U.S.NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment

ESTABLISHING A POSITIVE SAFETY CULTURE FOR 10 CFR PARTS 71 AND 72

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Presentation Outline

- Safety Culture Background

- Commission Direction

- Areas of Consideration

- Discussion Questions

Importance of Safety Culture

- Operating experience has demonstrated nexus with safety culture and events

- Safety culture contributes to the safe and secure use of radioactive materials

- NRC, as the regulator, considers the importance of safety culture in its oversight programs and activities

- Examples of safety culture

Statement of Policy
(76 FRN 34773)

*Sets forth the Commission's **expectation** that individuals and organizations performing regulated activities establish and maintain a positive safety culture commensurate with the safety and security significance of their activities and the nature and complexity of their organizations and functions*
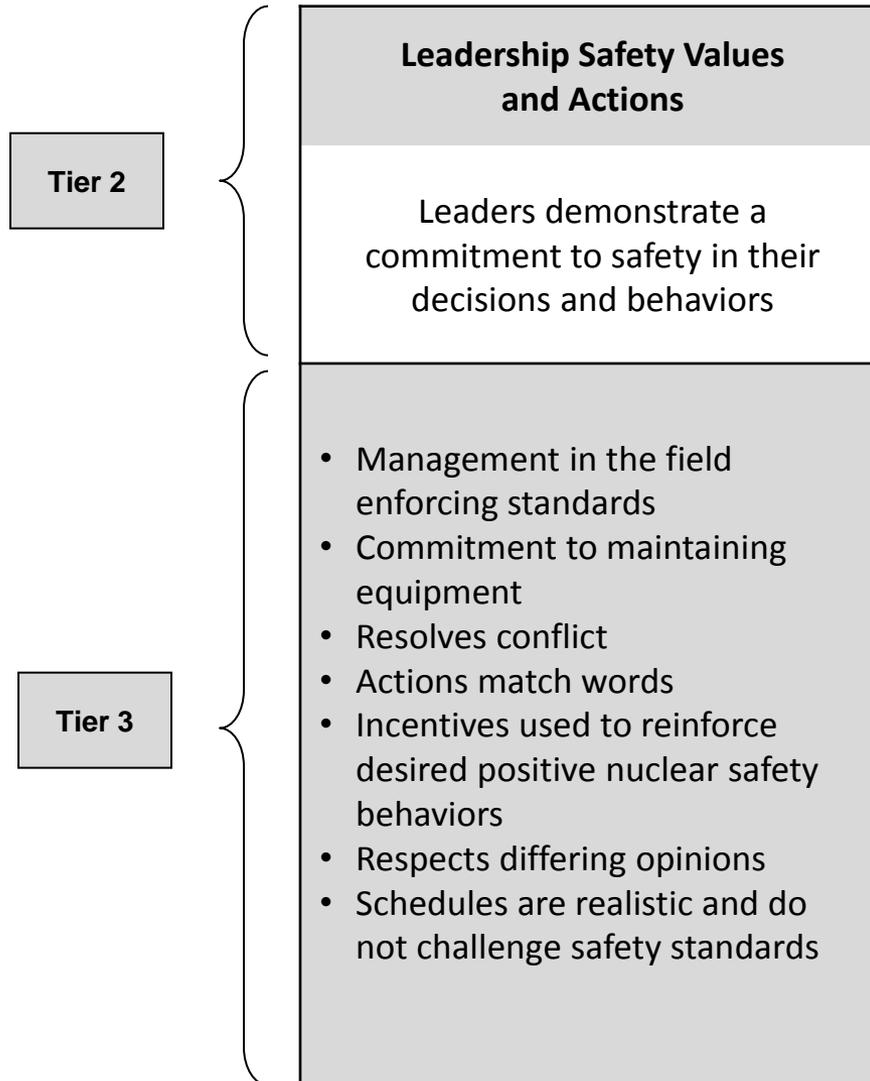
Safety Culture Traits

- Leadership Safety Values and Actions
- Problem Identification and Resolution
- Personal Accountability
- Work Processes
- Continuous Learning
- Environment for Raising Concerns
- Effective Safety Communications
- Respectful Work Environment
- Questioning Attitude

Commission Direction

- Commission direction is to "communicate and educate"

- Implementation activities require prior Commission review and approval

"Leadership" Trait Exercise Example of Tier 3

Tier 2

Leadership Safety Values and Actions
Leaders demonstrate a commitment to safety in their decisions and behaviors

Tier 3

- Management in the field enforcing standards
- Commitment to maintaining equipment
- Resolves conflict
- Actions match words
- Incentives used to reinforce desired positive nuclear safety behaviors
- Respects differing opinions
- Schedules are realistic and do not challenge safety standards

These Tier 3 behaviors were developed through an "affinity diagraming" exercise by external stakeholders at an NRC-sponsored public workshop in February 2010. They are provided as an example of how behaviors could be developed and do not constitute an all-inclusive or NRC-endorsed listing.

Areas of Consideration

- Discussing the SCPS with licensee/certificate holder senior management and workers

- Evaluating the effective use of corrective action programs through quality assurance program reviews

- Considering and incorporating safety culture into inspection programs

Areas of Consideration, cont'd

- Revising the NRC qualification programs to include specific training on safety culture

- Evaluating how safety culture can be included in NRC staff guidance such as standard review plans

Discussion Questions

- How can safety culture be integrated into NRC regulatory programs?

  - How can we increase attention to safety culture?

- What can we do to better define safety culture as applied to Part 71/72 activities?

- What are the potential pros and cons of placing more emphasis on safety culture?

References

- February 2008 SRM-COMGBJ-08-0001 (initiated SCPS); Accession # ML102500672

- COMSECY-10-0007 (Project Plan for the Regulatory Program Review to Support Extended Storage and Transportation of Spent Nuclear Fuel); Accession # ML101390413

- March 2011 SECY-11-0005 (Proposed Final Safety Culture Policy Statement); Accession # ML103200087

- NRC safety culture website: http://www.nrc.gov/about-nrc/regulatory/enforcement/safety-culture.html

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Safety Culture Traits, detailed

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Leadership Safety Values and Actions	Problem Identification and Resolution	Personal Accountability
Leaders demonstrate a commitment to safety in their decisions and behaviors	Issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance	All individuals take personal responsibility for safety
Work Processes	**Continuous Learning**	**Environment for Raising Concerns**
The process of planning and controlling work activities is implemented so that safety is maintained	Opportunities to learn about ways to ensure safety are sought out and implemented	A safety conscious work environment is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment or discrimination
Effective Safety Communications	**Respectful Work Environment**	**Questioning Attitude**
Communications maintain a focus on safety	Trust and respect permeate the organization	Individuals avoid complacency and continually challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action