

FENOC Vision

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

Senior Management Briefing
January 10, 2006

Agenda

Opening Remarks, Introductions

Gary Leidich – President and CNO

Fleet Wide Initiatives

Danny Pace – Sr. Vice President, Fleet Engineering

Fleet Operations

Fleet Overview – Bill Pearce, Vice President - Perry

Perry – Bill Pearce

*Davis-Besse – Bob Schrauder, Site Director –
Performance Improvement*

Beaver Valley – Jim Lash, Vice President

Fleet Regulatory Update

Greg Halnon – Director, Fleet Regulatory Affairs

Closing Remarks

Gary Leidich

Discussion/Q&A



Desired Outcomes

- ▶ **Discuss fleet-wide strategy and improvement initiatives**
- ▶ **Review 2005 safe and reliable fleet performance**
- ▶ **Report plant operating performance and challenges**
- ▶ **Note current fleet regulatory issues**

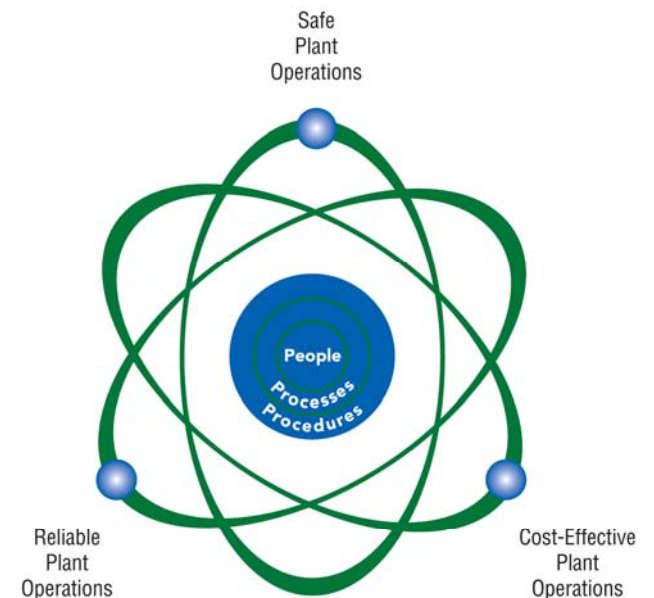


Implementing Nuclear Fleet Strategy

Objective:

Transform FENOC to top industry performance

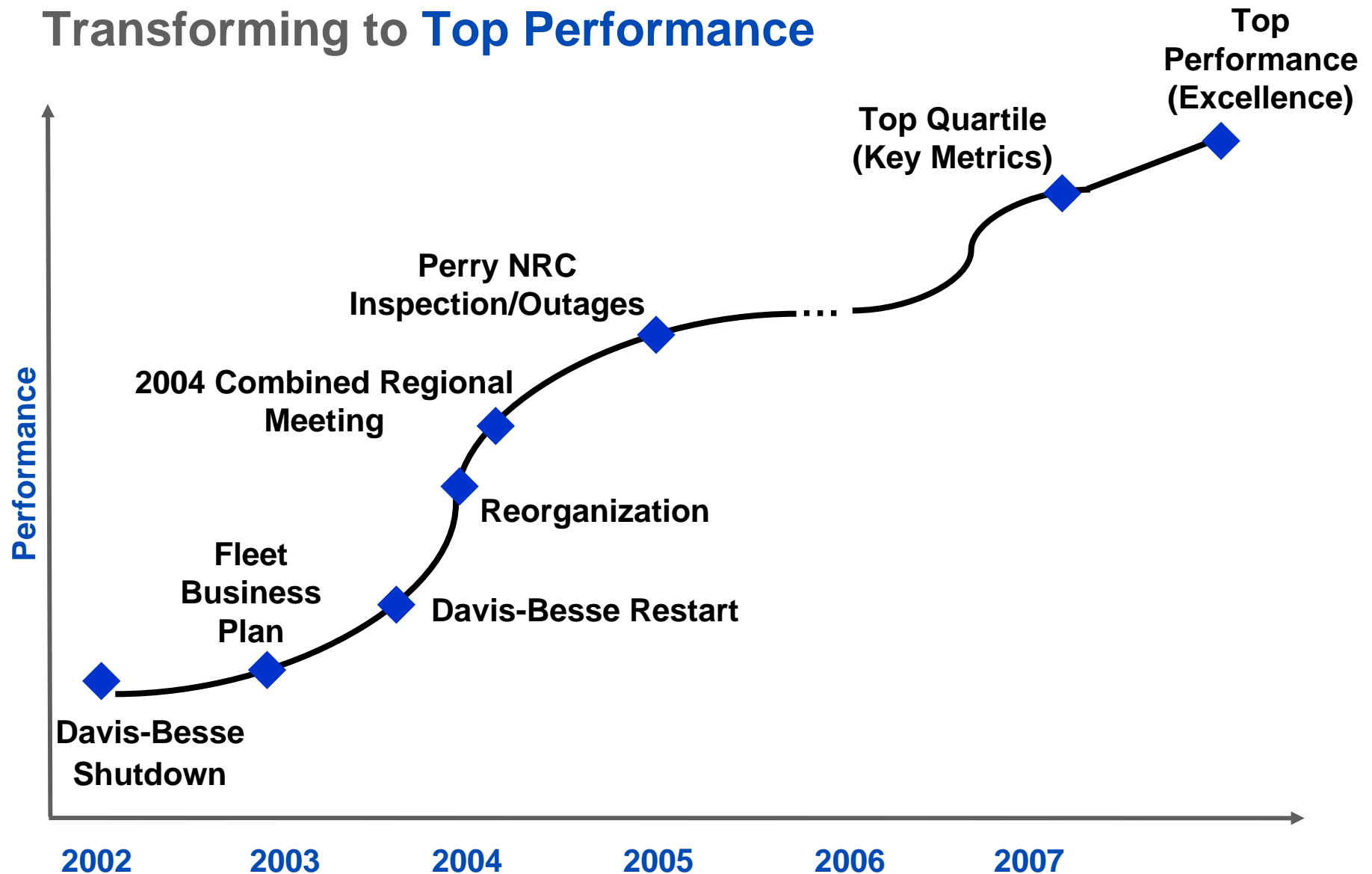
- **Safe Plant Operations**
- **Reliable Plant Operations**
- **Cost-effective Operations**
- **People, Processes and Procedures**



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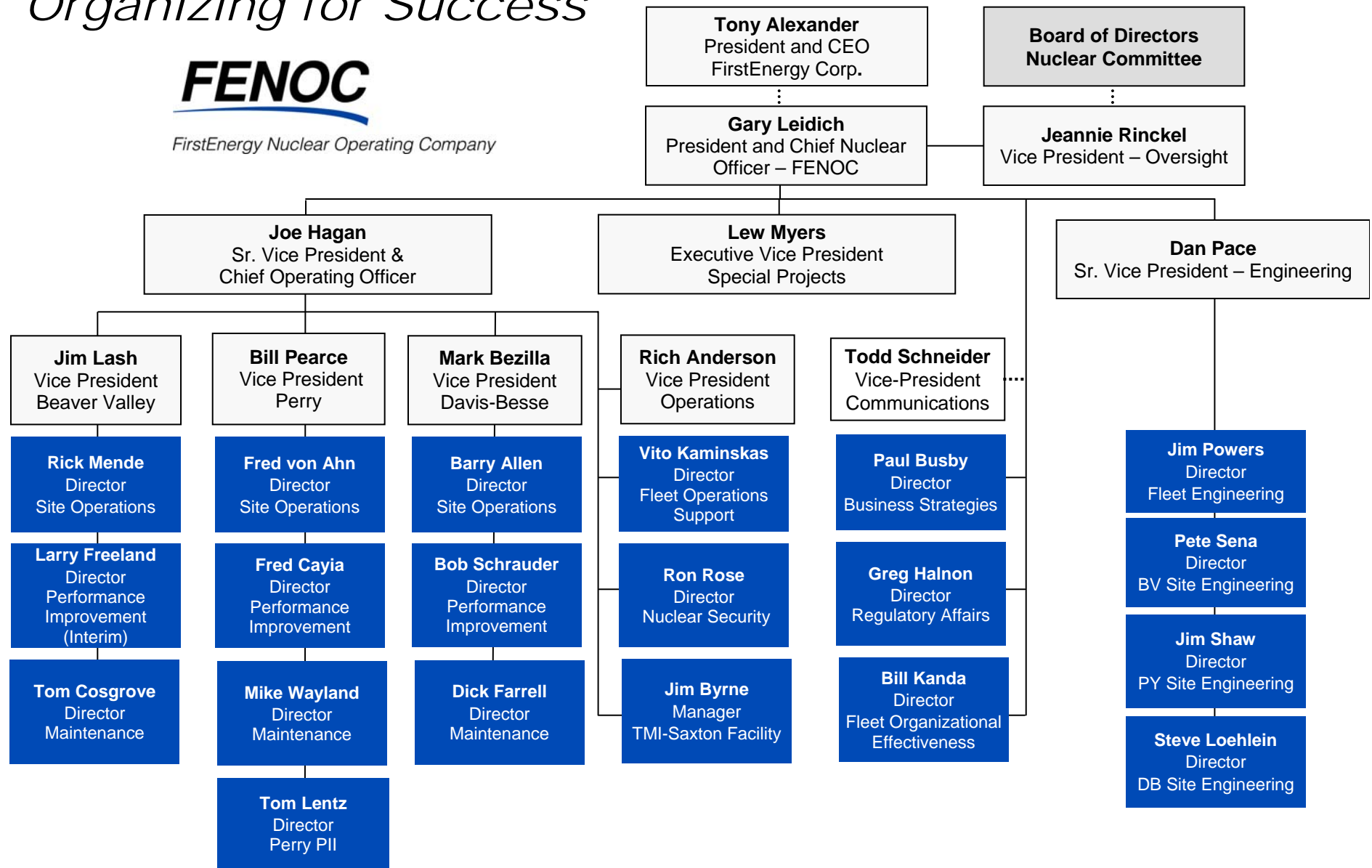
Implementing Nuclear Fleet Strategy – Transforming to **Top Performance**



Implementing Nuclear Fleet Strategy – *Organizing for Success*



FirstEnergy Nuclear Operating Company



Implementing Nuclear Fleet Strategy

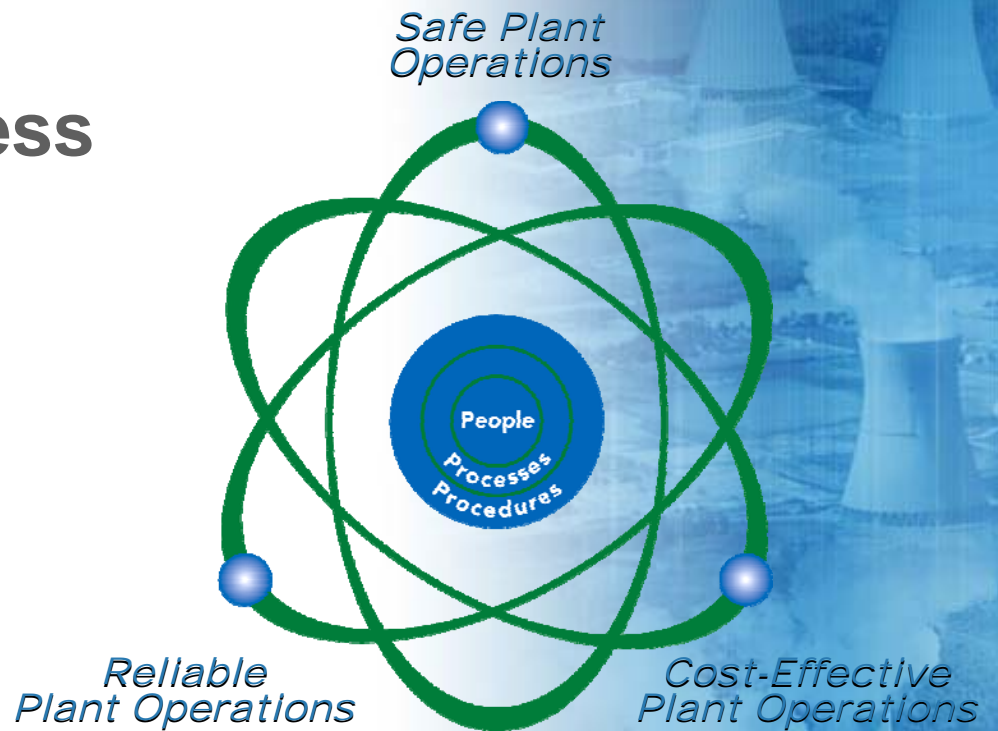
Saxton Nuclear Experimental Corporation Historic Recognition Ceremony

- Operated April 1962 through May 1972
- Served as a training and research facility for operators, engineers and scientists
- Gained ownership through GPU merger
- Completed decommissioning under NRC 10.CRF 50.82
- License terminated November 8, 2005



Positioning for Success

Danny Pace
Senior Vice President –
Engineering

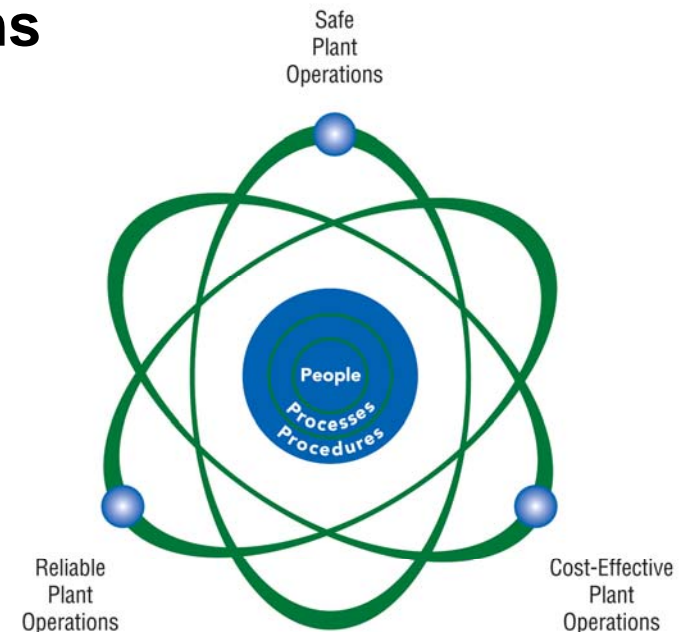


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Positioning for Success

- Business Planning
- FENOC Management Model
- Peer Groups/Transformation Teams
- Asset Management
- People
- Industry – Corporate Review



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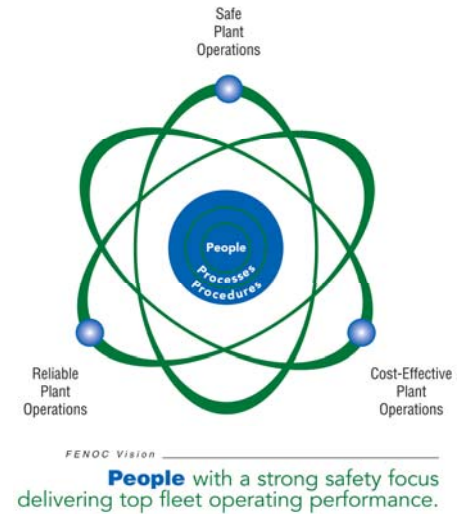
Positioning for Success – Business Planning

Vision

People with a strong safety focus delivering top fleet operating performance

Strategies

- Safe Plant Operations
- Reliable Plant Operations
- Cost Effective Plant Operations
- Through People, Processes and Procedures



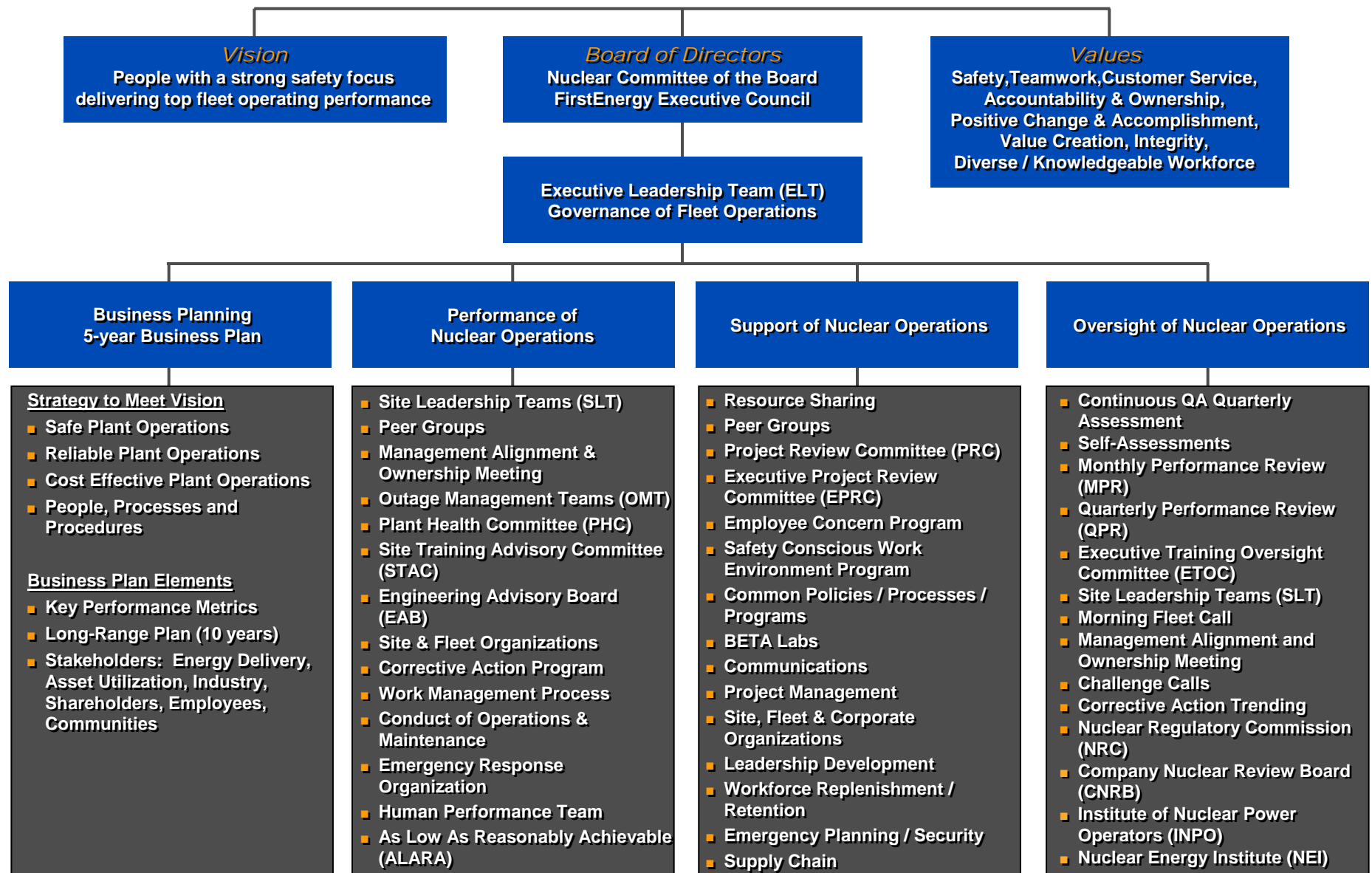
Business Planning Process

Five-year Business Plan focuses the organization on our priorities. Includes Vision, Values, Key Assumptions, Risks, Asset Improvements, Outage Plans, Metrics and Financials — all built around the strategies.

Transformation to Excellence

The philosophy of excellence will drive continuous improvement through the use of our standardized programs, processes and procedures in each of our functional areas. The Site Excellence Plans included in the Business Plan will be used to implement our strategies.

Positioning for Success – Management Model



Positioning for Success

Peer Groups and the Transformation Teams are specific tools to define what and how.

Peer Groups

Goal: To standardize Fleet processes and procedures

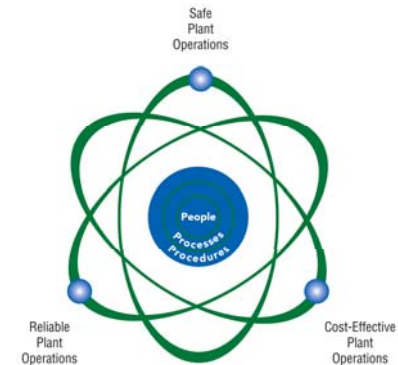
- Focus Areas
 - Drive performance beyond top quartile to excellence
-

Transformation Teams

Goal: To expedite FENOC's transformation to top-quartile performance by providing coaching and stimulating employee engagement

Positioning for Success – Managing our Assets

- Long-range Capital Program
- Maintenance Program
- Power Upgrades



| | | |
|------------------------|----------------------|----------------------|
| Davis-Besse | 11 MW in 2006 | 12 MW in 2007 |
| Beaver Valley 1 | 25 MW in 2007 | 43 MW in 2009 |
| Beaver Valley 2 | 20 MW in 2007 | 45 MW in 2009 |

- License Renewal Submittals

| | | |
|------------------------|-------------|-----------------------------|
| Beaver Valley 1 | 2007 | extends life to 2036 |
| Beaver Valley 2 | 2007 | extends life to 2047 |
| Davis-Besse | 2008 | extends life to 2037 |
| Perry | 2010 | extends life to 2046 |

Positioning for Success –

Beaver Valley Unit 1 Steam Generator and Reactor Vessel Head Replacements

**The new steam
generators and
reactor vessel
head arrived on
site in October**

**Installation is
scheduled for
early 2006,
during the 17th
refueling outage**



Positioning for Success – Investing in our people

- Identified key jobs and functions
- Evaluated demographics
- Developed hiring strategies
 - Operations pipeline
 - Engineering pipeline
 - Local trade school relationships
- Developed 5-Year staffing plan
- Performed succession planning
- Strengthened Leadership Academy



Positioning for Success – Corporate Evaluation

✓ Favorable Industry Corporate Evaluation – 8/29 – 9/02/05

Strengths

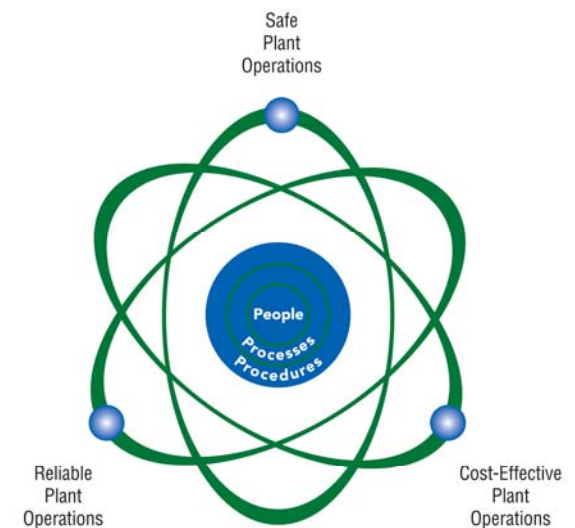
- Strong executive leadership and Nuclear Committee of the Board of Directors engagement
- Progressive measures to replenish workforce in anticipation of coming retirements
- Using BETA Lab for testing, analysis and other services
- Using a variety of Nuclear Communications tools and activities in addressing fleet priorities and challenges

Areas for Improvement

- More intrusive line oversight and standards reinforcement by fleet program managers
- Station performance monitoring tools that provide complete data and a more accurate picture of operations
- Using feedback from the field as “lessons learned”
- More detailed action plans and change management plans to eliminate rework in implementing fleet initiatives

Positioning for Success – Summary

- Focusing on day-to-day safe and reliable operations
- Driving performance through Business Plan Initiatives
- Investing in our people
- Implementing plant improvements to increase safety, reliability and cost-effective operations

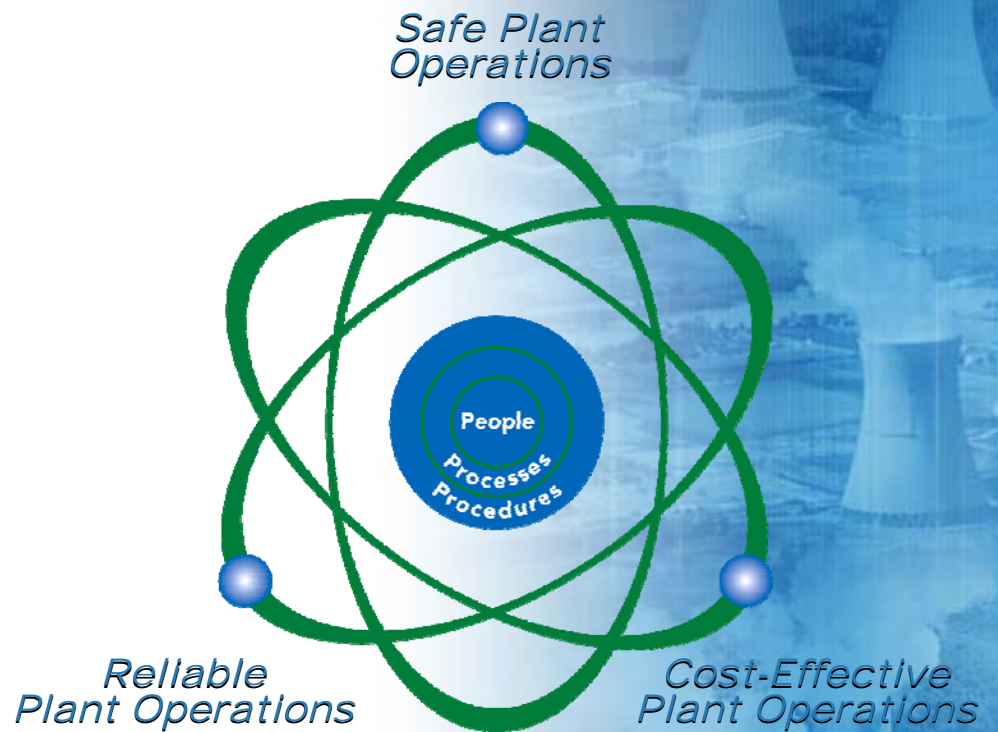


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Improving Fleet Performance

Bill Pearce
Vice President – Perry

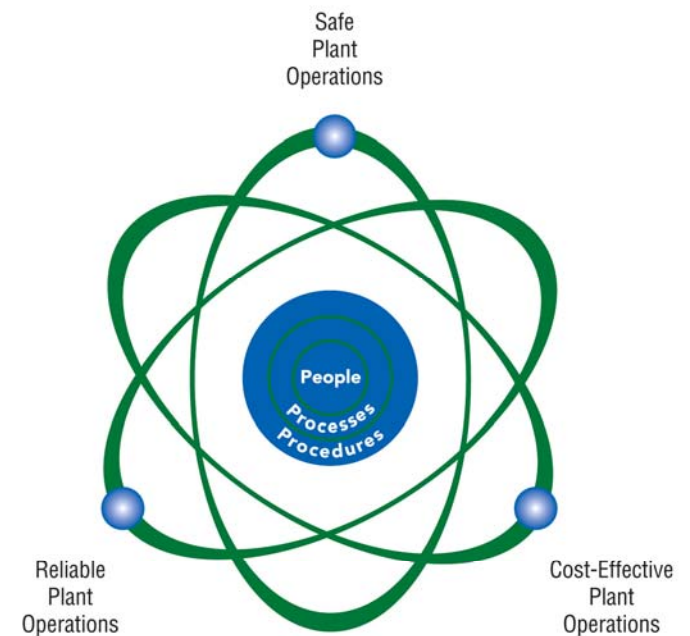


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Improving Fleet Performance

- **2005 Fleet Highlights**
- **Fleet-wide Improvement Initiative**
 - Corrective Action Program
 - Human Performance
- **Maintenance Backlog Reduction**
- **Plant Updates**

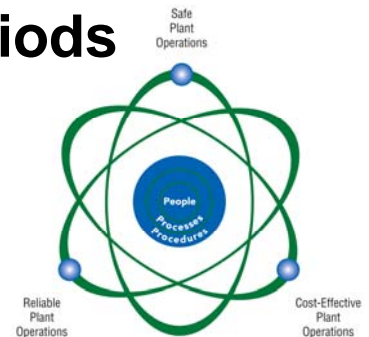


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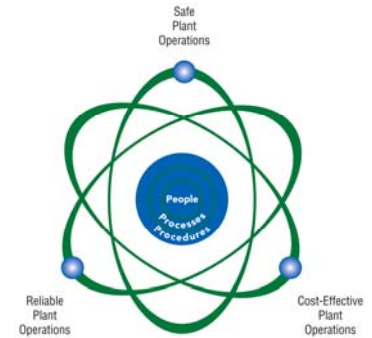
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Improving Fleet Performance – 2005 Highlights

- ✓ **Strengthening processes**
 - Strong focus on Corrective Action Program
 - Increased emphasis on Human Performance
- ✓ **Transitioning to new security environment**
 - Security
 - Emergency Planning
 - Operations
- ✓ **Focus on improvements in Work Management and Materiel Condition**
- ✓ **Reliable performance during peak summer periods (June through September)**
 - 99.9% Capability Factor
 - 100% Availability
 - Generated 207 GWh more than planned



Improving Fleet Performance – Corrective Action Program



■ Corrective Action Program improvement

- Timeliness
- Quality of evaluations and corrective actions
- Backlog

■ Initiatives

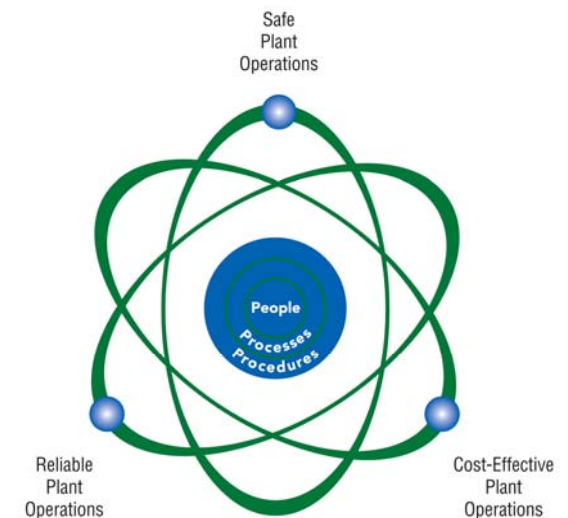
- Corrective Action Program “Summit”

■ Focus Areas

- Leadership behaviors
- CAP coordination with work management
- CAP simple and effective

Improving Fleet Performance – Human Performance

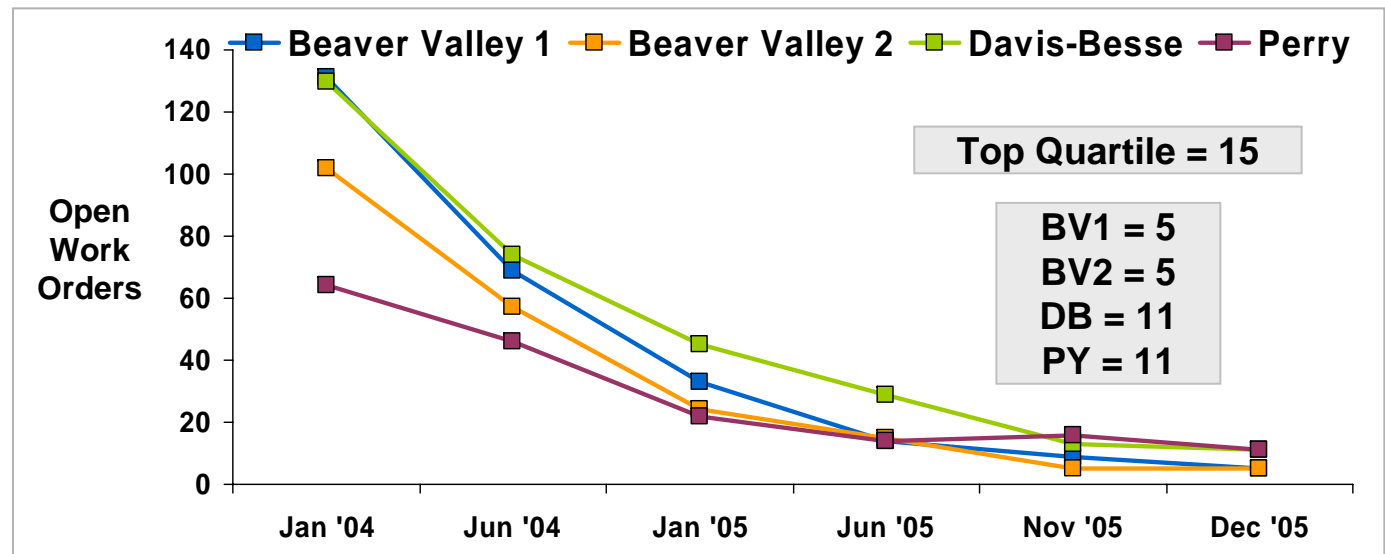
- Human performance policy issued
- Fleet human performance expert
- Improved human performance metrics
- Upgraded observation program
- Human performance focus integrated with training



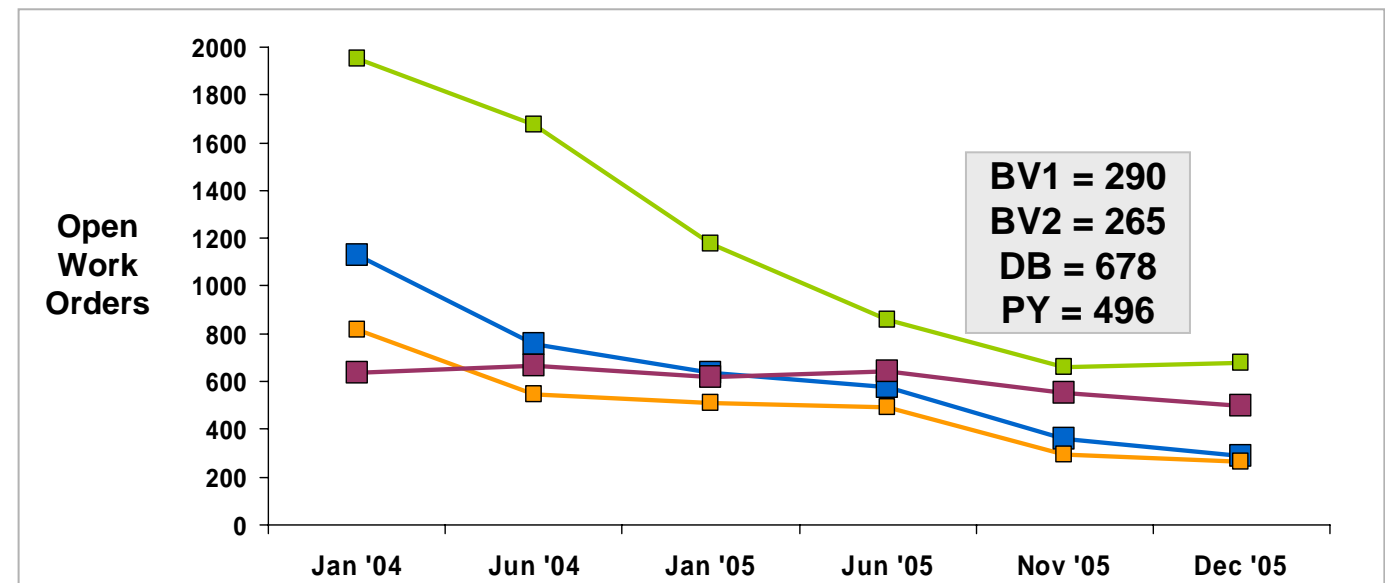
Improving Fleet Performance – Maintenance Backlogs

Reducing Backlogs

Corrective Maintenance



Elective Maintenance



Improving Site Performance – 2005 Review

Perry

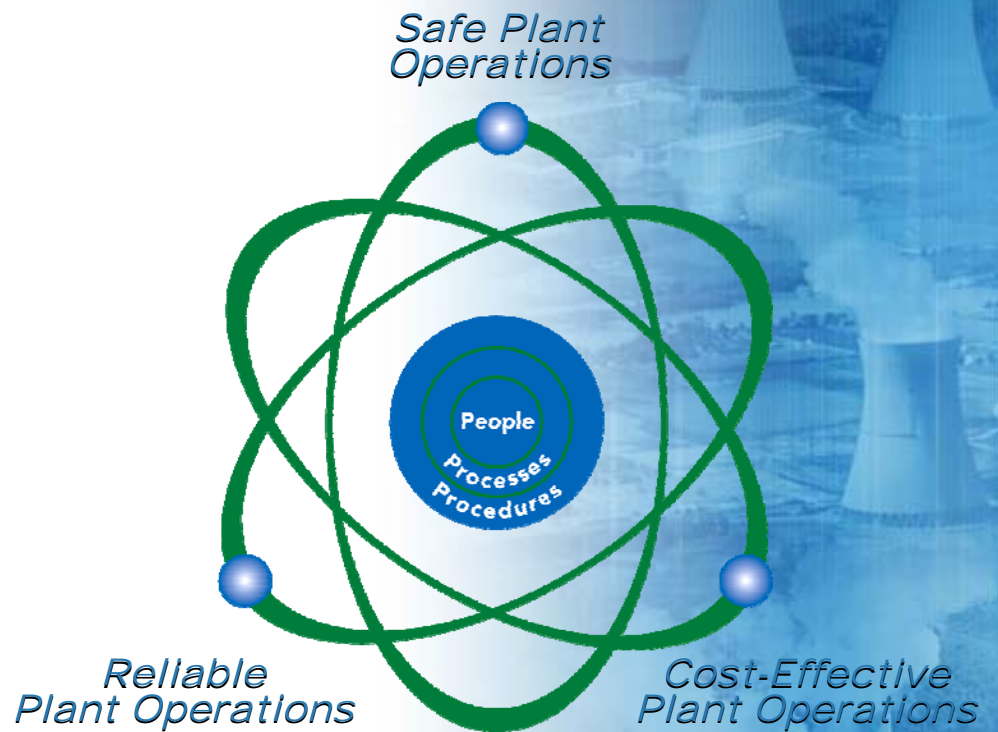
Bill Pearce, Site Vice President

Davis Besse

Bob Schrauder, Site Director –
Performance Improvement

Beaver Valley

Jim Lash, Site Vice President



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Improving Site Performance – 2005 Review, Perry

- ✓ **Safety Record: YTD OSHA Incident Rate = 0.50**,
worked 0.9 million hours since last lost time incident
(previous total was over 10 million hours)
- ✓ **Capability Factor: YTD = 70.6%**
98.1% since restart from 10th Refueling Outage in May
- ✓ **Forced Loss Rate: YTD = 10.17%**
- ✓ **Implementing Performance Improvement Initiative**
- ✓ **NRC Confirmatory Action Letter**
- ✓ **Aligned/Experienced Management Team**
- ✓ **Maintenance and Technical Training Programs
Accreditation Renewed**

Improving Site Performance – Top Focus Areas, Perry

- **Safe, secure, reliable, event-free operation**
- **Focus on implementing FENOC Business Plan and associated site Excellence Plan**
- **Perry Performance Improvement Initiative (PII)**
 - Focus on cross-cutting issues
 - Performance based metrics
 - Effective PII control process established
 - Validation reviews
 - Effectiveness reviews
 - Periodic assessments
 - Independent oversight review
 - Sustained performance improvement expected
- **Corrective Action Program implementation**
- **Employee Engagement and Job Satisfaction**

Improving Site Performance – **Looking Forward, Perry**

- **NRC Component Design Basis Inspection – January to March**
- **Industry Evaluation and Assessment – May**
- **Emergency Plan Evaluated Exercise – October**
- **RFO11 Preparation**
- **Assessment and evaluation of PII effectiveness**

Improving Site Performance – 2005 Review, Davis-Besse

- ✓ **Safety Record: YTD OSHA Incident Rate = 0.56,**
worked 4.2 million hours without a lost time incident
- ✓ **Capability Factor: YTD = 91.8%;**
95.5% since restart from mid-cycle outage in February
- ✓ **Forced Loss Rate YTD = 0.22%**
- ✓ **Well executed 23-day mid-cycle outage**
 - No recordable industrial accidents, under the 45 rem dose goal and only 16 personnel contamination events
 - No major issues found during steam generator inspection and the reactor head and bottom of reactor vessel inspections
- ✓ **Returned to NRC Reactor Oversight Process in July**
- ✓ **Successful maintenance outage in October**
- ✓ **Earned Industry Improved Performance Award**

Improving Site Performance – Top Focus Areas, Davis-Besse

- Safe, secure, reliable, event-free operation
- Focus on implementing FENOC Business Plan and associated site Excellence Plan
- Complete preparations for 14th refueling outage
- Sustain Human Performance improvements
- Work Management Process implementation
 - Continue backlog reductions
 - Reach steady state workload
- Corrective Action Program implementation
- Safety Culture and Safety Conscious Work Environment
- Improve organizational alignment through effective communications

Improving Site Performance – **Looking Forward, Davis-Besse**

- **Operations Training accreditation renewal - January**
- **Refuel Outage 14 - March**
- **Mid-cycle Industry Evaluation and Assessment**
- **Confirmatory Order Independent Assessments**
 - **Operations Performance – June**
 - **Corrective Action Program – August**
 - **Engineering Program Effectiveness – September**
 - **Organizational Safety Culture – November**

Improving Site Performance – 2005 Review, Beaver Valley

- ✓ **Safety Record: YTD OSHA Incident Rate = 0.19**
worked 4.1 million hours without a lost time incident
- ✓ **Capability Factor: Unit 1 – 99.6% YTD, Unit 2 – 91.3% YTD**
Unit 2: 99.4% since restart from 11th refueling outage in April
- ✓ **Forced Loss Rate: Unit 1 – 0.01% YTD, Unit 2 – 1.44% YTD**
- ✓ **Equipment refurbishment and backlog reduction**
- ✓ **Successful refueling outage**
 - Unit 2 – 24 days, no OSHA recordable incidents, achieved all nuclear safety goals
 - Significant modifications to improve equipment reliability
- ✓ **Meeting milestones for Steam Generator Replacement Outage**
- ✓ **Received Top Industry Practice Award for chemistry instrumentation upgrade**

Improving Site Performance – Top Focus Areas, Beaver Valley

- Safe, secure, reliable, event-free operation
- Focus on implementing FENOC Business Plan and associated site Excellence Plan
- Sustain rate of station performance improvement
- Corrective Action Program implementation
- Fire Protection Program and materiel condition excellence
- Supervisor alignment and development
- Workforce replenishment
- Site-specific Safety Conscious Work Environment improvement actions

Beaver Valley Steam Generator / Vessel Head Replacement

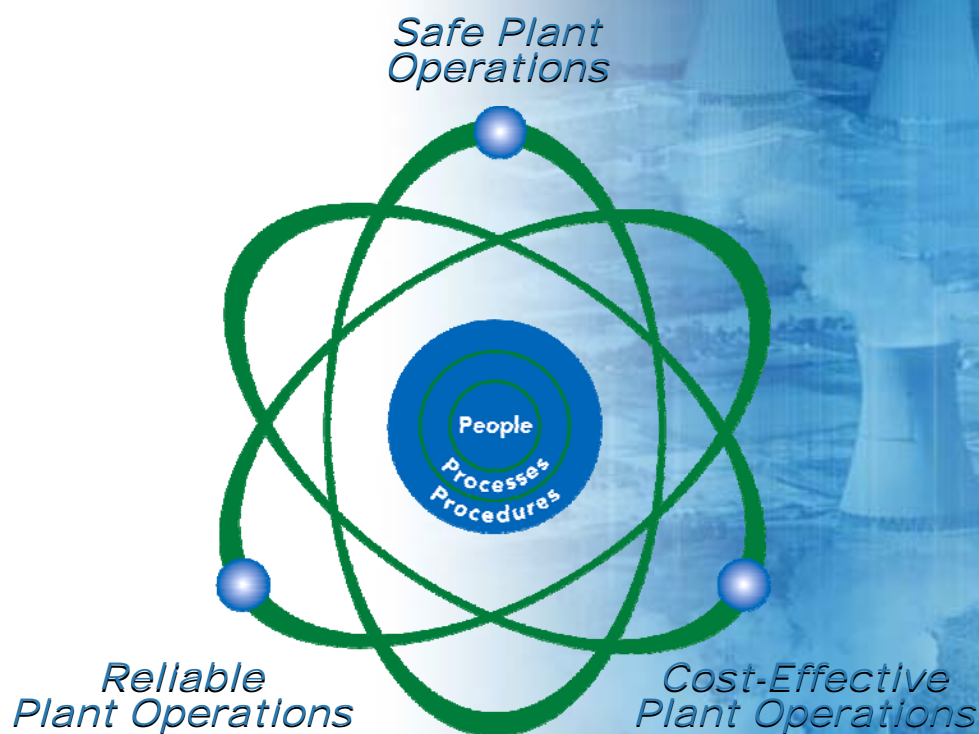
VIDEO

Improving Site Performance – **Looking Forward, Beaver Valley**

- **Unit 1 Outage – February**
 - Steam Generator/Reactor Vessel Head replacement
- **Emergency Plan Evaluated Exercise – June**
- **Operations Training Accreditation Renewal – July**
- **Unit 2 Outage – October**
 - Containment Sump Modifications
 - Power Uprate Modifications
 - Atmospheric Containment Conversion
- **Industry Evaluation and Assessment - November**
- **Implement Improved Technical Specification Amendment – December (currently under NRC review)**
- **License renewal, Units 1 and 2**
 - Submit in early 2007

Regulatory Communications

Greg Halnon
Director –
Fleet Regulatory Affairs



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Improving Regulatory Communications – **2005 Review, Fleet Regulatory Affairs**

- **Quality and Timeliness of Correspondence**
- **Full Potential Program at Beaver Valley**
 - Extended Power Uprate
 - Replacement Steam Generators
 - Alternative Source Term
 - Best Estimate LOCA
 - Containment Conversion
 - License Renewal
 - Improved Technical Specifications
- **Davis-Besse Extended Outage**
 - Items from Extended Shutdown
 - Items required for cycle operation
 - Items for Refuel Outage 14




Improving Regulatory Communications – **Top Focus Areas, Fleet Regulatory Affairs**

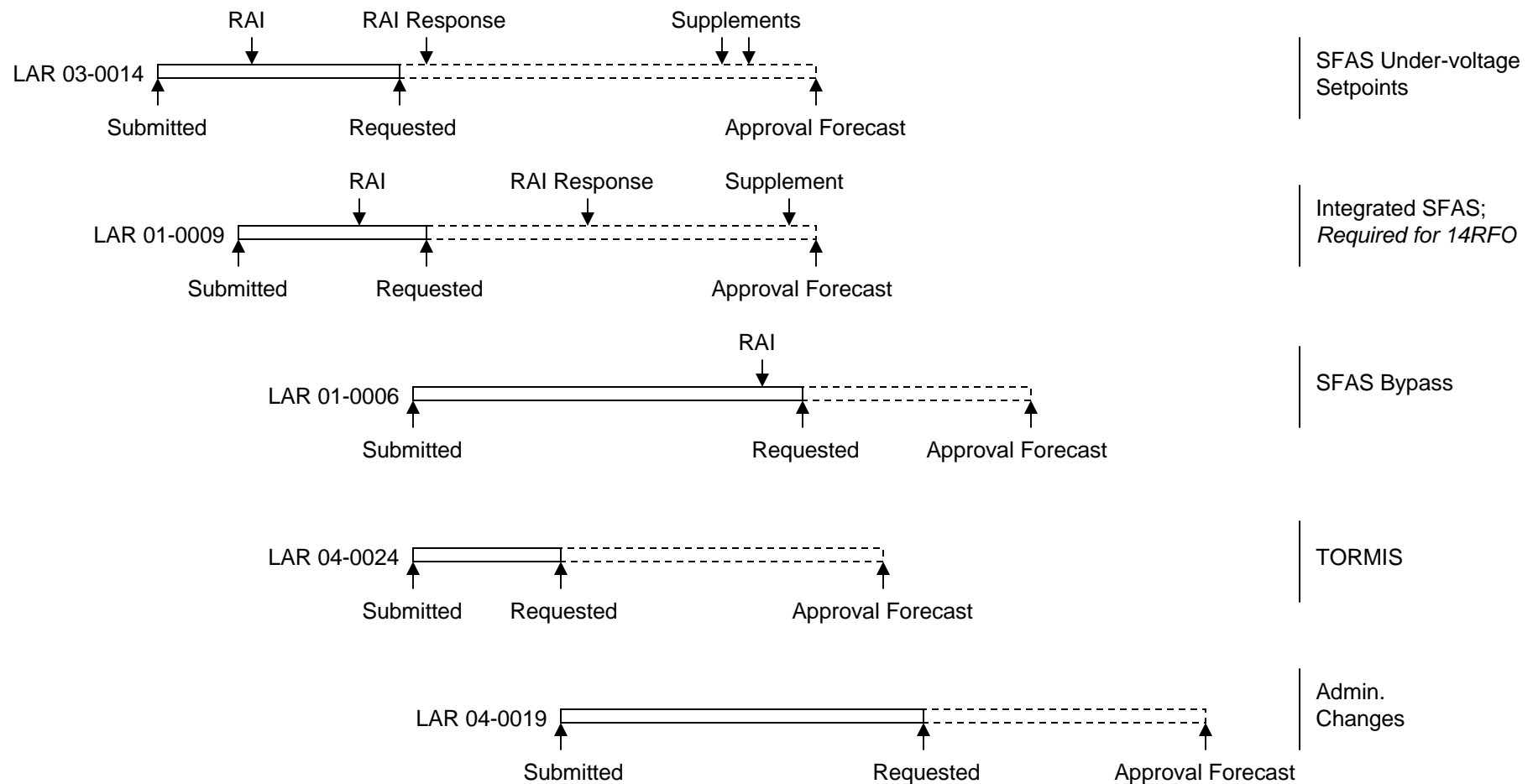
- **Infrastructure to assure Licensing Basis supports safe, secure, reliable, event-free operation**
 - Site Regulatory Compliance focus
 - Licensing program consistency
 - Principles of Conduct
- **Rules of Engagement**
 - Responsibilities of Regulatory Affairs personnel
 - Understanding the NRC's mission
 - Industry Involvement
- **Planning and Assessment Tools**
 - Maintain the big picture
 - Resource requirements
 - Use of Operating Experience

Licensing Actions – Typical Site Plan

Davis-Besse Nuclear Power Station

Licensing Action Timeline

| 2004 | 2005 | 2006 | 2007 |
|--|---|---|-------------------------|
| J F M A M J J A S O N D | J F M A M J J A S O N D | J F M A M J J A S O N D | J F M A M J J A S O N D |
|  13RFO |  MID-CYCLE |  14RFO | |



Improving Regulatory Communications— **Looking Forward, Fleet Regulatory Affairs**

■ **Beaver Valley**

- Extended Power Up-rate: begin multi-year implementation
- Replacement Steam Generators: implementation
- Improved Technical Specifications: implementation
- License Renewal, Units 1 and 2 submit in early 2007: development

■ **Davis-Besse**

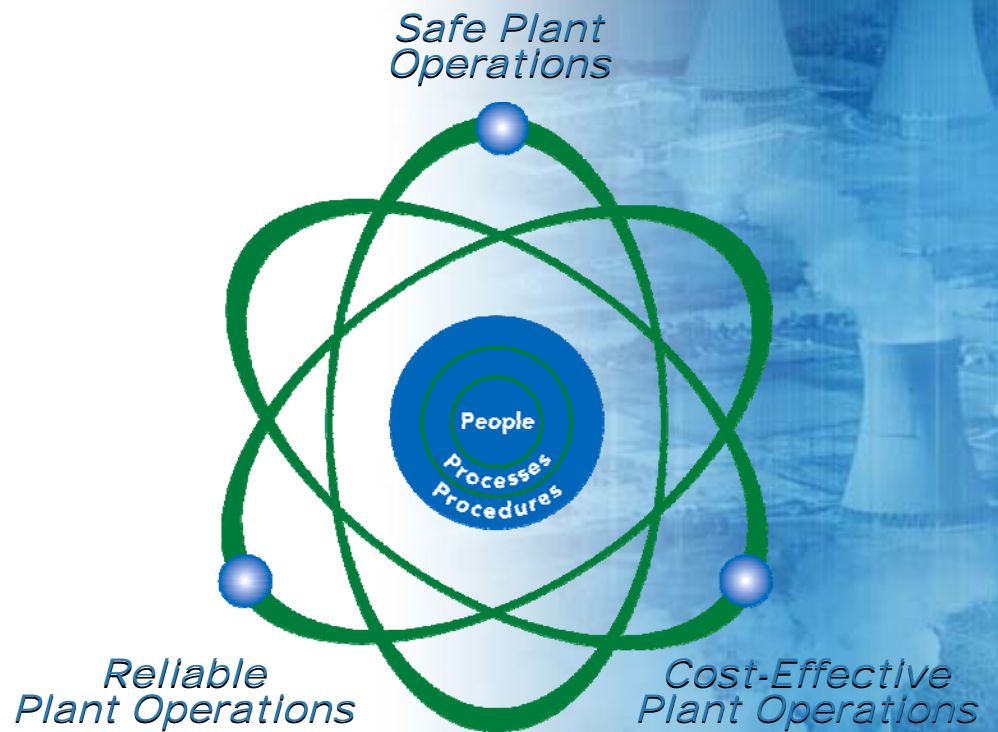
- Refuel Outage 14 Amendments: implementation
 - Improved Fuel Design
 - Improved Testing Sequence for SFAS
- Improved Technical Specifications: development
- License Renewal (following Beaver Valley): planning

■ **Perry**

- Refuel Outage 11 Amendments: NRC review
- License Renewal: strategic planning

Closing Comments

Gary Leidich
President and
Chief Nuclear Officer



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In Summary... Work the plan to achieve top performance.

Current

- Investing in Safety

- Investing in Reliability

- Investing in Capacity / Cost Effectiveness

- Investing in People

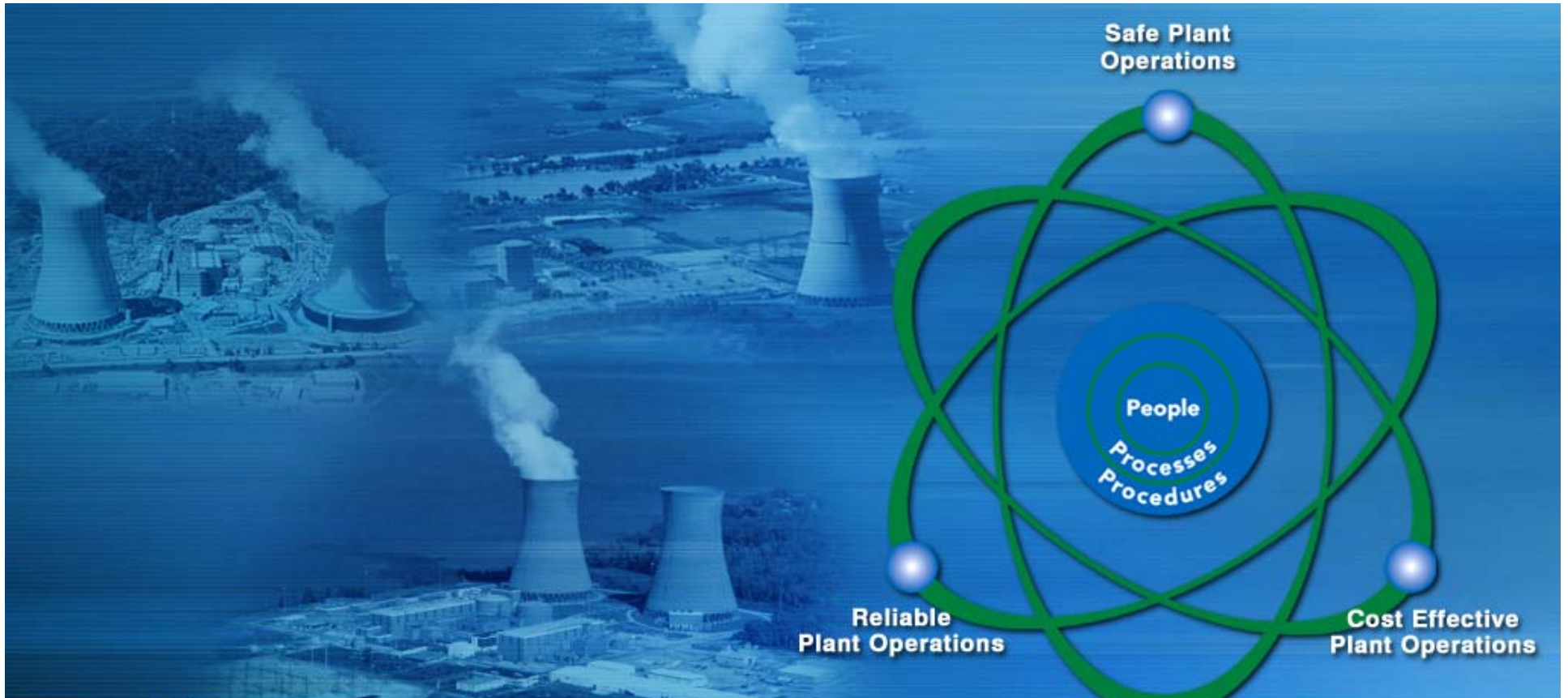
Forward Looking

- BV1 new steam generators and reactor vessel head in 2006
- Staying current with industry inspections

- Capital Spares Program
- Maintenance optimization

- Power uprates
- License renewal
- Outage execution improvements
- Fleet efficiency initiatives

- Leadership Academy
- Replenishment
- Succession planning



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