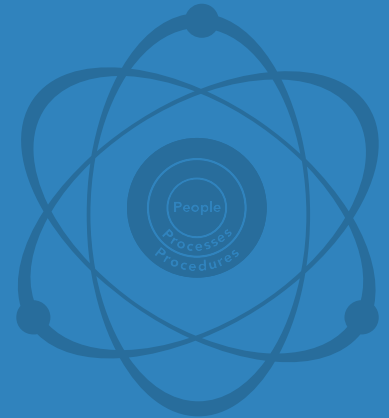
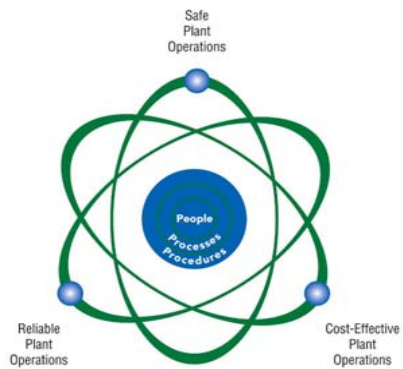


FENOC Fleet Overview

NRC Senior Management Briefing

June 21, 2011





FENOC Vision

People with a strong safety focus
delivering top fleet operating performance.

Agenda/Opening Remarks

Jim Lash



Agenda

- **Opening Remarks**

Jim Lash – President FE Generation and Chief Nuclear Officer

- **FENOC Overview**

Pete Sena – President FENOC and Chief Operating Officer

Eric Larson – Vice President, Nuclear Support

- **Fleet Strategic Initiatives**

Dan Pace – Senior Vice President, Fleet Engineering

- **Site Performance Review**

Beaver Valley: *Paul Harden – Vice President*

Davis-Besse: *Barry Allen – Vice President*

Perry: *Mark Bezilla – Vice President*

- **Fleet Oversight and Assessment**

Karen Fili – Vice President, Oversight

- **Closing Remarks**

Jim Lash

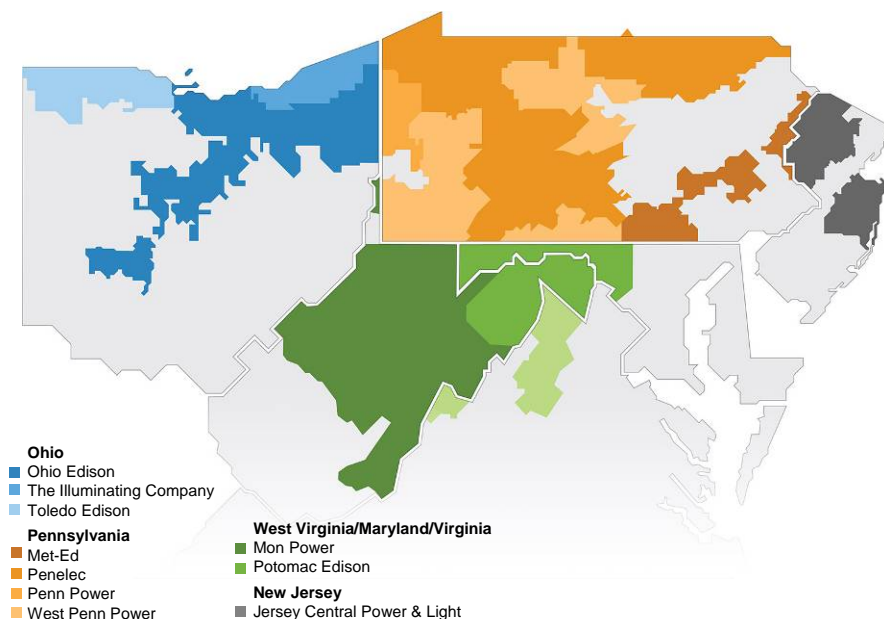
Desired Outcome

Demonstrate that FENOC is:

- **Committed to the safety and protection of the public, employees, and the environment**
- **Committed to safe, secure, reliable, cost-effective operations**
- **Focused on fleet operations and is having positive effects on site performance**
- **Addressing challenges and adjusting actions where needed**
- **On track for top fleet industry operating performance**

FirstEnergy Facts at a Glance

- Headquartered in Akron, Ohio
- Largest investor-owned electric system in the U.S. based on six million customers served
- Approximately 24,000 megawatts of generating capacity
- 10 electric utility operating companies in seven states
- Ranked 134 among Fortune 200 companies
- More than 17,000 employees



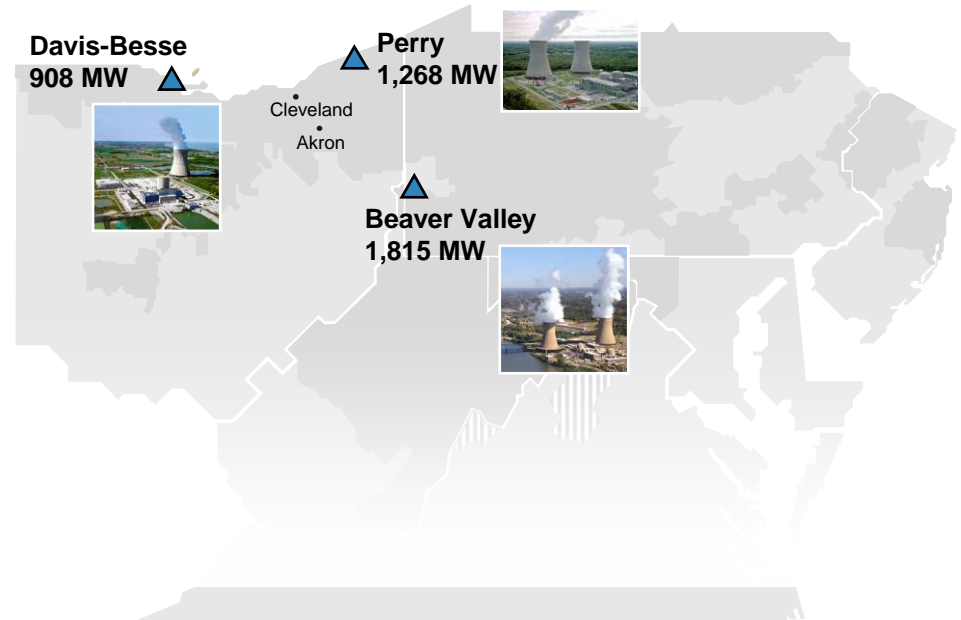
Post-Merger Insights

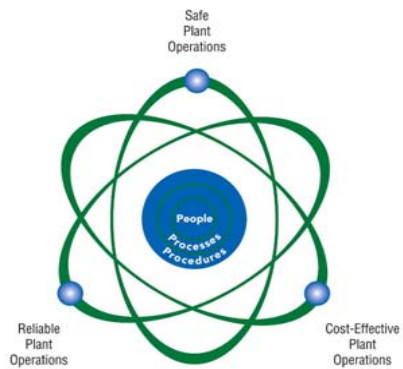
An Integrated Fossil and Nuclear Generation Fleet

- **Create one common vision and approach to safety, human performance and business practices**
- **Leverage operational and maintenance expertise**
- **Implement “best practices” across the generation fleet**
- **Apply nuclear approach to certain practices/events (e.g., outage management)**
- **Share resources and knowledge across the generation fleet**

About FirstEnergy Nuclear Operating Company

- Formed to continue the safe and reliable operations of FirstEnergy's (FE) nuclear plants
- Improved operational performance and efficiency with standard organizational structure and process beginning in 2004
- Four generating units produce about 4,000 megawatts of electricity or about 17 percent of FE's output





FENOC Vision

People with a strong safety focus
delivering top fleet operating performance.

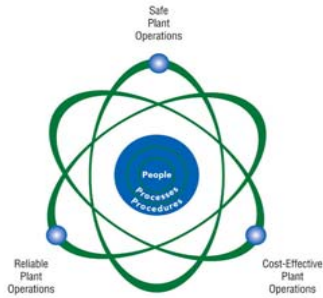
FENOC Overview

Pete Sena

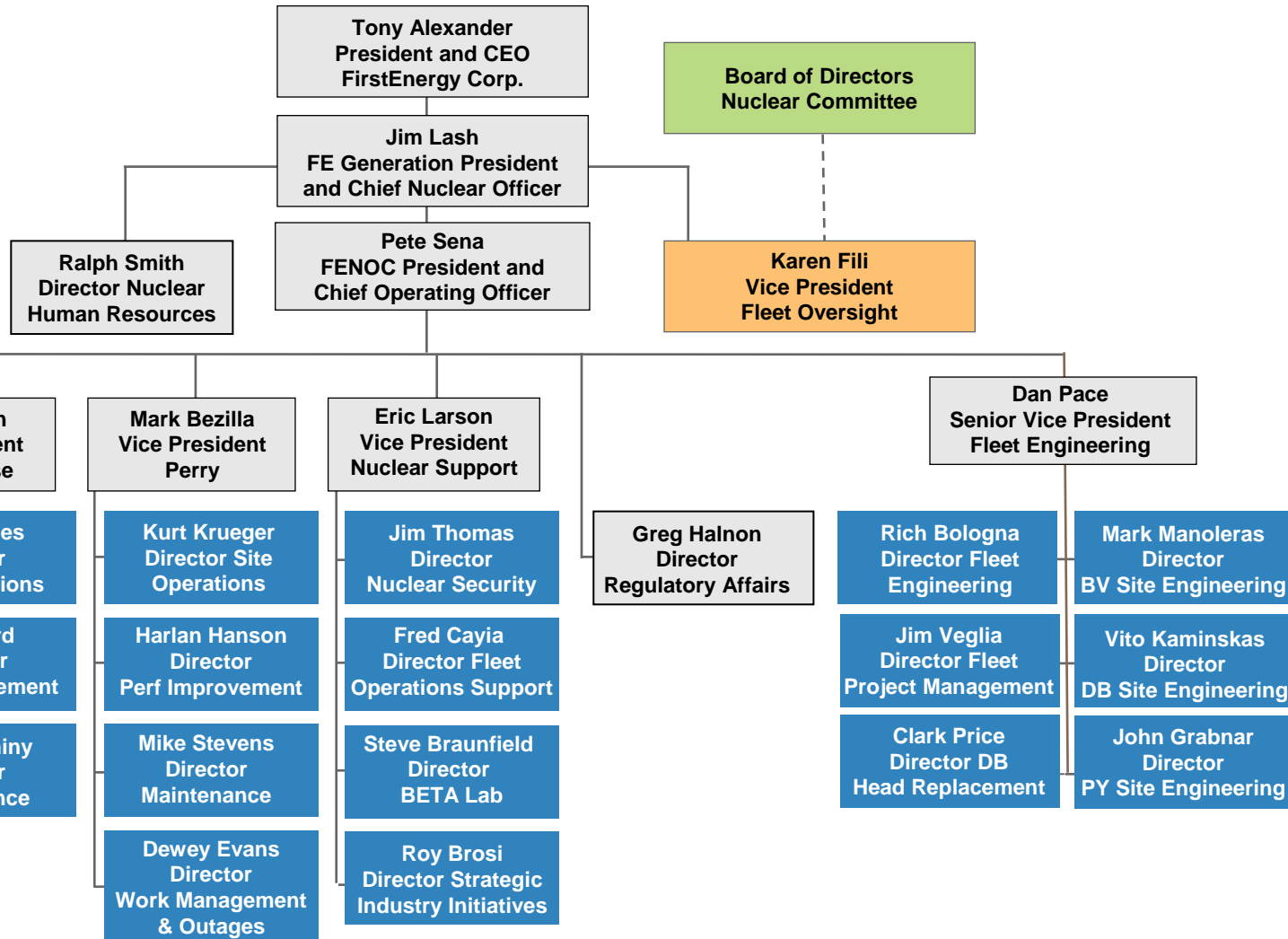
Eric Larson



FENOC Organization



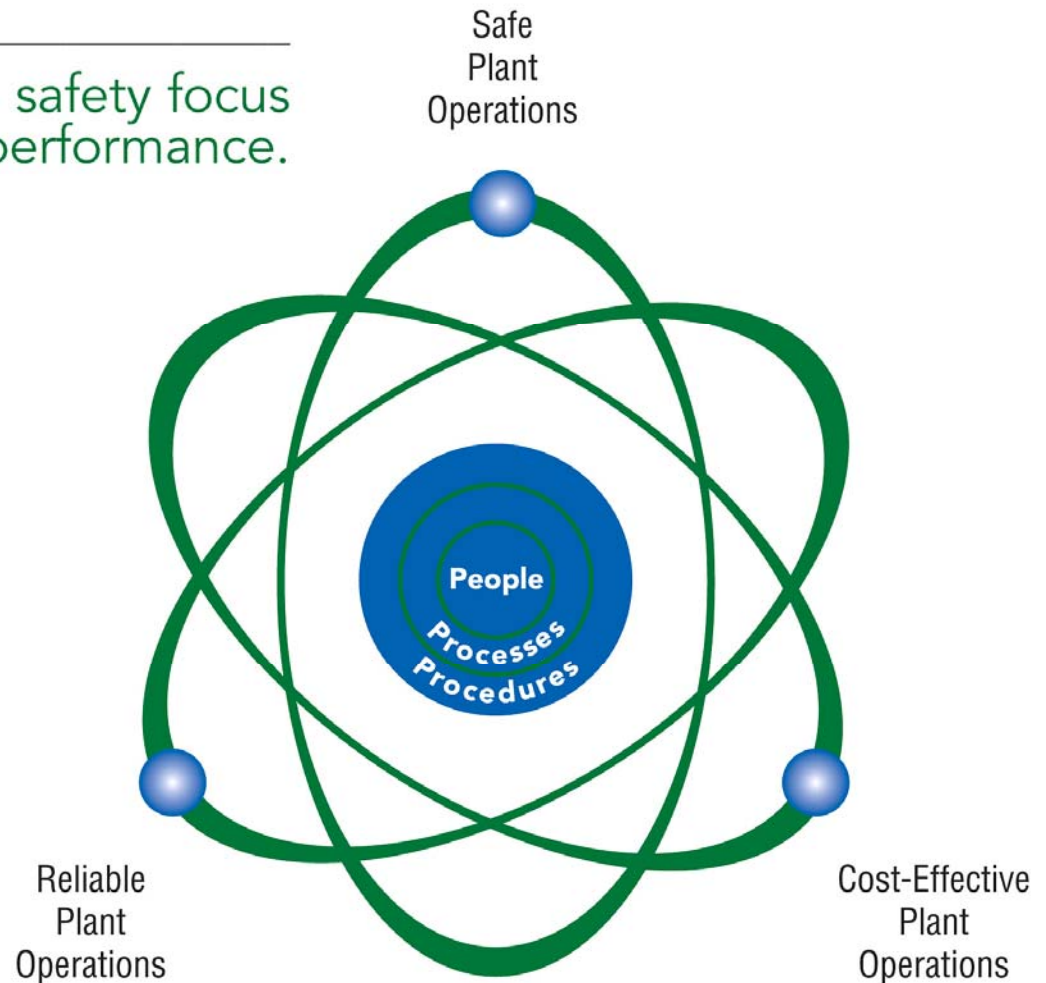
FENOC Vision
People with a strong safety focus
 delivering top fleet operating performance.



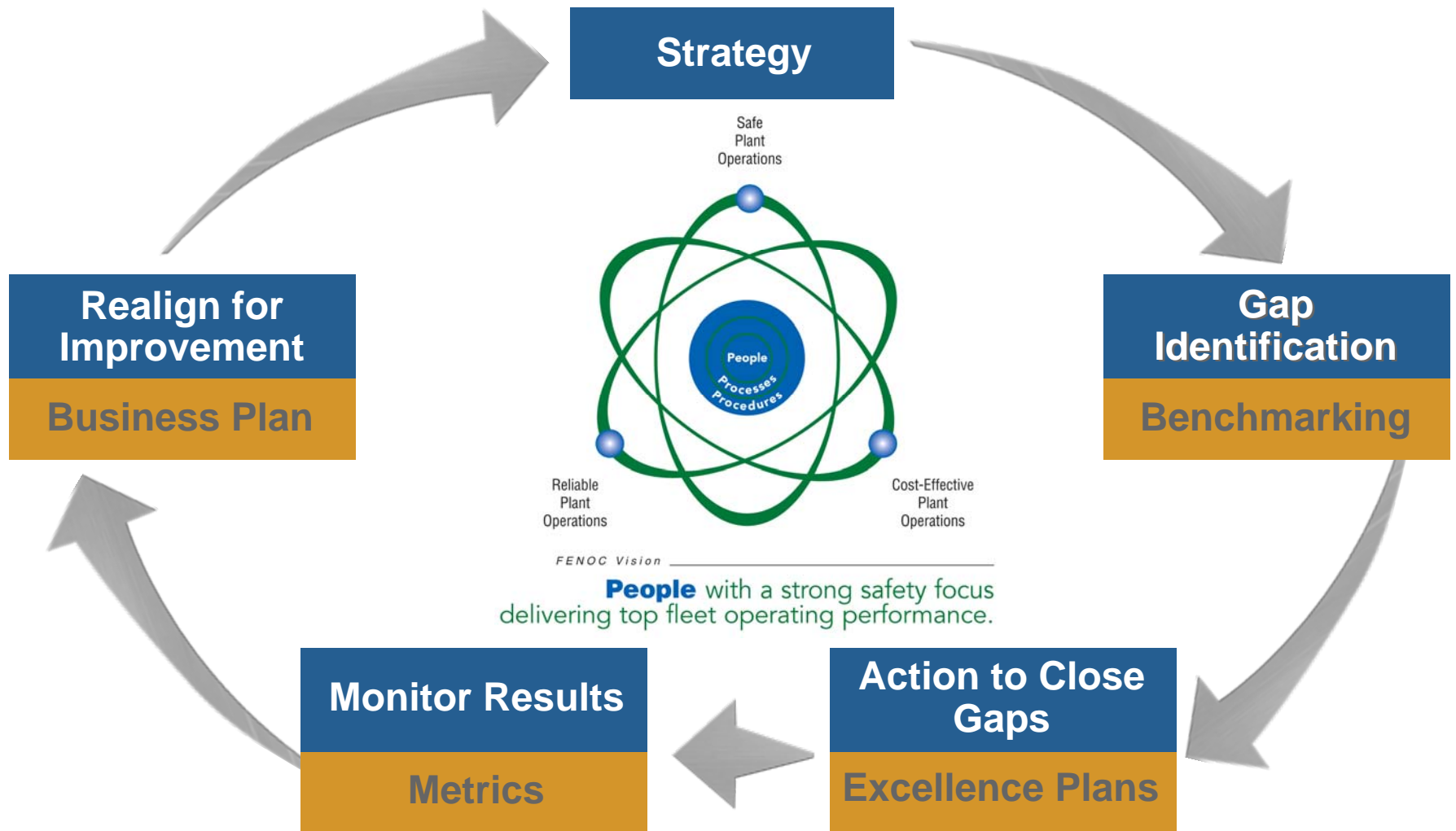
FENOC Vision and Strategies

FENOC Vision _____

People with a strong safety focus
delivering top fleet operating performance.



Continuous Improvement Process



Fleet Results – 2011 progress

- **Personal safety**
 - Fleet OSHA Rate = 0.23
- **Maintaining focus on safe and reliable day-to-day operations**
 - 83.3% Fleet Capability Factor
 - 0.01% Fleet Forced Loss Rate (rolling average)
- **Fleet benchmarks**
 - Strengths
 - Fuel reliability
 - Safety system availability
 - Unplanned automatic scrams
 - Chemistry performance
 - Opportunities
 - Outage duration
 - Collective radiation exposure
- **Earned NEI Top Industry Practice award**
 - Fire-fighting simulation tool
- **Earned two EPRI Technology Transfer awards**
 - Optimized weld overlay for Alloy 600 mitigation (Davis-Besse)
 - Mid-cycle detection and evaluation of dissimilar metal welds (Perry)

Fleet Progress

NRC Reactor Oversight Program results

■ Action Matrix columns

Quarter	1Q 04	2Q 04	3Q 04	4Q 04	1Q 05	2Q 05	3Q 05	4Q 05	1Q 06	2Q 06	3Q 06	4Q 06	1Q 07	2Q 07	3Q 07	4Q 07	1Q 08	2Q 08	3Q 08	4Q 08	1Q 09	2Q 09	3Q 09	4Q 09	1Q 10	2Q 10	3Q 10	4Q 10	1Q 11
BV1	2	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
BV2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
DB	5	5	5	5	5	5	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1
PY	3	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1

Industry assessment results

- Two FENOC sites have achieved recognition of industry excellence

2011 Business Objectives

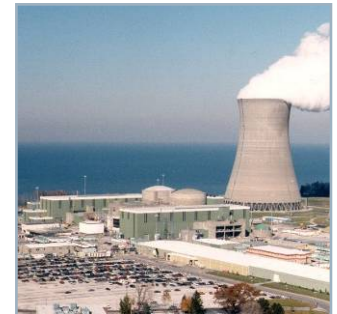
Fleet Focus Areas Drive Improved Performance

Improve:

- Outage planning and execution
- Radiological performance
- Equipment reliability

Excellence Plans

- Closing the gaps through FENOC Excellence Plans will continue safe and reliable operations and lead to top industry performance

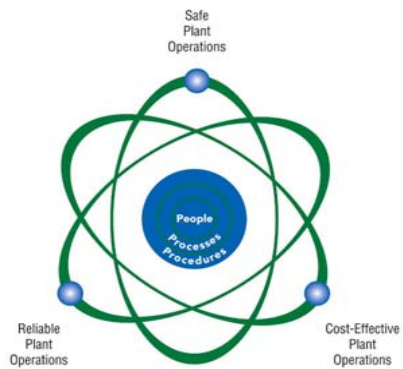


Workforce Replenishment Initiatives

- **Utilization of succession plans**
- **College Partnerships**
 - University of Pittsburgh
 - Pennsylvania State University
 - Ohio State University
- **Operations personnel pipeline**
- **Targeted recruiting of experienced personnel**
- **Nuclear Power Technology programs**
 - Lakeland Community College (Kirtland, OH)
 - Nuclear Uniform Curriculum Program

Security Update

- **Fully implemented new physical security requirements**
- **Invested \$112 million on security upgrades since 2001**
- **Security staffing at new, increased levels**
- **Four successful NRC Force-on-Force (FOF) evaluations during the last 14 months at the three stations**
- **Providing high confidence that public health and safety are protected**
- **Continue to assess, evaluate, and make necessary improvements**



FENOC Vision

People with a strong safety focus
delivering top fleet operating performance.

Fleet Strategic Initiatives

Dan Pace



Strategic Initiatives

Fleet Approach

- **Davis-Besse reactor head and steam generator replacement**
- **Beaver Valley Unit 2 reactor head and steam generator replacement**
- **Beaver Valley and Perry low pressure turbine rotor replacements**
- **Spent fuel dry storage implementation**
- **Operating license renewals**

Strategic Initiatives

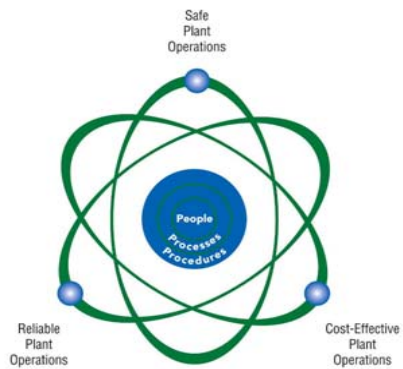
Fleet Approach

- **Probabilistic Risk Assessment upgrades**
- **Plant equipment upgrades**
- **Emergency Preparedness**
- **Engineering programs**

Strategic Initiatives

Fukushima Response

- **FENOC in leadership role**
- **Engineering representation for industry response**
- **Loaned employees to INPO for initial event response**
- **Proactive preparation**
- **Dedicated FENOC Director for company coordination**



FENOC Vision

People with a strong safety focus
delivering top fleet operating performance.

Site Performance: Beaver Valley

Paul Harden



Site Performance Review

Beaver Valley

■ Plant Status

- Personal Safety: 4.0 million hours without lost time incident
- YTD capability factor: Unit 1 = 96.5%, Unit 2 = 75.7%
- YTD forced loss rate: Unit 1 = 0.01%, Unit 2 = 0.04%
- Defect-free fuel performance
- BV2 Cycle 15 Operating Performance Summary
 - Availability Factor – tied record with Cycle 13
 - Capacity Factor – new record
 - Forced Loss Rate – new record

■ Regulatory Update

- Unit 2 Fuel Pool Rerack Amendment
- Component Design Bases Inspection
- NEI 99-01 Revision 5 Emergency Action Level upgrade

■ Refuel Outage Review

Site Performance Review

Beaver Valley

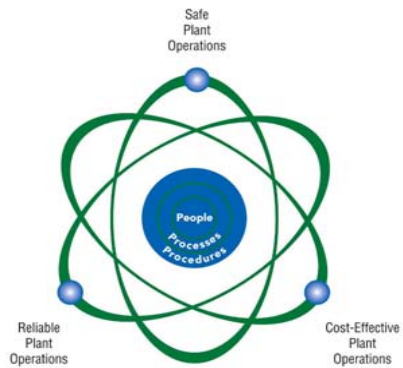
■ **2011 Objectives**

- Safe, secure, reliable, cost-effective operations
- Refueling outage execution and preparation
- Implement plans to increase Unit 2 spent fuel storage capacity
- Emergency preparedness improvements
- Improve material condition/equipment reliability

■ **License Renewal**

- Program implementation

■ **Operator Pipeline**



FENOC Vision

People with a strong safety focus
delivering top fleet operating performance.

Site Performance: Davis-Besse

Barry Allen



Site Performance Review

Davis-Besse

■ Plant Status

- Personal safety: 2.5 million hours without a lost time incident
- YTD capability factor = 95.4%, YTD forced loss rate = 0.00%
- Defect-free fuel performance
- Improved rod control system health
 - January 2011 planned maintenance outage

■ Regulatory Update

- NRC License Renewal
 - Application submitted and under review
 - Atomic Safety and Licensing Board
- Successful Emergency Response Organization Evaluated Exercise

■ Reactor Vessel Head Replacement Outage

- Voluntary accelerated replacement

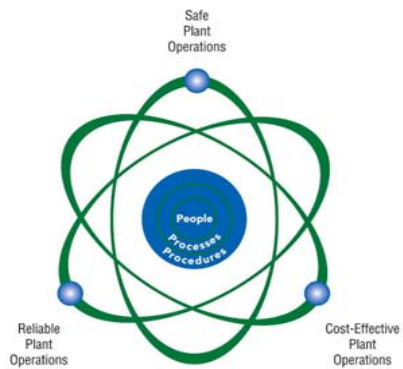
Site Performance Review

Davis-Besse

■ 2011 Objectives

- Safe, secure, reliable, cost-effective operations
- Excellent personal safety behaviors
- Mid-cycle outage preparation and execution
- Evaluated emergency response exercise
- Industry performance evaluation and assistance visit
- Plant life extension/license renewal

■ Operator pipeline



FENOC Vision

People with a strong safety focus delivering top fleet operating performance.

Site Performance: Perry

Mark Bezilla



Site Performance Review

Perry

■ Plant Status

- Personal Safety: 891,000 hours without a lost time incident
- YTD capability factor = 70.4%, YTD forced loss rate = 0.00%
- Defect-free fuel performance

■ Regulatory Update

- Human Performance Substantive Cross-Cutting Issue
- Special Inspection Team
- Successful Emergency Response Organization Evaluated Exercise

■ Refuel Outage Summary

- Opportunities
 - Oversight of refuel vendor performance
 - Crisp execution
- Improvements
 - Safety performance
 - Dose / Source term reduction
 - Equipment reliability improvements
 - FENOC craft performance

Site Performance Review

Perry

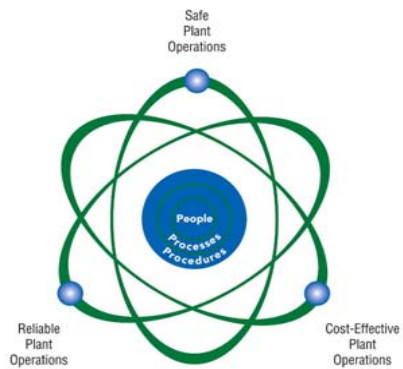
■ **Post Outage Lessons Learned**

- Outage critique
- Common Cause Assessment

■ **2011 Objectives**

- Safe, secure, reliable, cost-effective operations
- Human Performance
- Radiological performance
- Equipment reliability (work management and equipment focus)
 - Major Equipment Reliability Program (MERP) continues

■ **Operator pipeline**



FENOC Vision

People with a strong safety focus delivering top fleet operating performance.

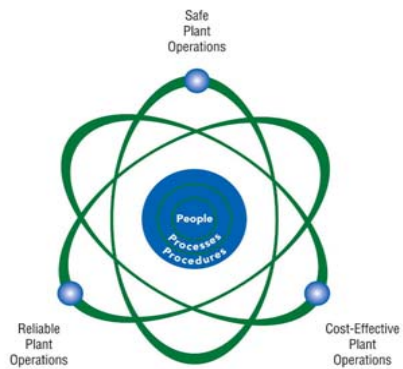
Fleet Oversight

Karen Fili



Fleet Oversight

- **Compliance auditing**
- **Individual site performance assessment**
 - Beaver Valley
 - Davis-Besse
 - Perry
- **Corporate Assessments**
 - Safety Culture/NEI Safety Culture Assessment Process
- **Employee Concerns Program**



FENOC Vision

People with a strong safety focus delivering top fleet operating performance.

Closing Remarks

Jim Lash

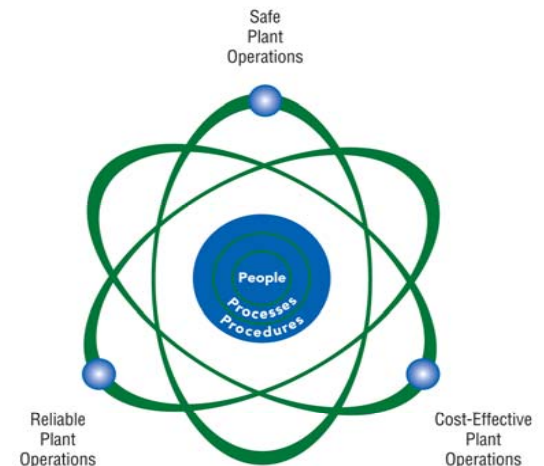


Closing Remarks

Our vision:

People with a strong safety focus delivering top fleet operating performance.

- **Safe Plant Operations**
- **Reliable Plant Operations**
- **Cost-Effective Plant Operations**
- **Effective use of People, Processes and Procedures**



FENOC Vision

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Closing Remarks

FENOC is:

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