

**Overview of the NFS
Independent Third Party Safety
Culture Assessment**

April 22, 2008

Independent Assessment of Safety Culture - Background

- Significant increase in NRC cited violations 2004-2006
- HEU material in unauthorized glovebox Mar 2006
- Alternate Dispute Resolution (ADR) process Sept – Nov 2006
- Confirmatory Order Feb 2007
 - Configuration Management
 - 3rd Party Independent Safety Assessment

Independent Assessment of Safety Culture - Background

- Safety Culture Board of Advisors (SCuBA)
 - No current or former ties to NFS
 - Broad and deep experience in Nuclear Industry, Safety Culture
 - Former NRC Office Director and Deputy EDO
 - Nuclear Power Employee Concerns Executive
 - Nuclear Power Safety Culture Assessment expert
 - Nuclear Power Safety Culture and Operations expert
 - Nuclear Fuel Fabrication Safety Executive
 - Large Chemical Plant Operations Senior Manager (Successful Safety Culture Turnaround Agent)
 - Nuclear Security expert

Safety Culture Board of Advisors Assessment (SCuBA)

- Objective: Assess NFS Safety culture with respect to industry best practices (excellence)
- Assessment Elements
 - Personal interviews
 - Document reviews
 - Observations
 - Written employee survey
- Provided initial feedback during assessment period
- Employed NFS self-assessment in 13 safety culture components

Safety Culture Board of Advisors Assessment (SCuBA)

- Report delivered to NFS Feb 16
- Findings and recommendations relative to nuclear power industry and fuel cycle facility **best practices** in the 13 component areas
- Minimum NRC regulations met in all areas
- NRC **expectations** implied by RIS 2006-13 not met in 9 of 13 component areas. Minimally or partially met in 4 areas
- 41 findings in main report
- 21 most significant findings and relevant recommendations grouped into 9 overarching themes
- Most elements of NFS self-assessment validated

SCuBA Safety Culture Assessment Results

- Decision Making - Area For Improvement (AFI)
- Resources - AFI
- Work Control – Opportunity For Improvement (OFI)
- Work Practices – AFI
- Corrective Action Program – AFI
- Operating Experience – AFI
- Self/Independent Assessment – AFI
- Environment for Raising Concerns – Area in Need of Management Attention (ANA)
- Prevent, Detect, Mitigate Perceptions of Retaliation (AFI)
- Accountability – AFI
- Continuous Learning Environment – AFI
- Organizational Change Management – AFI
- Safety Policies - ANA

SCuBA Safety Culture Themes

- ORGANIZATIONAL VALUES, STANDARDS AND EXPECTATIONS
 - Questioning attitude
 - Barriers to problem identification
 - Conservative decision making
 - Management model high accountability behaviors
- COMMUNICATION OF VALUES, STANDARDS AND EXPECTATIONS
 - Reinforce “Safety Strong”
 - Communicate safety basis for decisions

SCuBA Safety Culture Themes

- **HUMAN PERFORMANCE CHALLENGES**
 - Comprehensive Human Performance Program
 - Procedural Compliance
- **EMPHASIZE OWNERSHIP AND ACCOUNTABILITY**
 - Single Points of Accountability
 - Personnel Performance Evaluation process
 - Goal setting and management reviews
- **RESOURCING FOR SUCCESS**
 - Resource Functions to meet higher performance standards

SCuBA Safety Culture Themes

- ENHANCE EFFECTIVENESS OF PROGRAMS AND PROCESSES
 - Operational Decision Making
 - CAP scope
 - CAP quality and effectiveness
 - Employee Concerns Program
- ELIMINATE TOLERANCE FOR DEGRADED CONDITIONS
 - Top Ten Lists
 - Site Infrastructure Improvement Plan
- EXPAND THE FRAME OF REFERENCE
 - Benchmarking
- FOCUS ON CONTINUOUS IMPROVEMENT
 - Performance Indicators and Metrics
 - Self and Independent Assessments

NFS Major Safety Culture Initiatives

- Nuclear Safety Oversight – Chief Nuclear Safety Officer
- Benchmarking
 - Institute of Nuclear Power Operations (INPO)
 - Energy Facilities Contractor Operations Group (EFCOG)
- Strategic Planning and Execution Process (SPEP)
 - Safety Culture embedded as separate planning element
 - Accountability and metrics integrated in system
- Configuration Management
 - Separate element of Confirmatory Order
 - License amendment submitted
 - Electronic system acquired and installed
 - Implementation plan on track

NFS Major Safety Culture Initiatives

- Human Performance Program
 - Benchmarked, planned, resourced
 - Management and Supervisor training held
 - Pilot area implementation Spring 08
- Performance Evaluation Program
 - Implemented early 2008
 - 2009 to include Safety Culture related goals and competencies
- Capital Improvements
 - 2008 Capital budget approved, 2009 draft
 - Process and support equipment
 - Infrastructure – roofs, HVAC

NFS Major Safety Culture Initiatives

- Resourcing for Success – approved positions
 - Configuration Management Specialists
 - Quality Assurance Specialists
 - Industrial Safety Specialists
 - Radiation Technicians
 - Maintenance Mechanics
 - Chemical Operators
 - Additional engineering support

NFS Strategic Plan Elements 2008

Questioning attitude	HuP; Perf Eval Program
Barriers to problem identification	PIRCS Upgrade Spring 2008
Conservative decision making	HuP – Perf Eval Program
Management model high accountability behaviors	SPEP – monthly review; Perf Eval Program
Reinforce “Safety Strong”	Strategic Plan in 2008 - Communications Plan in Development
Communicate basis for decisions	Strategic Plan in 2008 - Communications Plan in Development
Comprehensive Human Performance Program	HuP – Pilot area roll out Spring 08
Procedural Compliance	HuP
Single Points of Accountability	Strategic Plan in 2008

NFS Strategic Plan Elements 2008

Personnel Performance Evaluation process	Implemented early 2008
Goal setting and management reviews	Strategic Planning , Perf. Eval.
Resource Functions to meet higher performance standards	Budgeted in 2008
Operational Decision Making	Benchmarking, expected 7/08
CAP scope, quality, and effectiveness	Changes in discussion
Employee Concerns Program	Program in place 12/08
Top Ten Lists	Pilot process in development
Site Infrastructure Improvement Plan	In budget 2008
Benchmarking	2009
Performance Indicators and Metrics	Strategic Plan in 2008