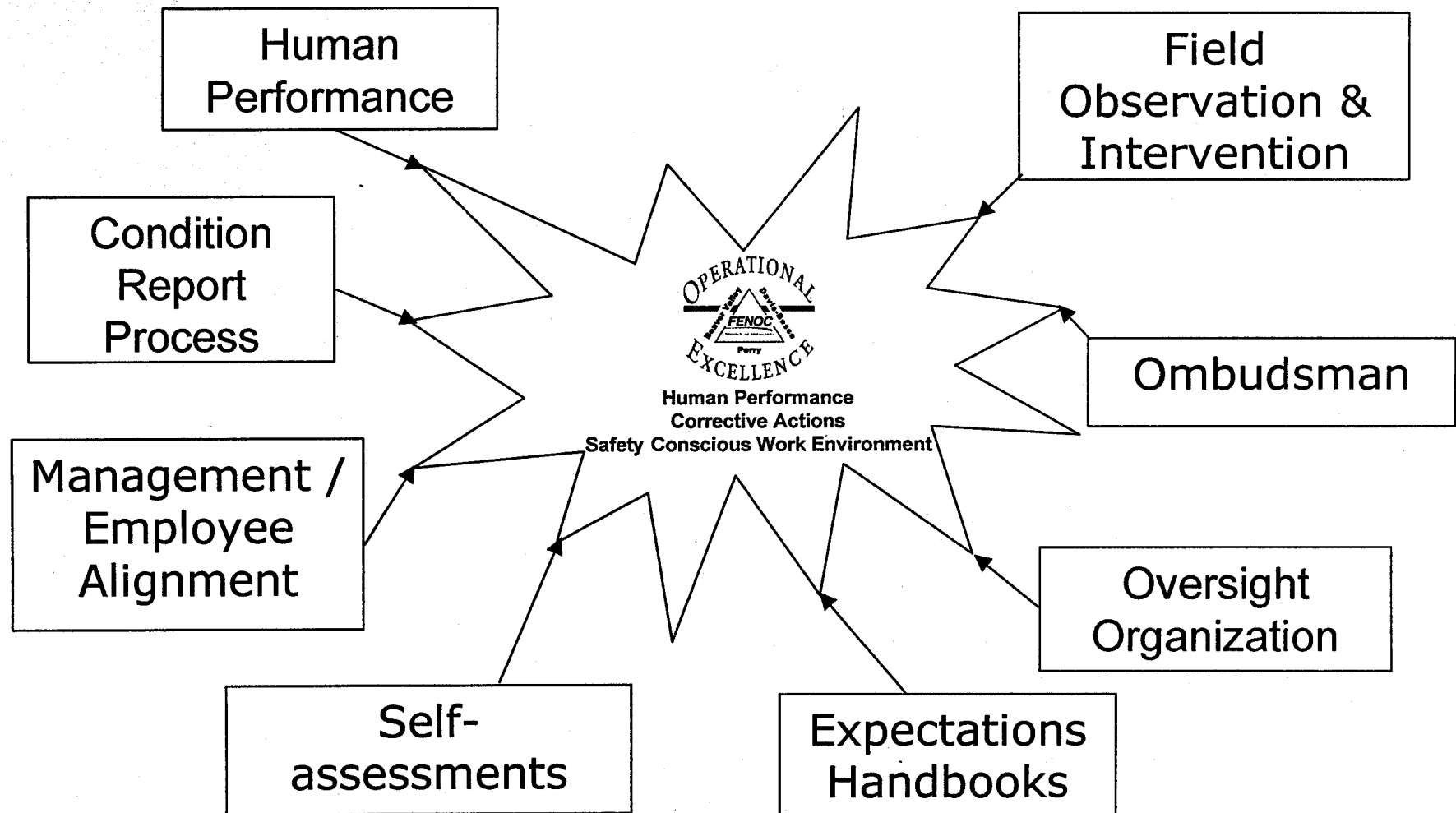
- ◆ Refuel Interlocks
- ◆ Power Uprate
- ◆ 24 Month Operating Cycle
- ◆ Containment Spray Test Frequency

■ Pending:

- ◆ 8 Relief Requests - ISI / IST Programs
- ◆ Cycle 9 Core Design
- ◆ MCPR Safety Limit
- ◆ OPRM Stability Monitor

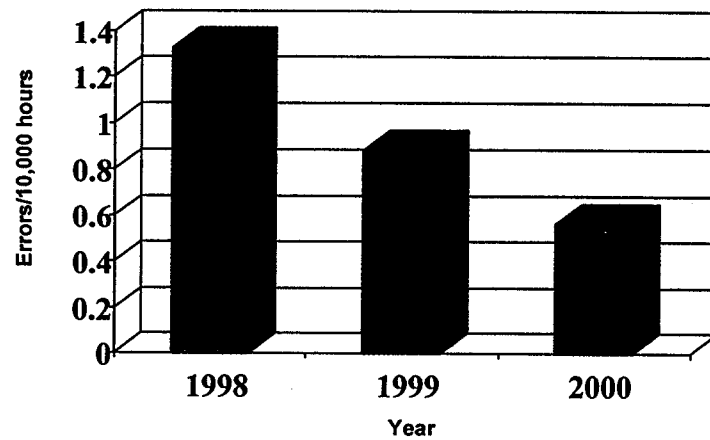
Human Performance

Kevin L. Ostrowski



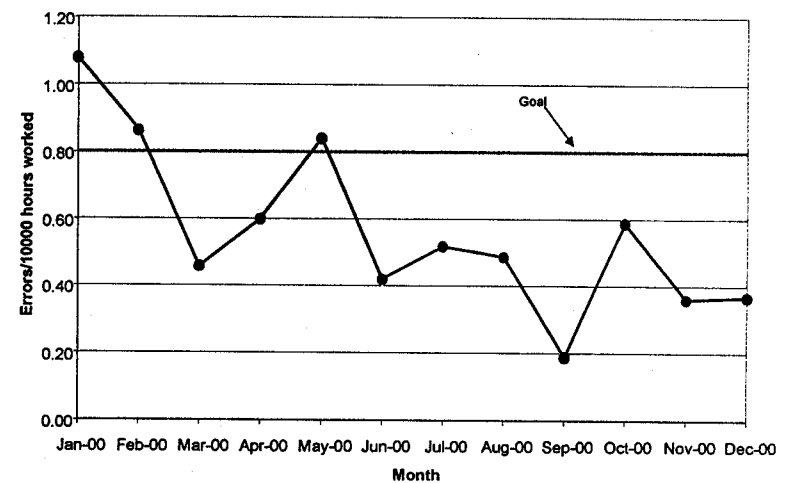
Human Performance

Personnel Error Rate Yearly Average



Personnel Errors Per
10,000 Person-Hours

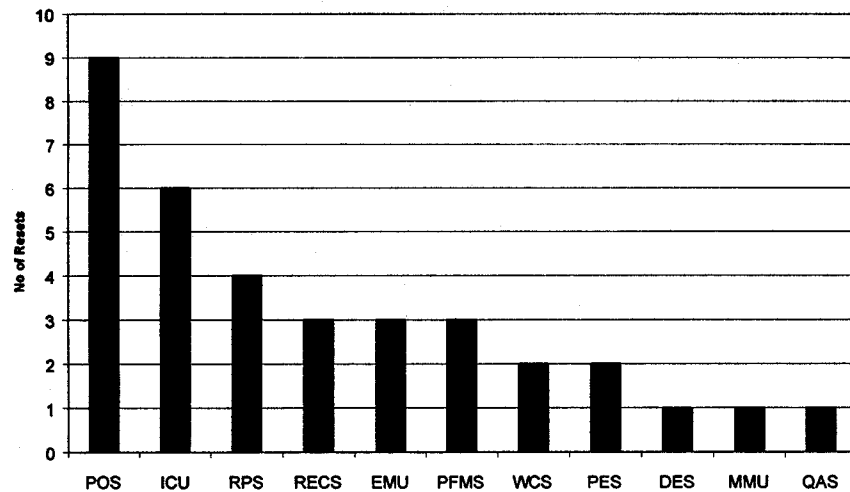
Year 2000 Personnel Error Rate Trend



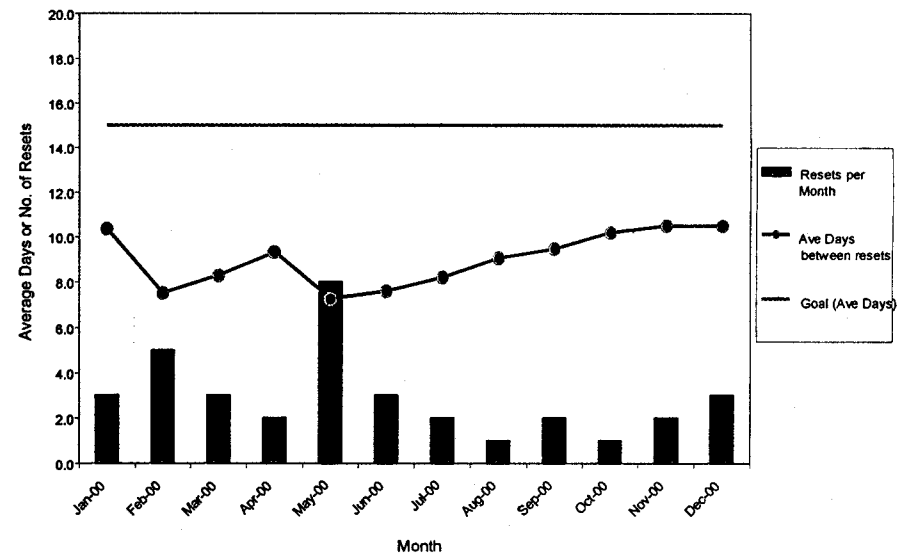
Performance
Trends

Event-Free Clock

Resets by Section
(1/1/00 through 12/31/00)



Year 2000 Event Free Clock



Corrective Action Program Continuous Improvement

- Condition Report Process
 - ◆ Program Continues To Mature
 - ◆ Common FENOC Process Adopted
 - ◆ CREST System Implementation
 - ✦ Paperless System
 - ✦ Integrated Binning And Trending Features
- Emphasis On Predict And Prevent
- Focused Self-assessments
 - ◆ 56 Completed In 2000
 - ◆ 72 Scheduled For 2001

Commitment to Safety Conscious Work Environment

- Updated The Employee Concerns Program - February 2000
- Positive Site Survey Results - March 2000
- Supervisory Continuing Training - October 2000
- FENOC Policy Statement Updated And Re-issued - November 27, 2000
- Re-emphasized Expectations For All-hands Pre-RFO8 Meeting - January 16, 2001
- In-processing / Outage Training For RFO8

Technical Issues

Timothy S. Rausch

- **Tornado Design: Building Venting Modifications**
 - ◆ Operability Determination Compensatory Measures In Place
 - ◆ Modifications Involve Damper and Door Replacements Along With Ductwork Hardening
 - ◆ Completion On Schedule For Mid-March

- **Emergency Service Water Sluice Gates: Seal Modification**
 - ◆ Unreviewed Safety Question (USQ) Approved by License Amendment 114
 - ✦ Requires Safety Upgrade of Gate Seal System
 - ◆ Ancient Design Issue Identified (LER 2000-05)
 - ◆ Resolution On Schedule For April

Technical Issues

■ Jet Pump Performance

- ◆ Jet Pumps Cleaned During RFO7
- ◆ Core Flow Reduction Returned Late In Cycle 8
 - ✦ Very Clean Reactor Water - High Corrosion Potential
 - ✦ Contributing Factor - High Velocity
- ◆ In-Situ Cleaning Scheduled For RFO8
- ◆ Ongoing Cooperative Effort With GE/EPRI For Long Term Solution.

■ Motor Operated Valve Program

- ◆ Recent Program Implementation Issues
- ◆ Investigation Team Identified Root Cause And Corrective Actions
 - ✦ Root Cause: Failure To Follow Procedure And Recognize Trends
 - ✦ Corrective Actions: Test Frequency Review, Periodic Verification, And Extensive Extent Of Condition
- ◆ Overall Program Is Sound

Technical Issues

- Fire Protection Program Improvements
 - ◆ Consolidated Under New Program Manager
 - ◆ System Reliability Improvement Plan Established
 - ◆ Procedure Upgrade Planned

- Diesel Generator Exhaust
 - ◆ Division 1 And 2 Functioning And On Increased Test Frequency
 - ◆ Division 3 Design Change Ineffective
 - ✦ Operable, Maintaining Exhaust Path Open
 - ◆ Final Resolution Under Engineering Evaluation

2001 Design Focus

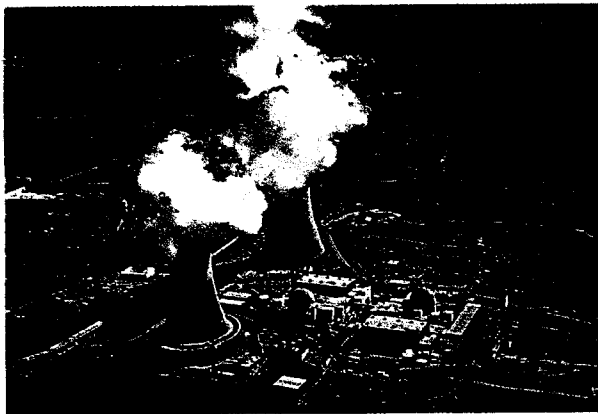
- Design Basis Enhancement
 - ◆ Design Basis Assessment Report
 - ✦ Assesses Current Health And Status Of Design Bases
 - ✦ Assesses Improvement Plan Progress
 - ◆ Design Basis Information
 - ✦ Electronic Catalog And Multifunction Search Capability
 - ◆ Calculation Enhancement Project
- 10 CFR 50.59 Process Implementation April 30, 2001

2001 System Focus

- System Health Report
 - ◆ Assesses Structure, System And Component (SSC) Reliability
 - ◆ Documents Monitoring And Improvement Actions
- Joint Engineering Team
 - ◆ Short Term, Emergent Support
 - ◆ Facilitates Continuous Focus On Long Term Issues
- Predictive Engineering Approach
 - ◆ New Tools And Expectations To Drive Culture Change
- Equipment Reliability

FENOC Strategy

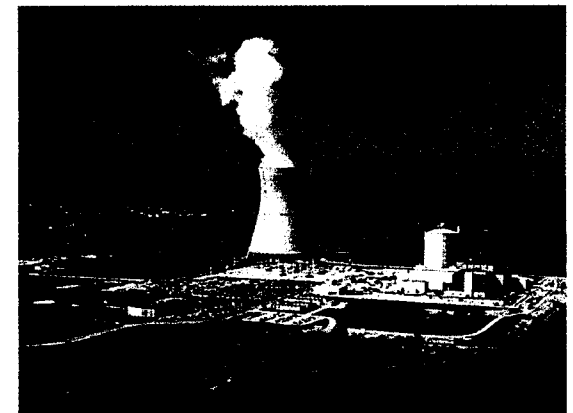
- Common Process
- Maintaining a Motivated, Highly Skilled Work Force
- Life Cycle Management



Beaver Valley



Perry



Davis-Besse

