



# **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

**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)

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

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

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

# Safety Culture

## Common Language Initiative

- 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

- 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 research and test reactors
- NRC assessment of safety culture is primarily a result of an event, allegation, or degradation in performance



# Event Follow-up

- Inspectors will review the licensee's root cause evaluation to ensure that all safety culture contributors are identified and documented
- If the licensee is issued escalated enforcement and participates in the Alternative Dispute Resolution process, 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

# Allegations Follow-up

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

# Safety Conscious Work Environment (SCWE) Issues

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

# Chilling Effect Letters (CEL)

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

# Safety Culture Policy Statement Educational Tools

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



The image shows the cover of an educational resource workbook titled "SAFETY CULTURE". At the top left is the U.S. NRC logo. The title "SAFETY CULTURE" is in large, bold, white letters on a dark blue background. Below the title are three small images: a nuclear power plant, hands holding a tool, and a person in a lab coat. The main text reads: "An Educational Resource About The NRC's Safety Culture Policy Statement". Below this, there are two sections: "NRC Licensees, Applicants and Vendors" and "Agreement States and Their Licensees", each with a short paragraph of text. At the bottom are three more small images: a person at a computer, a person with a scale, and a person in a lab coat.

**U.S.NRC**  
United States Nuclear Regulatory Commission  
*Protecting People and the Environment*

## SAFETY CULTURE

**An Educational Resource  
About The NRC's  
Safety Culture Policy Statement**

**NRC Licensees, Applicants and Vendors**  
*The Commission expects that individuals and organizations establish and maintain a positive safety culture. This includes all licensees, certificate holders, permit holders, authorization holders, holders of quality assurance program approvals, vendors and suppliers of safety-related components, and applicants for a license, certificate, permit, authorization, or quality assurance program approval, subject to NRC authority.*

**Agreement States and Their Licensees**  
*The Organization of Agreement States supports the use of this educational resource by its members and licensees. The Commission encourages the Agreement States, Agreement State licensees and other organizations interested in nuclear safety to support the development and maintenance of a positive safety culture.*

# Trait Talk and Licensee or Community Scenario

## TRAIT

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

## LICENSEE/COMMUNITY SCENARIO

**Power Reactors**  
**Radiography**  
**Medical/Brachytherapy**  
**Power Reactors**  
**Research Reactors**  
**Fuel Cycles**  
**Gauges**  
**Construction**  
**Vendors**

# Summary

- NRC communicates safety culture expectations through the Safety Culture Policy Statement
- NRC assessment of safety culture is primarily as a result of an event, allegation, or degradation in performance
- NRC may also address safety-conscious work environment concerns through Chilling Effect Letters
- Licensees can learn more about maintaining a healthy safety culture using NRC's educational tools

# For More Information

- 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](mailto:NRC.Allegation@nrc.gov)