

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

WEDWEST REPLY BY:

January 2, 2008

COMGBJ-08-0001

Approved/Disapproved. Comments attached.

Oale E. Klein 02/1/08

MEMORANDUM TO:

Chairman Klein

Commissioner Lyons

FROM:

Commissioner Jaczko

SUBJECT:

A COMMISSION POLICY STATEMENT ON SAFETY CULTURE

A healthy safety culture is an important part of ensuring the protection of the public in the generation of nuclear power and the use of radioactive materials, and the NRC should pursue continued progress in this area. Staff's efforts to advance this program for operating nuclear reactors have generated very positive results as attributes of safety culture have been in place within the Reactor Oversight Process for almost 18 months. This initial implementation period has provided the agency with sufficient data to assess and formalize an agency-wide safety culture initiative.

It is an appropriate time to complement the 1996 policy statement on a safety conscious work environment and the 1989 policy statement on the safe conduct of nuclear power plant operations. After years of work in this area, and after the operating experience of the ROP effort, the Commission should now direct the staff to provide the Commission with a draft "Policy Statement on Safety Culture." This policy statement should be broad and explain the Commission's expectations for a healthy safety and security culture at all NRC licensees. It should be developed through outreach to Members of Congress and other stakeholders. I look forward to working with my colleagues and our stakeholders to review and finalize this policy statement as a logical next step in our increasing focus on safety culture.

SECY, please track.

cc: OGC

**EDO** 

CFO

## Chairman Klein's Comments on COMGBJ-08-0001

I approve in part and disapprove in part Commissioner Jaczko's proposal in COMGBJ-08-0001. I agree with the idea of reassessing the concept of safety culture to widen its scope of applicability to all NRC-licensed facilities and to consider its applicability to security functions at these facilities. However, I disapprove tasking the staff at this time to develop a new policy statement that encompasses these considerations. Instead, the staff should complete its ongoing review of options to address licensee safety culture and provide a recommendation to the Commission.

The Commission has a long history of dealing with safety culture issues. In 1989, in response to instances of operator inattentiveness and unprofessional behavior in the control room of some nuclear power plants, the Commission first published a policy statement to foster the development and maintenance of a safety culture at nuclear power plants. Examples of unacceptable conduct observed at that time included licensed reactor operators sleeping while on duty, operators using entertainment devices that distracted their attention from operational and safety-related duties, and unauthorized individuals being allowed to manipulate reactivity controls. The 1989 policy statement and the supporting regulatory activities have helped to improve control room decorum over the years.

In 1996, in response to reports of management retaliation against licensee personnel for raising safety concerns, the Commission issued a policy statement affirming its expectation for NRC licensees to establish and maintain a safety-conscious work environment in which employees would feel free to raise concerns both to their own management and the NRC without fear of retaliation. The policy envisioned a positive environment reinforced by a management attitude that promotes employee confidence in raising and resolving concerns — where employees and managers would exhibit open and questioning attitudes with a positive orientation toward admitting and correcting personnel errors.

To help further this effort, the Commission directed the staff in 2003 to develop guidance that would identify best practices for establishing a safety-conscious work environment and to consider developing objective measures that could serve as indicators of possible problems with safety culture. In response to this Commission direction and the lessons learned from the reactor vessel head degradation event at Davis-Besse, which identified a weak safety culture as a root cause, the staff made changes to the Reactor Oversight Process in 2006 to address safety culture issues as part of the NRC inspection program.

A plethora of regulatory activities over the years, including those mentioned above, have helped to nurture and establish improved safety culture at the nuclear power plants; however, incidents of personnel misbehaviors and mistakes that reflect a weak safety culture continue to be reported at some facilities. As an example, a number of security-related events in recent years have raised questions about whether licensee efforts to establish and maintain a healthy safety culture is being communicated effectively to all plant personnel at some sites (and not just to the operations crew) as envisioned by the 1989 policy statement, which refers to safety culture as "the personal dedication and accountability of <u>all</u> individuals engaged in any activity which has a bearing on the safety of NRC-licensed facilities." However, despite its obvious implication, the recent reports of sleeping guards and other security-related incidents at some nuclear power plants suggest that there is a disconnect between the effort to enhance safety culture and the readiness to perform security functions at those plants.

One option for dealing with this disconnect could be to address "security culture" explicitly, separate from safety culture. This approach would address the uniqueness of security functions at the plants; however, this approach could also create competing demands that might undermine both safety and security or blur the safety-security interface. For example, securing a valve at a plant could delay or prevent its accessibility for providing a safety function. Another option to address this issue could be to articulate that security is a subset of safety culture by broadening the application of safety culture components of the Reactor Oversight Process to address security issues without calling for a separate security culture. I would expect the staff to consider those options as part of the ongoing review of the safety culture issue.

In the world of NRC-licensed facilities for handling nuclear materials, especially within the medical community, human errors of commission and omission occur too frequently to discount the possibility that a weak safety culture may be a contributor. Many Commissioners have raised this concern over the years, and I agree with Commissioners Jaczko and Lyons that all NRC-licensed facilities (i.e., fuel cycle, medical, industrial, academic facilities as well as existing and new reactors) should establish and maintain a healthy safety culture. The staff is currently considering whether the safety culture components in the Reactor Oversight Process could be applicable to all of our licensees. I suspect that a graded approach could be feasible, so that for small materials licensees, some of the components or safety culture attributes can be made more applicable than others.

The staff is presently deliberating the advantages and disadvantages of the various approaches discussed above for both the issue of safety culture applicability to security functions and how best to apply safety culture principles at all NRC-licensed facilities. The outcome of these discussions will not only inform which of the approaches would be more appropriate, but it should also inform the Commission whether revising the existing policy statements or developing new ones would be preferable. Consequently, it would be premature to task the staff at this time to develop a new policy statement that encompasses these major considerations without examining the feasibility of various options.

In summary, I agree with Commissioner Jaczko that the Commission policy on safety culture should be reassessed to consider incorporating security aspects and expanding its applicability to all NRC-licensed facilities; however, I do not support tasking the staff at this time to develop a new policy statement. Instead, I believe that it would be prudent for the staff to complete its ongoing evaluation first, and then provide a recommendation to the Commission for how best to update the Commission policy on this matter.

Dale E. Klein

Date

## **RESPONSE SHEET**

то:	Annette Vietti-Cook, Secretary
FROM:	COMMISSIONER LYONS
SUBJECT:	COMGBJ-08-0001 – A COMMISSION POLICY STATEMENT ON SAFETY CULTURE
Approved X	Disapproved X Abstain
Not Participating	
COMMENTS:	Below Attached X None
	Peter B. Lyons SIGNATURÉ
	1/ 3( /08 DATE
Entered on "STARS" Yes X No	

## Commissioner Lyons' Comments on COMGBJ-08-0001

I partially approve and partially disapprove the specific proposal by Commissioner Jaczko. I agree with the need to expand the Commision's policy of safety culture to address the unique aspects of security and to ensure the resulting policy is clearly seen to apply to all licensees and certificate holders. I approve a broad review by staff of issues related to safety culture. Safety and security culture programs can have positive impacts on all NRC and Agreement State licensees and certificate holders.

Commission Policy Statements already exist that touch on important safety culture principles. In addition, the staff is currently debating the advantages and disadvantages of treating security culture within or separate from safety culture. Finally, a safety-culture-pilot initiative for fuel cycle facilities is just getting started.

The Commission has repeatedly spoken to the importance of safety culture and has addressed this subject in several interactions with the Environment and Public Works Committee in oversight hearings. Many Commissioners, including me, have also expressed interest in extending safety culture beyond reactors, into the materials area and at fuel cycle facilities.

I support a broad review by staff of issues related to safety culture as part of the process of revising or developing additional Commission Policy Statement(s). Specifically, this review should address, at a minimum, the following:

- 1) Whether safety culture as applied to reactors needs to be strengthened.
- 2) How to increase attention to safety culture in the materials area.
- How stakeholder involvement can most effectively be used to address safety culture for all NRC and Agreement State licensees and certificate holders, including any unique aspects of security. The staff should, as part of its public stakeholder outreach, reach out to all types of licensees and certificate holders, including power reactors, research and test reactors, fuel facilities, spent fuel shipping and storage cask vendors, and the materials community, including industrial, academic, and medical users.
- 4) Whether publishing NRC's expectations for safety culture and for security culture is best accomplished in one safety/security culture statement or in two separate statements, one each for safety and security, while still considering the safety and security interfaces.

Staff's broad review should be prioritized relative to other staff initiatives. I anticipate a mid-level budget priority based on the fact that safety culture is already well advanced with reactors, the pilot with fuel cycle facilities is underway and safety culture is embraced implicitly in many materials uses. It is also necessary to actively involve the Agreement States so that any product developed fully incorporates their inputs within their areas of responsibility. This approach will provide the staff needed flexibility in working through a myriad of issues, internally and externally, so that a final proposal to the Commission will be a fully integrated, coherent, and a fundamentally principled proposal that will provide a stable policy foundation for revising or expanding the Commission Policy Statement(s) on safety culture.

ter B. Lyďns⁄ / Da