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**Date:** 1/6/04 3:20PM  
**Subject:** Safety Culture/SCWE Definitions and Attributes

Please see the attached. At the 12/18/03 update ARB for the Salem/HC SCWE allegation, I was tasked with developing this document, for use as a point of reference when making our overall assessments of the culture/work environment at the site. Please review when you get an opportunity. Your comments are welcome. We can discuss at the next update ARB (1/8/04), if you like.

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### **Safety Culture/Safety Conscious Work Environment Definitions and Attributes**

At the 12/18/03 ARB for RI-2003-A-0110, the Allegation Office was tasked with developing a basic set of definitions and attributes for Safety Culture and SCWE so that such information could be used as a point of reference for comparing the findings of the ongoing SCWE review at Salem/Hope Creek. While the Allegation Office has retained a considerable amount of external/industry documentation related to SCWE, only NRC authored/sanctioned documentation (references listed below) has been used in developing the definitions and attributes indicated below, so as to preclude any perception of external influence or of "setting policy."

The information relating attributes of an SCWE was obtained directly from a recent effort accomplished by a special team that was assigned to develop such information as a result of an NRC Discrimination Task Group (DTG) recommendation (see SECY 02-166 regarding the Commission's response to the DTG recommendations). Please note that this information was developed very recently (10/03) and is still undergoing internal NRC comment. As such, while the effort appears to have been thorough and provides a very good reference for SCWE considerations, it is not "official" NRC policy at this moment.

#### **Safety Culture Definition**

The concept of safety culture was discussed within the agency most recently at a June 2003 ACRS meeting. Safety culture encompasses a broad spectrum of characteristics that include personnel attitudes, the control of work activities and organizational structure. Safety culture refers to fundamental values within an organization. ACRS indicated that the generally accepted working definition of safety culture, as it relates to NRC interests, has been provided by the International Nuclear Safety Advisory Group (INSAG) of the IAEA. Specifically, safety culture is "that assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance." ACRS noted that the Commission had proposed a similar definition in a January 1989, "Policy Statement on the Conduct of Nuclear Power Operations."

While safety culture and SCWE are often referred to interchangeably, SCWE is more appropriately considered to be a "subset" of safety culture, in that SCWE alone cannot produce a positive safety culture. Organizational characteristics and values that develop workers who raise safety concerns contribute to the larger objective of safety culture, and establishing and maintaining within that safety culture an environment that promotes the continued raising of safety concerns without fear of reprisal (i.e., an SCWE), should be an industry goal.

#### **Safety Culture Attributes**

At the June 2003 ACRS meeting, there was general agreement that the important attributes of safety culture include:

- a questioning attitude
- conservative decisionmaking
- attention to detail
- personal accountability
- adherence to procedures
- management leadership
- conservative management operating philosophy

- effective training
- effective corrective and preventive action

ACRS concluded that safety culture is important to safety performance and that existing regulations provide an appropriate framework for monitoring the impact of licensee safety culture on performance.

### **Safety Conscious Work Environment Definition**

While safety culture refers to fundamental organizational values, SCWE refers more specifically to the framework within which those values are practiced, fostered, and reinforced. The aforementioned 1989 NRC Policy Statement on the Conduct of Nuclear Power Operations indicated that it is a management responsibility to establish and maintain "a professional working environment with a focus on safety." The more recent definition of SCWE as described in the Commission's May 1996 Policy Statement refers to an environment in which employees are encouraged (and understand that it is their responsibility) to raise concerns both to their own management and/or to the NRC without fear of retaliation, and where such concerns are promptly reviewed, given the proper priority based on their potential safety significance, and appropriately resolved, with timely feedback to employees.

### **SCWE Attributes**

The NRC special team that was assigned to develop attributes of an SCWE as a result of an NRC Discrimination Task Group (DTG) recommendation has put together a draft document reflecting "Best Practices to Encourage a Safety Conscious Work Environment" (10/03). The following elements (in summary form) were identified. A more detailed version of this outline is available.

### **Effective Processes for Problem Identification and Resolution**

1. Self-Assessment of SCWE - licensee periodically evaluates and assesses information from pertinent areas/organizations that may contribute or negatively effect the SCWE to identify enhancements or adjustments to the SCWE (i.e., program enhancements, training enhancements, coaching and counseling, organizational changes, survey suggestions, etc.)
2. Employees are Encouraged to Raise Concerns
  - a. SCWE Policy exists
  - b. SCWE training is provided to employees/managers
  - c. SCWE is reinforced by demonstrated management behavior that promotes employee confidence in raising and resolving concerns, including availability, receptiveness, sensitivity, communications, timeliness, responsiveness, and incentive programs
  - d. Employees/managers have a positive orientation toward admitting and correcting personnel errors. While it is important to hold employees accountable for personnel errors, licensee personnel management practices, to the extent practical, should not discourage employees from raising concerns, near misses, etc.
3. Management is Promptly Notified of Concerns
  - a. Employees/management have an open and questioning attitude - ask "why" and "what if" type questions
  - b. Processes for raising concerns are accessible, user-friendly and ensure understanding of concern prior to inspection/proposed resolution

4. Concerns are Promptly Prioritized and Reviewed - safety/risk is appropriately considered, issue screening includes operability/reportability review as appropriate, good communications, timeliness, in-depth evaluation, thorough root cause assessment as appropriate, extent of condition.
5. Concerns are Appropriately Resolved - timeliness, root cause, extent of condition
6. Feedback is Provided to the Concerned Individual
7. Appeal Process for Concerns - An appeal process exists for employees who are dissatisfied with the resolution of their concerns (e.g. DPO, ADR).
8. Self-Assessments of PI&R Processes
9. An Alternative Process to line management or the Corrective Action Process is available that is accessible, but discrete. Process is advertised to staff, properly prioritizes issues and assures issues receive appropriate operability/reportability review, and provides for, accountability, identity protection, timely feedback, and status reporting. Appropriate resources are applied.

10. Performance Indicators:

Volume and trend of NRC allegations compared other concerns received internally as well as the number of NRC allegations received at other sites

Indicates: Employee willingness to raise concerns internally.

Volume and trend of NRC retaliation allegations compared to retaliation concerns received internally as well as the number of NRC retaliation allegations received at other sites

Indicates: Licensee effectiveness in preventing retaliation claims.

Percent of anonymous concerns raised

Indicates: Employee willingness to raise concerns without fear of retaliation.

Percent of risk significant concerns that are externally identified (INPO, NRC, OSHA, etc.), self-revealing, self-identified

Indicates: Employee willingness/ability to raise safety concerns; questioning attitude

Backlog and age of concerns

Indicates: Effectiveness of processes for resolving concerns

Quality of survey/interview tools

Indicates: Employee beliefs, attitudes and satisfaction with key SCWE attributes

Observations - supervisor/manager behavior, employee behavior

Indicates: Effectiveness of SCWE Training

Exit Interviews/surveys are conducted to facilitate identification of safety issues from exiting employees.

Indicates: Willingness of employees/contractors to raise safety concerns without fear of retaliation; Licensee effectiveness in preventing retaliation claims

360-degree appraisal programs:

**Indicates:** Employee expectations/perception of management SCWE behavior

**Improving Licensee Contractor Awareness of Their Responsibilities**

1. Licensee SCWE expectations are communicated (MOUs, contractual language, etc.) to contractors engaged in regulated activities.
2. Licensee oversees contractor SCWE-related matters. (policies, process, training)
3. Involvement of Licensee Management in Contractor Cases of Discrimination
4. SCWE training

**Involvement of Senior Management in Employment Actions Which Could be Motivated by Discrimination**

1. Programs/processes involving changes to employment conditions (e.g., disciplinary, reductions-in-force, etc) are well-defined, defensible, and communicated to the workforce.
2. Senior Management reviews proposed employment actions, before they are taken, to assess whether factors of retaliation or apparent retaliation are present, to ensure programs/processes are being followed to ensure actions are well founded and non-retaliatory, and to assess whether any mitigating actions can be taken to minimize potential chilling effects resulting from planned action.
3. After employment action is taken, assure appropriate level of management is involved if retaliation is alleged, to evaluate or reconsider action taken. Successful management implementation of mitigating actions planned to minimize potential chilling effect, including communications with the workforce that the action was taken for legitimate, non-retaliatory reasons.

**References:**

NRC Policy Statement, "Freedom of Employees in the Nuclear Industry to Raise Safety and Compliance Concerns Without Fear of Retaliation," 5/14/96

Federal Register Notice, "Safety Conscious Work Environment - Request for Public Comment," 2/26/97

SECY 97-260, "Resolution of Public Comments in Response to Request for Public Comments in Federal Register Notice "Safety Conscious Work Environment," 11/4/97

SECY 98-176, "Proposed Options for Assessing a Licensee's SCWE," 9/1/98

SECY 92-0166, Staff Requirements Memorandum, "Policy Options and Recommendations for Revising the NRC's Process for Handling Discrimination Issues," 3/28/2003

ACRS Letter to NRC Chairman Diaz, "Safety Culture," 7/16/03