

ADAMS ACCESSION NUMBER: ML110550238
DOCUMENT DATE: February 24, 2011



Proposed NRC Safety Culture Policy Statement

**Eric Fries
Safety Culture Program Manager, OE**

**IRPA Workshop on Radiation Protection Culture
February 10, 2011**

Presentation Overview

- NRC's Mission and Responsibility
- Safety Culture Background
- Draft Safety Culture Policy Statement
- Current Status
- Next Steps

The U.S. NRC's Mission



To license and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

NRC Scope of Regulatory Responsibility

- Reactors: commercial reactors for generating electric power and non-power reactors used for research, testing, and training
- Materials: uses of nuclear materials in medical, industrial, and facilities that produce nuclear fuel
- Waste: transportation, storage, and disposal of nuclear materials and waste, and decommissioning of nuclear facilities from service

Importance of Safety Culture

- Operating experience has demonstrated nexus between safety culture and events
- Safety culture contributes to the safe and secure use of radioactive materials
- NRC recognizes that licensees bear the primary responsibility for the safe use of nuclear materials while the NRC, as the regulator, must consider the importance of safety culture in its oversight programs

NRC Safety Culture Background

1989: Conduct of Operations Policy Statement

- Expectations for a Safety Culture:
 - Full attention to safety matters
 - Personal dedication and accountability of all individuals engaged in any activity which has a bearing on nuclear power plant safety
 - Management fosters the development of a ‘safety culture’ at each facility and promotes a professional working environment in the control room, and throughout the facility, that assures safe operations

NRC Safety Culture Background

1996: Safety Conscious Work Environment (SCWE)

Policy Statement

- Establish and maintain a SCWE
- Intended to assure the freedom of employees in the nuclear industry to raise safety concerns without fear of retaliation
- Applies to all NRC-regulated activities of licensees, contractors, and applicants

NRC Safety Culture Background

2000: Reactor Oversight Process Implemented

- Monitors the “Cornerstones” that are the basis of plant safety:
 - Reactor safety
 - Radiation safety
 - Safeguards
- “Cross-Cutting” areas:
 - Human performance
 - SCWE
 - Problem Identification and Resolution (PI&R)

NRC Safety Culture Background

2006: Reactor Oversight Process Enhanced

- Safety culture definition
- 13 safety culture “components”
- Requirements added to specifically focus on safety culture evaluation for plants with degraded performance (columns 3 and 4 of the Action Matrix)
- Safety culture training provided to NRC inspection personnel
- Safety culture features added to select NRC inspection procedures

NRC Safety Culture Background

2008: Commission Direction

(SRM-COMGBJ-08-0001A)

- Develop a draft safety culture policy statement
- Address the unique aspects of security
- Applicable to all licensees and certificate holders
- Increase attention to safety culture in the material area

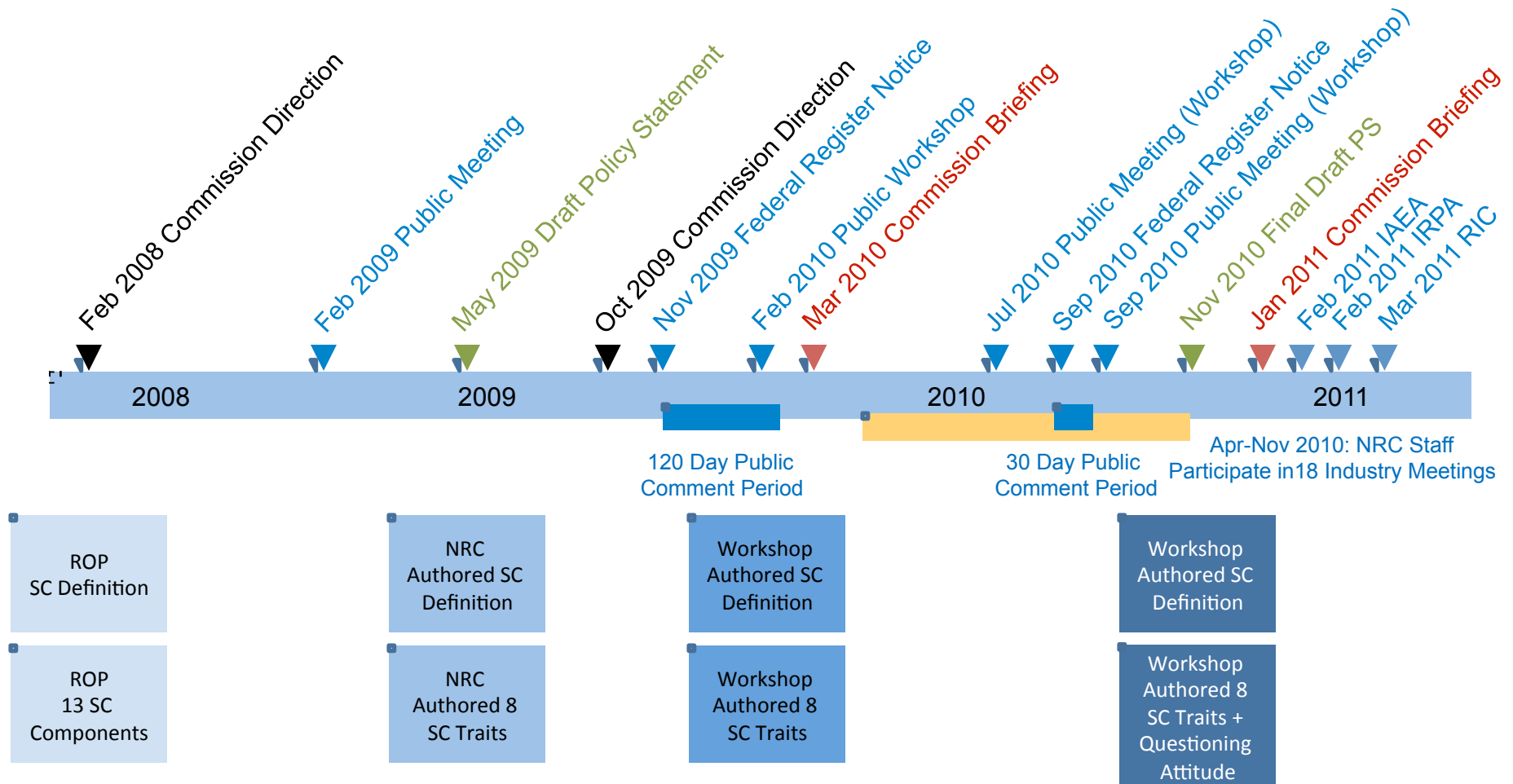
NRC Safety Culture Background

2009: Further Commission Direction

(SRM-SECY-09-0075)

- Publish the draft safety culture policy statement for public comment
- Continue to engage a broad range of external stakeholders and the Agreement States
- Seek opportunities to achieve common safety culture terminology with existing standards and references
- Consider making the policy statement applicable to vendors and suppliers

Draft Safety Culture Policy Statement Timeline



Proposed Statement of Policy

- Includes definition and traits
- Interface of safety and security considerations
- Preamble addresses “security”
- Recognizes diversity of regulated entities
- Vendors and suppliers included
- Consider negative factors (e.g., incentive goals)
- Implementation not directly addressed

Safety Culture Policy Statement: Requirement or Expectation?

Proposed Statement of Policy

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 actions and the nature and complexity of their organizations and functions

Applicability to Agreement States

The Commission encourages the Agreement States and other organizations interested in nuclear safety to support the development and maintenance of a positive safety culture, as articulated in the Statement of Policy, within their regulated communities

Proposed Safety Culture Definition

Nuclear Safety Culture is the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.

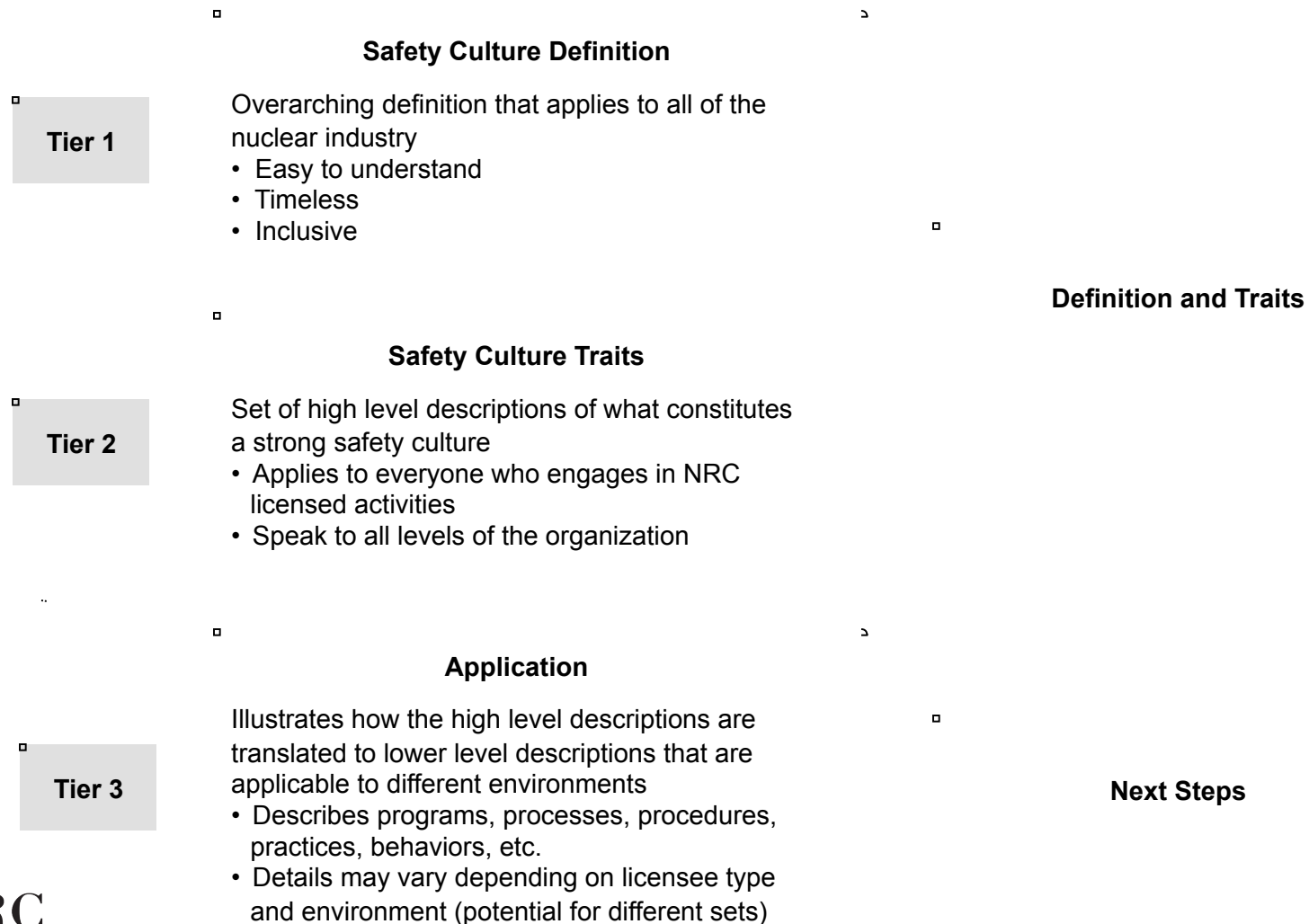
Proposed Preamble

Experience has shown that certain personal and organizational traits are present in a positive safety culture. A trait, in this case, is a pattern of thinking, feeling, and behaving that emphasizes safety, particularly in goal conflict situations, e.g., production vs. safety, schedule vs. safety, and cost of the effort vs. safety. It should be noted that although the term “security” is not expressly included in these traits, safety and security are the primary pillars of the NRC’s regulatory mission. Consequently, consideration of both safety and security issues, commensurate with their significance, is an underlying principle of this Statement of Policy.

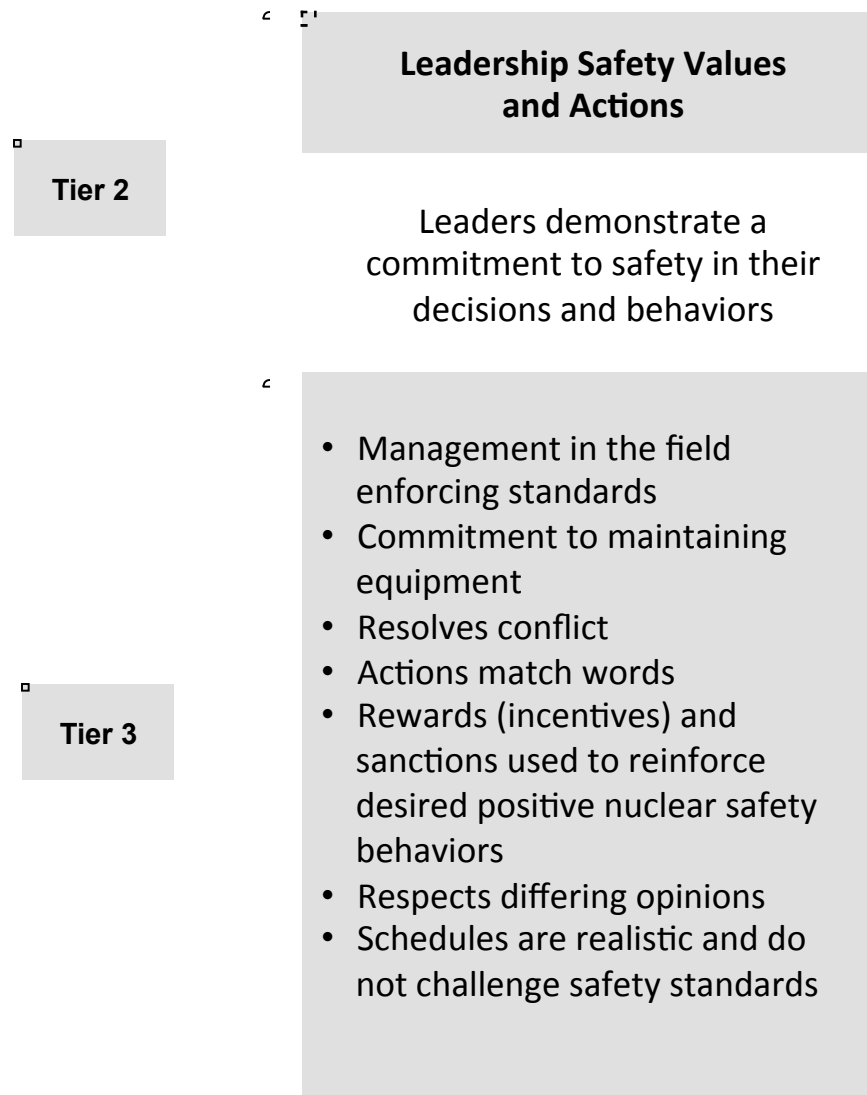
Proposed Safety Culture Traits

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

Tiers for Development of the Policy Statement



“Leadership” Trait Exercise Example of Tier 3



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.

Current Status

- The Commission has been briefed (January 24, 2011) on the proposed safety culture policy statement
- The staff is awaiting further direction

NRC: Next Steps (Projected)

Resources

- NRC safety culture website: <http://www.nrc.gov/about-nrc/regulatory/enforcement/safety-culture.html>
 - Policy Statement meeting summaries
 - Regulatory Issue Summary – 2006 changes made to the Reactor Oversight Process to more fully address safety culture
- Eric Fries, Safety Culture Program Manager
(e-mail: eric.fries@nrc.gov or external_safety_culture.resource@nrc.gov)