DEFINITION OF NUCLEAR SAFETY CULTURE

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.

TRAITS OF A POSITIVE NUCLEAR SAFETY CULTURE

Experience has shown that certain personal and organizational traits are present in a positive safety culture. The following are traits of a positive safety culture:

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

There may be additional traits not included bere that are also important in a positive safety culture. These traits were not developed for inspection purposes.

NRC MISSION

The mission of the NRC is to license and regulate the Nation's civilian use of byproduct, source, and special nuclear materials in order to protect public health and safety, promote the common defense and security, and protect the environment.





NUREG/BR-0500 June 2011

TO GET MORE INFORMATION

www.nrc.gov www.nrc.gov/about-nrc/regulatory/enforcement/ safety-culture.html



SAFETY CULTURE Policy Statement



CHAIRMAN'S MESSAGE



"The importance of a positive Safety Culture has been demonstrated by a number of significant events in the United States and throughout the world. The NRC's Policy Statement, supported by a wide range of stakebolders-from nuclear power

plant operators to public interest groups – further emphasizes the tremendous importance of both safety and security in the nuclear industry."

> Gregory B. Jaczko Chairman, U.S. Nuclear Regulatory Commission

> > Photo Courtesy Entergy Nuclea

SAFETY CULTURE POLICY STATEMENT

In March 2011, the U.S. Nuclear Regulatory Commission (NRC or the

Commission) approved the Safety Culture Policy Statement. The Policy Statement was developed over a three-year period during which the agency engaged in extensive outreach with a broad range of stakeholders.

This Policy Statement provides the NRC'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. Because safety and security are the primary pillars of the NRC's regulatory mission, consideration of both safety and security issues, commensurate with their significance, is an underlying principle of the Safety Culture Policy Statement.

The policy statement applies to 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. In addition, the Commission encourages the Agreement States (States that assume regulatory authority over their own use of certain nuclear materials), their licensees, and other organizations interested in nuclear safety to support the development and maintenance of a positive safety culture within their regulated communities.

BACKGROUND

The 1986 nuclear accident at the Chernobyl nuclear power plant in the Ukraine revealed the importance of safety culture and the impact that weaknesses in safety culture can have on safety. Since then, the importance of a positive safety culture has been further demonstrated by a number of significant events in the United States and the international community. Assessments of



these events revealed that safety culture weaknesses were an underlying cause or increased the severity of problems.

The NRC addressed the importance of safety culture in two previously issued policy statements. The 1989

"Policy Statement on the Conduct of Nuclear Power Plant Operations" applies to all individuals engaged in activities that affect the safety of nuclear power plants and provides the NRC's expectations for utility management and licensed operators in the conduct of operations. The 1996 "Freedom of Employees in the Nuclear Industry To Raise Safety Concerns Without Fear of Retaliation" policy statement applies to the regulated activities of all NRC licensees and their contractors and subcontractors. It provides the expectation that licensees and other employers subject to NRC authority establish and maintain work environments in which employees feel free to raise safety concerns without fear of retaliation.

Following the September 11, 2001 terrorist attacks, the Commission issued orders enhancing security at

nuclear facilities. During the early years of implementation of these enhancements, several violations of the enhanced requirements occurred because of failures to cultivate a positive safety culture in the licensee's security program.

While discernable progress has been made by the nuclear community to strengthen nuclear safety culture since the Chernobyl accident, the NRC seeks to further emphasize the critical importance of safety culture by the issuance of this Policy Statement.



IMPORTANCE FOR REGULATED ENTITIES

Industry experience has shown the value of establishing and maintaining a positive safety culture. The NRC believes that through our continued



outreach activities this value will become apparent. It is important to remember that individuals and organizations performing regulated activities bear the primary responsibility for safety and security. The NRC can monitor and trend



the performance of individuals and organizations to determine compliance with requirements and commitments. Additionally, this information may serve as an indicator of possible problem areas in an organization's safety culture. However, the NRC does not monitor or trend the traits in the Policy Statement. The Policy Statement is not a regulation; therefore, it is the organization's responsibility, as part of its safety culture program, to consider how to apply this Policy Statement to its regulated activities.

MOVING FORWARD

As the Safety Culture Policy Statement enters the next phase, outreach, cooperation and interaction with and between external stakeholders will become even more important to the

success of the policy statement. During this phase, the NRC staff will continue to engage stakeholders in dialogue regarding the importance of a positive



safety culture in their specific activities and will also seek out feedback on the ability of stakeholders to use the policy statement in those activities, as



well as to determine whether there are areas in the policy statement where changes may be appropriate.

