

Department of Energy

Washington, DC 20585 May 12, 2004

The Honorable John T. Conway Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, NW Washington, D.C. 20004-2941

Dear Mr. Chairman:

In January 2004, the Department reported interim completion of Commitment 4.2.1.3 in the Department's Implementation Plan for Software Quality Assurance (SQA) in response to Board Recommendation 2002-1. This commitment required the Department to conduct a gap analysis to determine the actions needed to bring the six toolbox codes into compliance with SQA criteria and to develop a schedule with milestones to upgrade each code based on the gap analysis results.

The Department has completed additional code developer and peer reviews to further improve the accuracy of the gap analysis effort as described in the Secretary's letter to you on May 3, 2004. The attached final gap analyses reports for the MACCS2, ALOHA, EPICODE, MELCOR, GENII, and CFAST toolbox codes are complete. While SQA improvement actions are recommended for the six toolbox codes, no evidence has been found of programming, logic, or other types of software errors that would have led to non-conservatisms at defense nuclear facilities. In parallel with completion of these reports, we have contacted each of the code developers and will be evaluating further improvement actions, as described in the Secretary's May 3, 2004 letter.

The Guidance Reports for each of these codes are being finalized by the end of the month and provide information to users on the effective use of these codes. Questions concerning this commitment may be directed to Chip Lagdon at (301) 903-4218 or me at (301) 903-8008.

Sincerely,

Frank B. Russo

Deputy Assistant Secretary

for Corporate Performance Assessment

Sharon a. Root

Attachments

cc:

Mark B. Whitaker, DR-I Richard H. Lagdon, EH-31

MACCS2 Gap Analysis Reports ALOHA Gap Analysis Reports EPICODE Gap Analysis Reports MELCOR Gap Analysis Reports GENII Gap Analysis Reports CFAST Gap Analysis Reports

