U.S. NRC: Safety and Security – Policy and Oversight

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Outline



- NRC's Safety Culture Policy Statement (SCPS)
 - Addresses both safety and security
- Reactor Oversight Process
 - Assesses safety and security performance for operating power reactors
- Allegation and Enforcement Programs
 - Assesses safety and security performance for material users and vendors, as well as operating power reactors



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 <u>safety</u>, promote the common defense and <u>security</u>, and protect the environment.



- 2001: After 9/11, Commission issued orders to enhance security at facilities
- 2008: Commission directed staff to expand policy on safety culture to address security, and determine if there should be one policy or two
- 2009: Commission direct staff to encompass security within the Safety Culture Policy Statement
- 2011: The NRC's Safety Culture Policy Statement was issued



- 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.
- Commission agreed that an overarching safety culture addresses both safety and security.
- A robust discussion of security, and the interface between safety and security, was included in a preamble in the Statement of Policy.



Preamble:

Organizations should ensure that personnel in the safety and security sectors have an appreciation for the importance of each, emphasizing the need for integration and balance to achieve both safety and security in their activities. Safety and security activities are closely intertwined. While many safety and security activities complement each other, there may be instances in which safety and security interests create competing goals. It is important that consideration of these activities be integrated so as not to diminish or adversely affect either; thus, mechanisms should be established to identify and resolve these differences. A safety culture that accomplishes this would include all nuclear safety and security issues associated with NRC regulated activities.



Preamble continued:

• 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, schedule, and the cost of the effort versus safety. It should be noted that although the term "security" is not expressly included in the following 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.

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.

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

Safety Culture Policy Statement Educational Tools



- Educational Tools:
 - SC Educational Resource
 Workbook
 - Trait Talks
 - Metro Case Study
 - Journeys
 - SCPS
 - Safety Culture during
 Decommissioning





Safety Culture Common Language Initiative (NUREG-2165)

- Joint effort with the Nuclear Energy Institute (NEI), Institute for Nuclear Power Operations (INPO), and other stakeholders from 2011 to 2013 for the reactor community
- Common language includes 10 traits (addition of decision-making) of a healthy safety culture, 40 aspects (performance characteristics) representing those traits, and numerous examples
- Common language traits and aspects have been incorporated under the ROP cross-cutting areas
- Language could apply to other regulated communities

Reactor Oversight Process



- Regulatory oversight of safety and security is conducted through the Reactor Oversight Process (ROP) which is the NRC's program for assessing the performance of operating commercial nuclear power reactors.
- In 2004, the NRC took steps within the ROP to strengthen the agency's ability to detect potential safety culture weaknesses during inspections and performance assessments.
- In 2006, guidance and procedures for inspecting and assessing aspects of licensees' safety culture, which includes security, were included in the ROP.
- The ROP uses inputs from performance indicators and inspection findings to develop conclusions about a licensee's safety performance. Performance is evaluated systematically and on a continuous basis through planned inspections, and assessment meetings.

Reactor Oversight Action Matrix



Column 4: Column 1: Column 2: Column 3: Multiple/Repetitive Degraded Licensee Regulatory Degraded Cornerstone Response Response Cornerstone Inspection Procedure (IP) 95001: Verify licensee's root cause evaluation appropriately considered safety culture IP 95002: Independently determine whether weakness in safety culture were root or contributing causes May request licensee conductindependent assessment of safety culture

IP 95003:

- Request licensee conduct independent safety culture assessment
- Conduct graded safety culture assessment based on results of review of licensee's assessment

NRC Allegation and Enforcement Programs



- Addresses safety culture through use of Chilling effect letters (CELs).
- Uses Confirmatory Orders (COs) in the ADR Program to resolve discrimination and wrongdoing cases.

Summary



- The NRC considers both safety and security as part of the SCPS; therefore, a separate policy statement for security culture is not necessary.
- The NRC's ROP addresses both safety and security and any inspection findings are tagged with a safety culture aspect, where appropriate.
- Safety culture issues, which include security concerns, can also be addressed through the NRC's Allegation and Enforcement programs with ADR and a CO.

For More Information



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

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