PUBLIC MEETING ON SAFETY CULTURE

August 17, 2005

Background of the Safety Culture Initiatives

Isabelle Schoenfeld

Office of Enforcement

Background of the Safety Culture Initiatives

- Commission Staff Requirements Memorandum
- Davis-Besse Lessons Learned Recommendation
- Congressional Interest

Background of the Safety Culture Initiatives

- Established a Safety Culture Steering Committee, Working Group, and Support Team
- Defined Objectives and Approach
- Developed a Safety Culture Response Plan (Plan)
- Developed a Safety Culture Attributes Table (Table)

Safety Culture Response Plan

J. J. Persensky

Office of Nuclear Regulatory Research

Safety Culture Response Plan

- Assess the Reactor Oversight Process (ROP) Cross-cutting Issues and Inspection Procedures and modify, as needed
- Develop a Process for Evaluating Licensee Safety Culture for Plants with Degraded Cornerstones
- Train Inspectors on Safety Culture
- Monitor Industry Safety Culture efforts
- Monitor Foreign Developments in Safety Culture

Safety Culture Response Plan

- Assess and Modify ROP
  - Develop the Safety Culture Attributes Table (Table)
  - Compare the Table to Current Inspection Program
  - Propose changes to the ROP including
    - Inspection procedures/Cross Cutting Areas
    - Documentation
    - Assessment process
- Process for determining when to apply a specific evaluation of safety culture for plants in the degraded cornerstones
- Process for conducting the specific evaluation of safety culture
  - Determine the type of NRC evaluation (NRC-led, licensee self-assessment, licensee third party assessment)
  - Develop Guidance

Safety Culture Response Plan

- Train Inspectors
  - Safety culture familiarization
  - Baseline inspections
  - Safety culture specific evaluation
- Monitor Industry Efforts in Safety Culture
  - Observe INPO Plant Evaluations, etc.
- Monitor Foreign Developments
  - International Atomic Energy Agency
  - Nuclear Energy Agency – Special Experts Group on Human and Organizational Factors

Safety Culture Attributes Table

Jeff Jacobson

Office of Nuclear Reactor Regulation

Safety Culture Attributes Table

- Provides for a structured way of identifying those organizational values, behaviors, and associated plant programs and processes thought to be important relative to safety culture
- Modeled after ROP cornerstone hierarchical framework
- Derived from multiple national and international sources (including IAEA, foreign regulators, INPO, commercial US facilities, etc.)
- The table is a work in progress

Safety Culture Attributes Table

Safety Culture Attribute	Safety Culture Element	Potential Safety Culture Inspection Information	Potential Safety Culture Measure
An inherent characteristic, quality, or property that is critical to a licensee's safety culture	A specific factor, process, or process outcome that can either be inspected or measured and that can be used to assess a licensee's performance with respect to the Safety Culture Attribute(s).	Qualitative information that is acquired from an inspection to assess change or performance of a Safety Culture Element.	Quantifiable information that is acquired through an inspection (e.g., that can be counted, trended or noted) which can be used to assess change or performance of a Safety Culture Element.

Safety Culture Attributes Table

- Four general “Safety Culture Attributes” and fifteen associated “Safety Culture Elements”
- Many of the Safety Culture Elements are currently covered, at least partially, by NRC baseline or supplemental inspections as part of the ROP
- Will be used to develop enhancements to current NRC inspection and assessment programs

Safety Culture Attributes and Elements

- Safety Conscious Work Environment (SCWE)
  - Organizational Responsibility For SCWE
  - Personal Responsibility For SCWE
  - Questioning Attitude
- Organizational Learning and Assessment
  - Operating Experience (internal and external)
  - Self assessment process
  - Problem Identification and Resolution/Corrective Action Program
  - Continuous Learning Environment
  - Benchmarking

Safety Culture Attributes and Elements

- Work Planning and Human Performance
  - Work Control
  - Systematic Decision-making
  - Conduct of Work
- Organizational Safety Accountability
  - Safety Policies
  - Accountability and Incentive Programs
  - Adequate Resources
  - Organizational Change Management

Safety Culture Attributes Table

- The column titled “Potential Safety Culture Inspection Information” provides examples of qualitative information that could be used to assess the Safety Culture Element by NRC inspectors
- The column titled “Potential Safety Culture Measures” provides examples of quantitative information that could be used to help focus NRC inspectors on areas of potential concern
- The Potential Safety Culture Measures are not meant to be used as performance indicators analogous to those used in the ROP

Next Steps in the Safety Culture Initiatives

Isabelle Schoenfeld

Office of Enforcement

Next Steps in Safety Culture Initiatives

- Seek Internal and External Stakeholder input on the Table
- Public Meeting in October 2005
- Advisory Committee on Reactor Safeguards (ACRS) Information Briefing, November 2005
- Avenues for Stakeholder input/feedback

Questions and Comments

- Approach
- Safety Culture Response Plan
- Safety Culture Attributes Table
- Next Steps