

The Secretary of Energy Washington, DC 20585

November 21, 2002

The Honorable John T. Conway Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, NW, Suite 700 Washington, D.C. 20004

Dear Mr. Chairman:

The Department acknowledges receipt of the Defense Nuclear Facilities Safety Board's (Board) recommendation 2002-1, *Quality Assurance for Safety-Related Software*, issued on September 23, 2002, and published in the *Federal Register* on October 9, 2002. The Department accepts recommendation 2002-1 and will develop an implementation plan that results in the following:

- Clear assignment of organizational roles, responsibility, and authority for safety-related software.
- Creation of infrastructure necessary to ensure an effective software quality assurance program, including personnel with the appropriate skill and expertise.
- Implementation of processes to identify safety analyses and design codes and ensure that they are subject to verification and validation appropriate for the application.
- Establishment of requirements and guidance for a rigorous software quality assurance process, which will include the use of industry standards where practicable.
- Creation of a process that will track continuous improvements and initiatives in software technology. This information will be used as a basis for maintaining safety-related software and will be shared across the complex.

The Department has initiated activities to improve the implementation of quality management systems at its defense nuclear facilities. Many of these activities resulted from the deficiencies documented in the Board's Technical Report DNFSB/TECH-25, Quality Assurance for Safety-Related Software at Department

of Energy Defense Nuclear Facilities, and discussed at several of your public meetings on quality assurance. The Department considers its efforts to improve software quality assurance as a key element in the overall improvement of our quality management system, and the implementation plan will include and build on the actions that were previously undertaken as part of this initiative.

Ms. Beverly Cook, Assistant Secretary for Environment, Safety and Health, is the Department of Energy official responsible for safety-related quality assurance and for ensuring the successful completion of the implementation plan we will develop in response to your recommendation. Mr. Ray Hardwick, Office of Environment, Safety and Health, (301) 903-4244, is the responsible manager for the preparation of the Department's implementation plan.

Please feel free to contact either of them with any questions you may have as the Department moves forward with development of the implementation plan.

Sincerely,

Spencer Abraham