FENOC

FirstEnergy Nuclear Operating Company

IMC 0350 Meeting

February 22, 2005

Desired Outcomes

- Demonstrate Davis-Besse's operations continue to be safe and conservative
- Discuss site activities since last meeting
- Status the improvement initiatives and Confirmatory Order Independent Assessments

Mark Bezilla
Vice President

Meeting Agenda

- Plant Performance……Barry Allen
- Steam Generator Inspection - Mid-Cycle Outage..Barry Allen
- Independent Assessments
  - -Engineering Program Effectiveness……Steve Loehlein
  - -Organizational Safety Culture, including SCWE...Mark Bezilla
- Oversight Perspective……Ray Hruby

Plant Performance

Barry Allen
Director - Site Operations

People with a strong safety focus delivering top fleet operating performance

- Plant Status
  - ~100% power
  - ~ 945 Mwe
  - 13 continuous days of service
  - 40 Human Performance success days

Plant Performance

- Noteworthy items
  - December 16 - NRC Biennial Problem Identification and Resolution (PI&R) Inspection Team exit
  - December 17 - Monthly Performance Review
  - December 21 - Dr. Sonja Haber conducted a debrief of the Confirmatory Order Independent Assessment of SC/SCWE
  - December 23 - Entered Station Isolation procedure (winter weather)

Plant Performance

- Noteworthy items (continued)
  - January 5 - Dr. Sonja Haber presented the results the Safety Culture / Safety Conscious Work Environment to site employees
  - January 10 -12 - Industry Accreditation Team Lead Visit
  - January 13 - Loss of D1 Electrical Bus
  - January 17 - Started Steam Generator Inspection - Mid-Cycle Outage
  - January 17 - 21 - Industry Assist Visit - Operations Performance
  - January 18 - 28 - NRC Mid-Cycle Inservice Inspection

Outage Control Center

Plant Performance

FENOC President tours plant

FE Executive VP & COO tours plant

- Noteworthy items (continued)
  - January 18 - 27 - NRC ALARA and Radworker Access Control Inspection
  - January 20 - Plant tour by FENOC President
  - January 25 - Plant visit by NRC 0350 Panel Chairman and Region III Branch Chief
  - February 3 - Tour by FirstEnergy Executive Vice-President & Chief Operating Officer
  - February 9 - End of Steam Generator Inspection - Mid-cycle Outage and synchronize turbine to grid

Plant Performance

Restart Readiness Meeting

- 2005 Key Events Calendar
  - February 15 - 17 - Mock Fleet Support/ Corporate Evaluation
  - March 14 - 18 - Industry Technical Skills Training Accreditation Team Visit
  - March 28 - April 1 - Industry Primary Systems Integrity Review Visit
  - April 18 - May 6 - NRC Safety System Design and Performance Capability Inspection
  - May 16-20 - NRC Biennial Maintenance Rule Inspection
  - May 17 - Evaluated Emergency Preparedness Exercise
  - August - Industry Plant, Corporate, & Simulator Evaluation (*Tentative)
  - October - Industry Operations Training Accreditation Team Visit

Conclusion

- Davis-Besse's operations continue to be safe and conservative

Steam Generator Inspection-
Mid-Cycle Outage

Barry Allen
Director - Site Operations

Steam Generator Inspection - Mid-Cycle Outage

Accomplishments

- January 17, 2005 - February 9, 2005
- Focus on **SAFETY**
  - No Lost Time Accidents
  - No OSHA recordable accidents
  - Shutdown Safety maintained
  - Effective RCS Cleanup
  - Good radiological performance
  - Improved plant materiel condition
  - Set positive tone for the year

Employees FOCUSED on SAFETY

Steam Generator Inspection - Mid-Cycle Outage

Accomplishments

- Project List
  - Once-Through Steam Generator Eddy Current Testing
  - Train 2 Station Battery Replacement
  - Reactor Head and Under Vessel Inspections
  - Control Rod Drive Mechanism Flange Inspections
  - Boric Acid Corrosion Control Inspections
  - Pressurizer Nozzle Inspections
  - Reactor Coolant Pump Inspections
  - Refueling Canal Liner Repair

Lifting battery cells

Steam Generator Inspection - Mid-Cycle Outage

Accomplishments

Polar Crane Modifications

Turbine Bypass Valves

Training on Steam Generator Mock-up

Steam Generator Inspection

Steam Generator Inspection - Mid-Cycle Outage
Accomplishments

- Operator Burdens Fixed
  - Eight Control Room Deficiencies
  - Three Level 1 Workarounds
  - One Level 2 Workarounds
  - Ten Temporary Modifications removed

Control Room

Steam Generator Inspection - Mid-Cycle Outage

Control Room - Level 1 Workaround

- Control Rod Drive Transfer Pulser
  - Issue
    - Control Rods could not be remotely transferred to their auxiliary power supply
  - As Left Condition
    - CRD remote transfer function restored

Removed CRD Transfer Pulser

Steam Generator Inspection - Mid-Cycle Outage

Control Room - Level 2 Workaround

- Electro-Hydraulic Control -24 VDC Ground
  - –Issue
    - •Intermittent grounds
  - –As Left Condition
    - •Grounds cleared

Ground configuration

Steam Generator Inspection - Mid-Cycle Outage

Control Room - Deficiencies

- Rod 2-3 Actual Position Indicator
  - –Issue
    - •Position Indication erratic
  - –As Left Condition
    - •Relays replaced and position indication restored

Control Rod position indicator

Replaced Relay

Steam Generator Inspection - Mid-Cycle Outage

Control Room - Deficiencies

- Main Steam 101 Valve Indicator
  - –Issue
    - •Open indicating light failed to illuminate
  - –As Left Condition
    - •Limit switch adjusted and tested satisfactorily

MS101 Control Room indicator

Limit switch ZS101D

Steam Generator Inspection - Mid-Cycle Outage

Control Room - Deficiencies

- Control Switch HIS197B (Valve switch) malfunctioning
  - –Issue
    - •Control switch loose
  - –As Left Condition
    - •Control switch replaced
    - •Tested satisfactorily

Replaced indicator HIS197B

Steam Generator Inspection - Mid-Cycle Outage

Control Room - Deficiencies

- Flow Indicating Controllers ICS32A & B Indicator
  - –Issue
    - •Indicator meter offset
  - –As Left Condition
    - •Indicators calibrated and returned to service

FIC ICS32A

FIC ICS32B

Steam Generator Inspection - Mid-Cycle Outage

Control Room - Deficiencies

- Reactor Coolant Pump 2-1 Seal Standpipe
  - –Issue
    - •Seal standpipe alarm malfunction
  - –As Left Condition
    - •Relay replaced and alarm function restored

RCP Seal Standpipe

Steam Generator Inspection - Mid-Cycle Outage

Control Room - Deficiencies

- Cooling Tower Valve 861 Indicating Light
  - –Issue
    - •Indicating light failed to illuminate
  - –As Left Condition
    - •Indicating light repaired

Control Room indication for CT861

Steam Generator Inspection - Mid-Cycle Outage

ZONE 2 - Level 1 Workaround

- Turbine Bypass Valves SP13A2 & SP13A3
  - –Issue
    - •Valves sticking
  - –As Left Condition
    - •Actuators modified and valves response satisfactory

Unmodified valve

Valve after Engineering Change Package

Steam Generator Inspection - Mid-Cycle Outage

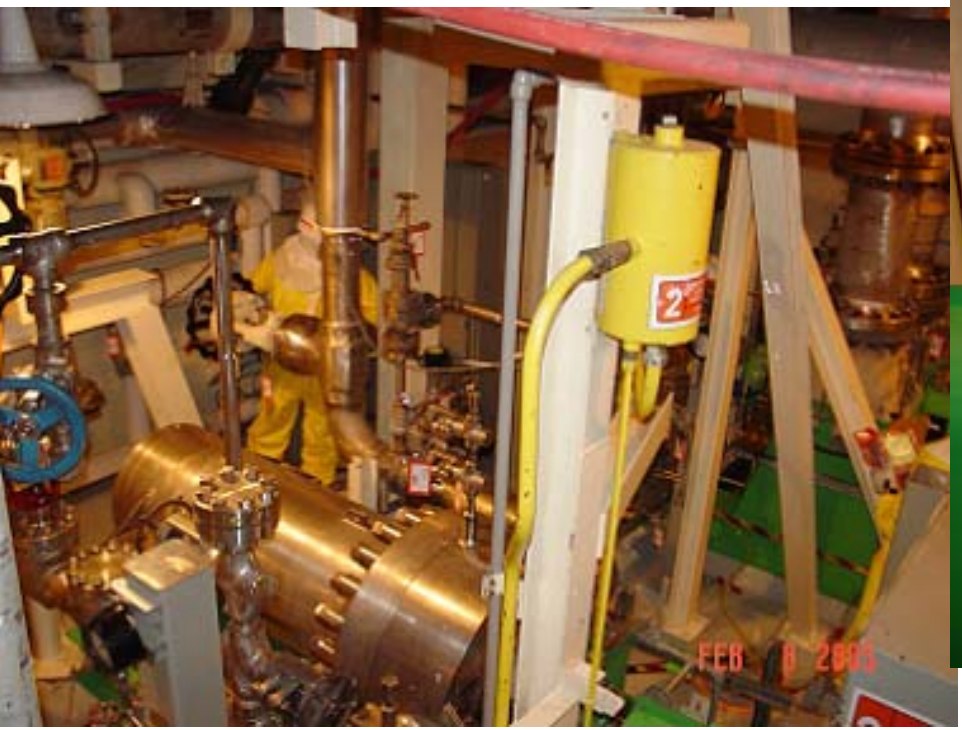
Emergent Issues

- Cooling Tower Icing

Steam Generator Inspection - Mid-Cycle Outage

Emergent Issues

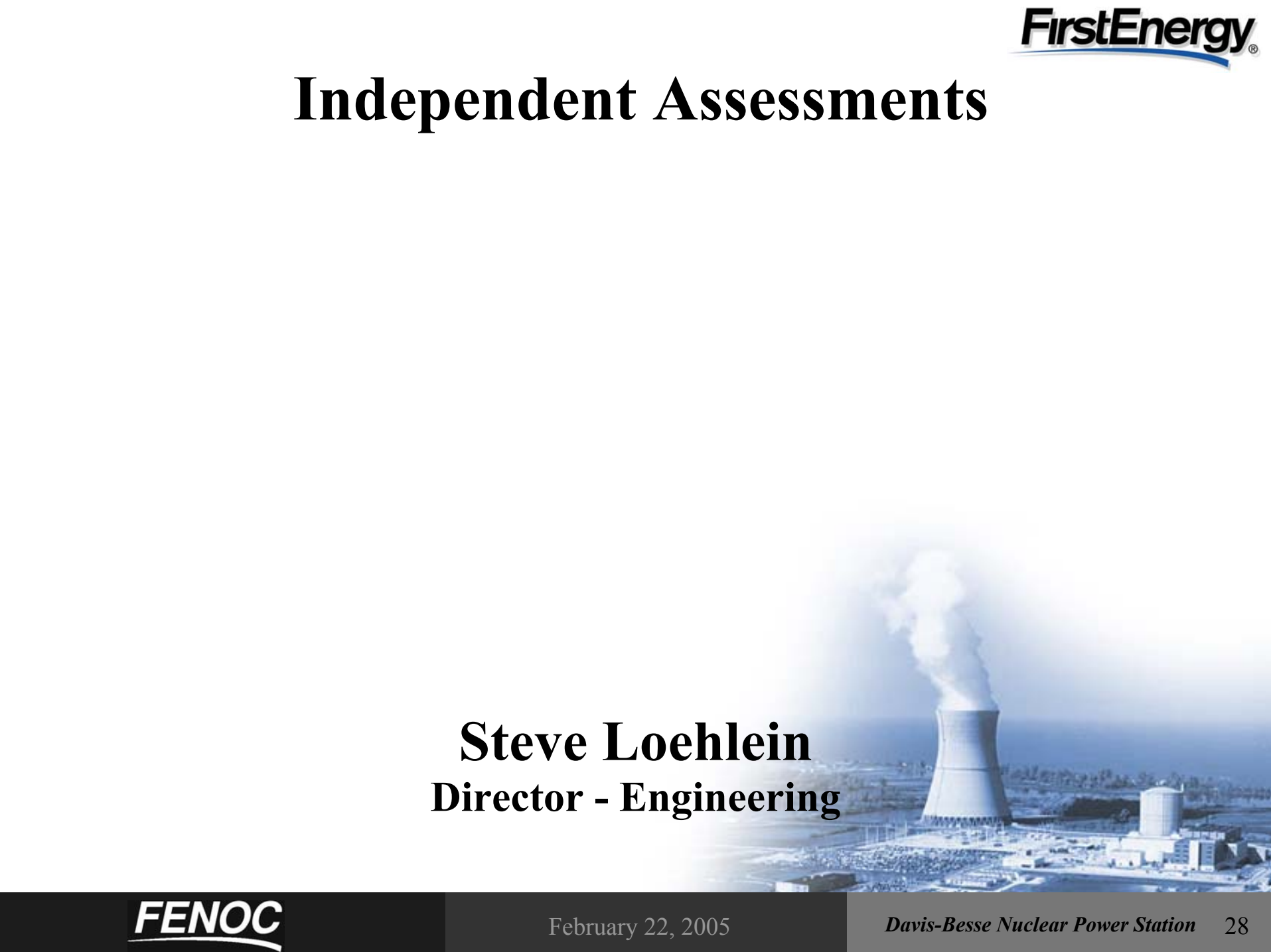
- Decay Heat Pump #2 Mechanical Seal



Steam Generator Inspection - Mid-Cycle Outage
Conclusion

- Davis-Besse Steam Generator Inspection Outage was well planned, well-coordinated, and safely executed
- Plant equipment and systems support continued safe operation

Independent Assessments



Steve Loehlein
Director - Engineering

Independent Assessments
Confirmatory Order Action Plan

- 2004 Schedule
  - Operations Performance (August)
  - Corrective Action Program Implementation (September)
  - Engineering Program Effectiveness (October)
  - Organizational Safety Culture, including SCWE (November)
- 2005 Schedule (tentative)
  - Operations Performance (June)
  - Corrective Action Program Implementation (July)
  - Organizational Safety Culture, including SCWE (November)
  - Engineering Program Effectiveness (December)

Independent Assessments
Engineering Programs

- Dates: October 10 - 22, 2004
- Assessment Team consisted of three consultants and three senior nuclear industry peers
- Scope included six key areas:
  - Modifications
  - Calculations
  - System Engineering
  - Use of Corrective Action Program
  - Management topics
  - Self-Assessments

Independent Assessments

Engineering Programs

- Assessment Team found engineering program to be generally effective
- Team's findings consisted of:
  - 3 Strengths
  - 3 Areas For Improvement
  - 3 Positive Noteworthy Items
  - 13 Negative Noteworthy Items

Independent Assessments
Engineering Programs

- Areas For Improvement included
  - Closure of some modifications
  - Management focus on and rate of progress of the Calculation Improvement Program
  - Self-Assessment schedule and consistency in performance
- Noteworthy Items
  - Selection and prioritization of modifications
  - System Description content
  - Focus of Margin Management initiative
  - System Health Rating
  - System Health Improvement plans elements

Independent Assessments
Engineering Programs

- Noteworthy Items (continued)
  - Access to calculations by system engineers
  - Level of fleet counterpart interactions
  - Acceptance of corrective actions
  - Parallel processes interfaces
  - Engineering management tools and techniques for planning, scheduling, assigning work
  - Backlog reduction
  - Human Resource development
  - Engineering Rigor and Attention to Detail

Independent Assessments
Engineering Programs

- Strengths included
  - Rapid Response Team
  - Internalization of Engineering Principles and Expectations
  - Engineering Assessment Board effect on product quality

- Positive Noteworthy Items
  - Implementation and use of the Calculation Utility
  - Effective use of the Design Interface Evaluation (DIE)
  - System Engineering Support of the Plant

Independent Assessments

Engineering Programs

- Conclusions
  - Engineering Programs were found to be generally effective at Davis-Besse
  - Measurable improvement over past performance is evident
  - Our goal remains to be continuously improving

Independent Assessments
Organizational Safety Culture, including SCWE

Mark Bezilla
Vice President

Independent Assessments
Organizational Safety Culture, including SCWE

- Dates: Conducted during November/December 2004
- Team Members:
  - Dr. Sonja B. Haber, Human Performance Analysis, Team Leader
  - Dr. Deborah A. Shurberg, Independent Consultant (Human Performance Analysis)
  - Rear Admiral (Ret.) Whitney Hansen, Independent Consultant (Dolphin Enterprises)
  - Aldo Capristo, Fleet Employee Concerns Program Manager, Nuclear Management Co.
- Assessment Team found that the Safety Culture and Safety Conscious Work Environment at Davis-Besse had not significantly changed since the last independent assessment conducted in February 2003

Independent Assessments
Organizational Safety Culture, including SCWE

- Safety Culture behavior and attitudes are not something that are changed in the short term; and initiatives by management must be continually assessed to ensure long term changes

Independent Assessments
Organizational Safety Culture, including SCWE

- Areas For Improvement:
  - Although safety is a recognized value in the organization, it is inconsistently internalized across all levels of personnel
  - Accountability and ownership for safety are not yet universally accepted at all levels within the organization
  - Safety is not yet consistently integrated into all activities in the organization
  - An integrated and cohesive organizational safety leadership process is not clearly evident
  - A learning-driven organization is still not fully developed
  - The process for establishing a strong and effective and sustainable SCWE continues to need management attention

Independent Assessments
Organizational Safety Culture, including SCWE

- Cross-cutting issues
  - –FENOC and Davis-Besse Senior Management need to develop a long-term strategic vision and plan for a safety culture and safety conscious work environment
  - –A focus on trust needs management attention at all levels in the FENOC and Davis-Besse organizations
  - –Challenges in communication in the Davis-Besse organization with respect to clear and consistent expectations, standards, and values, continue to require management actions
  - –A management focus should be placed on safety being internalized by all employees as a way of doing business

Independent Assessments
Organizational Safety Culture, including SCWE

- Cycle 14 Operational Improvement Plan
- Continuous Safety Culture Improvement Initiative
- Periodic monitoring of Safety Culture and Safety Conscious Work Environment

Independent Assessments
Organizational Safety Culture, including SCWE

- Actions/Action Plan
  - Immediate Actions
    - Davis-Besse commissioned an independent team to facilitate an internal assessment of the results obtained from the annual internal SCWE survey conducted in October 2004
    - The COIA results were presented by the Independent Assessment Team Lead to management and representatives of the workforce
    - The COIA results were again presented by the Independent Assessment Team Lead to site personnel at an All-Hands session

Independent Assessments
Organizational Safety Culture, including SCWE

- Actions/Action Plan
  - Short Term Actions
    - The management team adopted the following areas of focus to demonstrate a clear overriding priority for Nuclear, Industrial, Radiological, and Environmental Safety for the 2005 Steam Generator Inspection Mid-Cycle Outage
      - Safety vs. Schedule Focus
      - Overall Communication Quality
      - Openness of Communication of Emergent Issues
      - Openness for Employees Ideas for Solutions to Emergent Issues
      - Resolution and Disposition of Emergent Issues
      - Engagement of the Workforce

Independent Assessments
Organizational Safety Culture, including SCWE

- Actions/Action Plan
  - Short Term Actions (continued)
    - A follow-up employee survey will be performed to see how actions and behaviors were perceived by the organization
    - FENOC will review the organizational hierarchy of the Employee Concerns Program
    - Develop and implement a communication campaign to re-familiarize employee with the FENOC Employee Concerns Program and the Safety Conscious Work Environment Review Team functions

Independent Assessments
Organizational Safety Culture, including SCWE

- Actions/Action Plan
  - Long Term Actions
    - Davis-Besse will engage the workforce through the Teamwork, Ownership, Pride (TOP) Team supplemented by other employees from the organization, to work as a multidiscipline/cross-functional team for the purpose of developing and communicating alignment and communication tools to facilitate the communication and continued learning of FENOC/Davis-Besse visions, values, standards and expectations, priorities, including short and long-tem goals for the organization

Independent Assessments
Organizational Safety Culture, including SCWE

- Actions/Action Plan
  - Long Term Actions (continued)
    - Perform a modified mid-period SCWE Survey following the organizational alignment sessions to evaluate the initial effectiveness of this initiative
    - Actions will be developed and implemented to devote more time in the work-week for the manager/supervisor and manager/employee interactions for listening to and addressing issues and concerns

Independent Assessments
Organizational Safety Culture, including SCWE

- Actions/Action Plan
  - Long Term Actions
    - FENOC and Davis-Besse will assess the following Safety Culture and SCWE monitoring and assessment tools to identify opportunities to enhance their effectiveness
      - FENOC Safety Culture Monitoring and Assessment Business Practices
      - The Quarterly Safety Conscious Work Environment Performance Indicators
      - The Annual SCWE Survey questions
      - The Davis-Besse Weekly 3-Question survey questionnaire

Independent Assessments
Organizational Safety Culture, including SCWE

- Conclusions
  - Implementation of these Actions/Actions Plan will further enhance and drive long term improvement in the Safety Culture and Safety Conscious Work Environment at Davis-Besse

Oversight Perspective

Ray Hruby

Manager – Nuclear Oversight - DB

Oversight Perspective
4th Quarter Assessment Report

- Audited 14 Primary Elements
  - –3 rated Effective
  - –11 rated Satisfactory

- Reconciled 5 Program Areas
  - –2 rated Satisfactory
  - –3 rated Marginally Effective

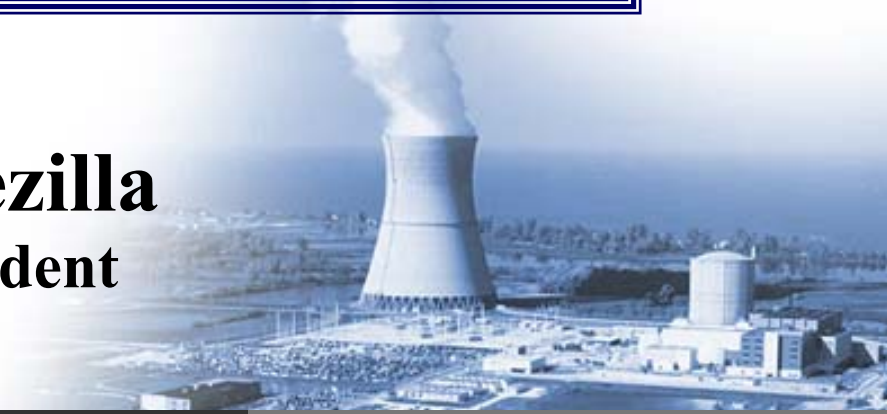
Oversight Perspective
Insights and Future Focus Areas

- Training
- Procedure Content and Adherence
- Organizational Performance
- Future Focus Areas
  - Operations Performance
  - FENOC Reorganization Implementation
  - Training

Closing Comments

FENOC Vision:

People with a strong safety focus delivering top fleet operating performance



Mark Bezilla
Vice President

Actions for Continuous Improvement

- Integrated Restart Report dated November 23, 2003 & Supplement to report dated February 6, 2004
  - Appendix A Commitments 38
  - Closed to date 31
- Cycle 14 Operational Improvement Plan
  - Appendix D Commitments 94
  - Closed to date 71