

IMPROVEMENTS TO THE REACTOR OVERSIGHT PROCESS

As discussed in SECY-05-0070, "Reactor Oversight Process Self-Assessment for Calendar Year 2004," April 25, 2005, the staff incorporated several enhancements to the treatment of substantive cross-cutting issues. The staff revised IMC 0305 "Operating Reactor Assessment Program," on December 21, 2004, to provide more specific guidance for the determination of a substantive cross-cutting issue in the areas of human performance and problem identification and resolution.

In SRM M050525B dated June 30, 2005, the Commission directed the staff to continue efforts to improve the guidance on substantive cross-cutting issues. Also, substantive cross-cutting issues were discussed at the March 2005 Regulatory Information Conference (RIC) and there were lessons learned for staff action after the conclusion of the most recent end-of-cycle assessment review meetings. As a result, the staff plans on issuing a revision to program office guidance in this area. These improvements will be implemented with consideration to the safety culture initiatives reported on in this paper.

Additionally, the staff completed the implementation of several Davis-Besse Lessons Learned Task Force (DBLLTF) recommendations that relate to safety culture, as follows:

- (A) DBLLTF Recommendation 3.2.5(2), "Revise inspection guidance to provide assessments of: (1) the safety implications of long-standing, unresolved problems; (2) corrective actions phased in over several years or refueling outages; and (3) deferred modifications:

Inspection Procedure (IP) 71152, "Identification and Resolution of Problems," was revised to require the resident inspector to perform a screening review of each item entered into the corrective action program. The intent of this review is to be alert to conditions such as repetitive equipment failures or human performance issues that might warrant additional follow-up through other baseline inspection procedures.

IP 71152, also was revised to require a semi-annual review to identify trends that might indicate the existence of a more significant safety issue. Included within the scope of this review are repetitive or closely related issues that may have been documented by the licensee outside the normal corrective action program, such as in trend reports or performance indicators, major equipment problem lists, repetitive and/or rework maintenance lists, departmental problem/challenges lists, system health reports, quality assurance audit/surveillance reports, self-assessment reports, maintenance rule assessments, or corrective action backlog lists.

IP 71111.15, "Operability Evaluations," was revised to include deferred modifications as one of the areas an inspector can assess to ensure that structures, systems, and components are capable of performing their design function.

- (B) DBLLTF Recommendation 3.3.1(1), "Provide training and reinforce expectations to NRC managers and staff members to address the following areas... maintaining a questioning attitude in the conduct of inspections..."

The staff developed a web-based training course based on the Columbia Space Shuttle accident to (1) illustrate the importance of maintaining a questioning attitude toward

safety and the potential negative consequences that can occur when such a questioning attitude is lost or compromised; (2) provide examples of how issues concerning an organization's safety culture can lead to technological failures; (3) provide insights into investigation techniques that can be used to assess safety significant issues or events; and (4) illustrate the importance of a robust corrective action program and highlight the corrective action program weaknesses that contributed to the shuttle accident

- (C) DBLLTF Recommendation 3.3.2(2), "Revise the overall PI&R inspection approach such that issues similar to those experienced at DBNPS are reviewed and assessed. Enhance the guidance for these inspections to prescribe the format of information that is screened when determining which specific problems will be reviewed."

IP 71152, "Identification and Resolution of Problems," was revised to include an inspection requirement to perform a semi-annual review to identify trends that might indicate the existence of a more significant safety issue.

- (D) DBLLTF Recommendation 3.3.4(5), "Review the range of NRC baseline inspections and plant assessment processes, as well as other NRC programs, to determine whether sufficient programs and processes are in place to identify and appropriately disposition the types of problems experienced at DBNPS. Additionally, provide more structured and focused inspections to assess licensee's employee concerns programs and safety conscious work environment (SCWE)."

The staff reviewed the NRC baseline inspection program and plant assessment processes and as a result enhanced the baseline inspection program by (1) requiring the screening of all licensee corrective action items, (2) performing a semi-annual trend review focused

on recurring equipment issues, (3) requiring containment walk downs during outages, (4) reviewing deferred modifications, and (5) evaluating licensee actions when operating with multiple, repetitive, or unplanned technical specification action statements. The staff enhanced the plant assessment process by (1) strengthening the oversight of plants in extended shutdowns, (2) requiring more complete documentation of important staff decisions, and (3) budgeting resources for Inspection Manual Chapter 0350 plants. The staff has also enhanced the Reactor Oversight Process (ROP) by requiring training on boric acid corrosion, stress corrosion cracking, and the importance of a questioning attitude, and requiring annual refresher training on different aspects of the ROP.

This memorandum informs the Commission of the staff's activities that respond to the Commission's August 30, 2004 Staff Requirements Memorandum to enhance the ROP's treatment of cross-cutting issues to more fully address safety culture. Therefore, the Safety Culture Response Plan addresses this DBLLTF recommendation to provide more focused inspections on employee concerns programs and SCWE.