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The Nuclear Regulatory Commission's Oversight of Safety Culture

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Outline

- NRC's definition of nuclear safety culture

- NRC's approach to safety culture
  - Oversight process
  - Event, allegation, or degradation in performance
  - Chilling effect letters

- Safety culture concern follow-up

NRC Safety Culture History

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1989	• Operators inattentive and unprofessional while on duty at nuclear power plant • Commission Policy Statement: Conduct of Nuclear Power Plant Operations
1996	• Workers retaliated against for whistleblowing • Commission Policy Statement: Freedom to Raise Safety Concerns Without Fear of Retaliation
2002	• Davis-Besse reactor head degradation event • NRC revised Reactor Oversight Process (ROP) to more fully address safety culture
2008	• Commission direction to develop policy statement on safety culture that applies to all licensees
2011	• Final Safety Culture Policy Statement (SCPS) published in the Federal Register

Safety Culture Policy Statement (SCPS)

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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.

Nuclear Safety Culture Definition

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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.

Commission's Safety Culture Policy Statement (76 FR 34773; June 14, 2011)

Safety Culture Traits

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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 (SCWE) 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.

Safety Culture
Common Language Initiative

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- A common language for safety culture was developed in 2013
  - Includes 10 traits of a healthy safety culture, 40 attributes (performance characteristics) representing those traits, and numerous examples
- NUREG-2165 was completed in 2014

NRC Approach to Safety Culture

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- Vendors and licensees bear primary responsibility for safety.
- NRC's Safety Culture Policy Statement states safety culture expectations but is not a regulatory requirement.
- NRC considers safety culture within oversight processes for vendors and licensees.
- NRC assessment of safety culture at vendors is primarily as a result of an event, allegation, or degradation in performance.
- NRC considers safety culture within the Reactor Oversight Process (ROP) for nuclear power reactors.

NRC Reactor Oversight Process (ROP)

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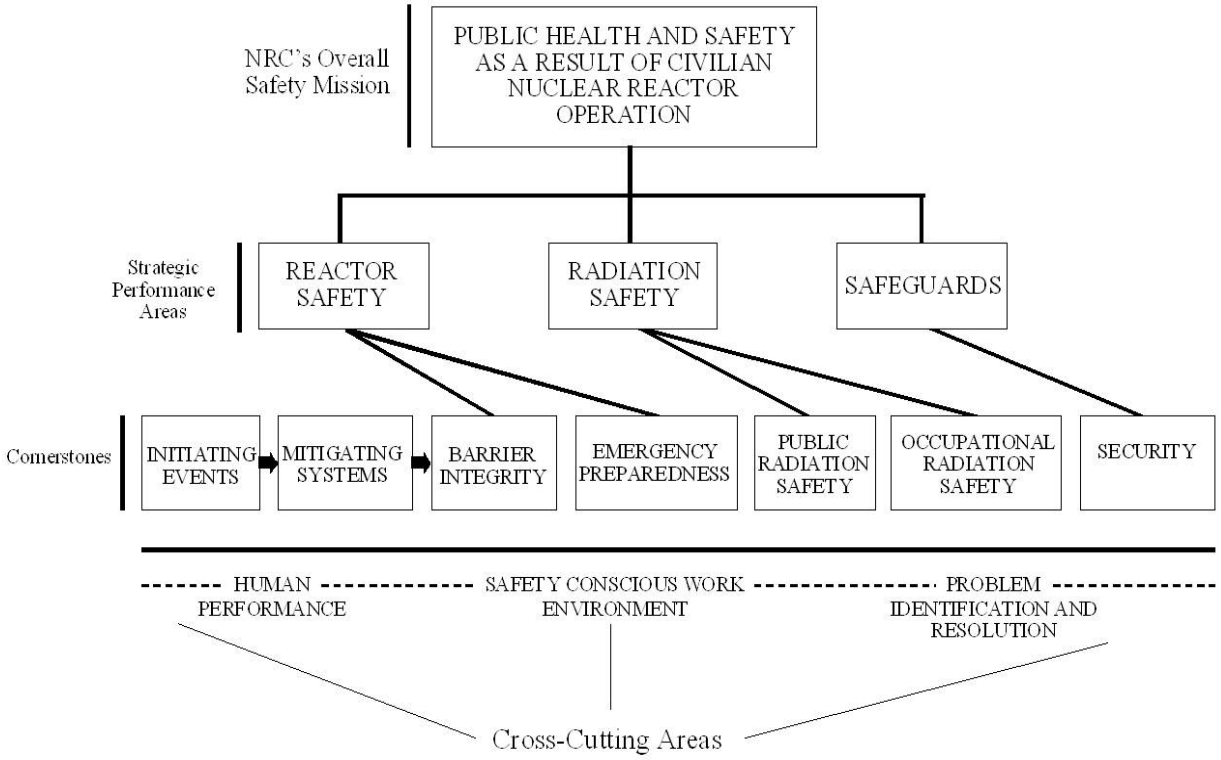
- NRC's Performance Assessment Program for operating nuclear power reactors
  - Inputs derived from licensee performance indicators and NRC inspection findings
- Licensee performance evaluated continuously
  - Including mid-year and end-of-year assessment meetings
- NRC assigns each licensee to a column in the ROP Action Matrix based on performance
- Action Matrix placement determines level of NRC regulatory oversight

Safety Culture and the ROP



Event Follow-up

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- Inspectors will review the vendor and licensee's root cause evaluation to ensure that all safety culture contributors are identified and documented.
- If the vendor or licensee is issued escalated enforcement, they will be issued a choice letter.
- Alternative Dispute Resolution (ADR)
  - Corrective actions associated with safety culture may be included.
  - All agreed upon corrective actions would be included in a Confirmatory Order and would be inspected.

Allegation Follow-up

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- If NRC receives allegations at your site stating that employees are hesitant to raise nuclear safety concerns (SCWE), the NRC will follow up on the issue.
- The NRC may send a Request for Information (RFI) or conduct a follow-up inspection.
- An RFI may request the licensee or vendor employ a third party to evaluate the SCWE concern.
- An inspection will assure qualified safety culture assessors will inspect the SCWE at your site.

Safety-Conscious Work Environment (SCWE) Issues

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- If SCWE concerns are substantiated by the licensee, the vendor or by the NRC, the licensee or vendor will be expected to take adequate corrective actions.
- The NRC will monitor the SCWE at the licensee or vendor.
- If the SCWE is not corrected, the NRC may send the licensee or vendor a Chilling Effect Letter.

Chilling Effect Letters (CEL)

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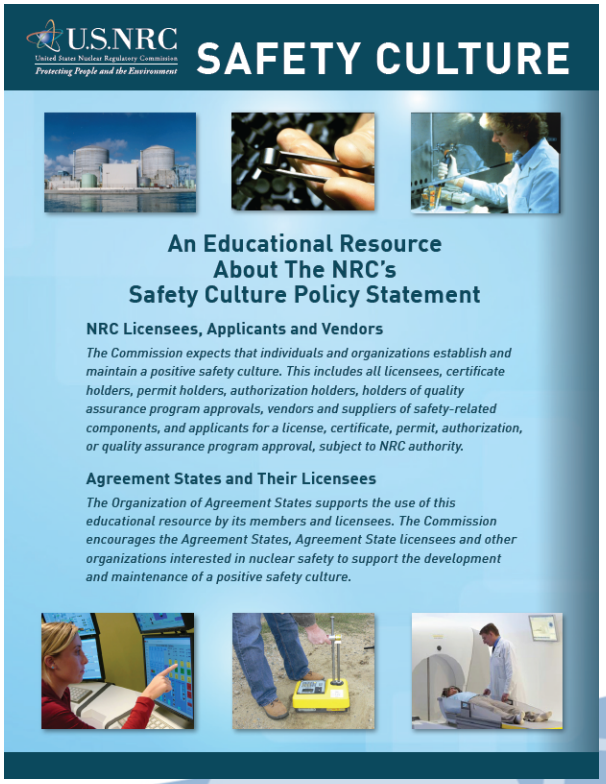
- A Chilling Effect Letter:
  - Publicly notifies the vendor or licensee of NRC's concern that employees are hesitant to raise nuclear safety concerns.
  - Informs the workforce of the concern.
  - Formally requests information and a response, including corrective actions.

Safety Culture Policy Statement (SCPS) Educational Tools

- Safety Culture Educational Resource Workbook
  - Trait Talks
  - Case Studies
  - SCPS



Trait Talk and Licensee or Community Scenario

TRAIT	LICENSEE/COMMUNITY SCENARIO
• Leadership Safety Values and Actions	Power Reactors
• Work Processes	Radiography
• Questioning Attitude	Medical/Brachytherapy
• Problem Identification and Resolution	Power Reactors
• Environment for Raising Concerns	Research Reactors
• Effective Safety Communication	Fuel Cycles
• Respectful Work Environment	Gauges
• Continuous Learning	Construction
• Personal Accountability	Vendors

Summary

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- NRC communicates safety culture expectations through the Safety Culture Policy Statement.
- NRC assessment of safety culture at a vendor is primarily as a result of an event, allegation, or degradation in performance.
- Safety culture considerations incorporated in the Reactor Oversight Process through cross-cutting areas and supplemental inspection activities.
- NRC may also address safety-conscious work environment concerns through Chilling Effect Letters.
- You can learn more about maintaining a healthy safety culture using NRC's educational tools.

For More Information

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- Please visit NRC's safety culture webpage at: http://www.nrc.gov/about-nrc/safety-culture.html

- Or contact NRC staff via email at: NRC.Allegation@nrc.gov