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# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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September 18, 2002

The Honorable Spencer Abraham  
Secretary of Energy  
1000 Independence Avenue, SW  
Washington, D.C. 20585-1000

Dear Secretary Abraham:

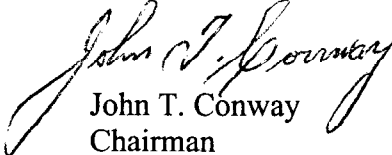
On March 8, 2000, the Defense Nuclear Facilities Safety Board (Board) issued Recommendation 2000-2, *Configuration Management, Vital Safety Systems*. This recommendation called for the Department of Energy (DOE) to take steps to ensure that safety systems for defense nuclear facilities will remain reliable and effective. In particular, the Board stressed the actions required to ensure the reliability of confinement ventilation systems. The Board approved DOE's Implementation Plan for Recommendation 2000-2 on December 14, 2000. This plan consists of 29 specific actions designed to meet the intent of the recommendation. Two of the key actions required by the plan are the performance of initial reviews of vital safety systems (Phase I assessments), followed by more detailed reviews of selected vital safety systems (Phase II assessments).

The Board's staff observed several Phase II assessments and reviewed the reports on completed assessments that have been received thus far. The Phase II assessment process has been effective in identifying deficiencies with vital safety systems. Common deficiencies have included surveillance tests that do not adequately confirm the operability of safety functions, poor configuration control, weak maintenance programs, and specific equipment deficiencies that require corrective action. In addition, many of the reviews revealed that the safety basis documentation did not adequately define the functional requirements for safety systems.

The Phase II assessment reports reviewed by the Board also indicate that the sites are taking corrective actions or developing plans to respond to identified deficiencies. The Board requests that each site provide to the Board its corrective action plans for addressing the deficiencies identified for each of the Phase II assessments.

Many of the actions in the Implementation Plan for Recommendation 2000-2 have been completed successfully, and DOE is making progress on the remaining items. The Board's staff has discussed those remaining items with members of your staff responsible for the implementation plan. A summary of those discussions are contained in the enclosure to this letter, provided for your information and use.

Sincerely,



John T. Conway  
Chairman

c: Mr. Mark B. Whitaker, Jr.

Enclosure

## Enclosure

### Actions Remaining to Implement Recommendation 2000-2

The following commitments under the Implementation Plan for Recommendation 2000-2, *Configuration Management, Vital Safety Systems*, remain open and require action to meet the intent of the recommendation:

1. The majority of the scheduled Phase II reports have been completed and provided to the Defense Nuclear Facilities Safety Board (Board). The Department of Energy (DOE) has stated that all but one scheduled Phase II report, could be completed prior to the briefing to the Board scheduled for the September–October period. The Board requests that each site provide its corrective action plans for each of the Phase II assessments once the plans are complete. Phase II assessment results at some sites have identified the need for additional Phase II assessments. The Board requests to be kept informed of plans for, and results from, any additional Phase II assessments.
2. As identified in the Board's letter of April 19, 2002, plans for institutionalizing the Phase II assessments should be provided to the Board.
3. In an August 14, 2002, letter to the Board, the Federal Technical Capability Panel (FTCP) provided a list of DOE personnel who are filling positions as subject matter experts (SME) in DOE's field and area offices. However, many inconsistencies are noted (e.g., many vacant positions with no plans to be filled, vacant positions to be filled from within the current DOE organization but for which no candidate has been identified as yet, and safety-system categories listed as non-existent in conflict with information provided in the original report of January 2002). The FTCP should resolve these inconsistencies with the field elements and resubmit the list.
4. The deliverable providing a schedule for completion of the DOE SME qualification standards did not meet the intent of the commitment in the implementation plan. The Board needs to see examples of how the actual changes would be made to the qualification standards. Once these examples have been provided and a reasonable schedule for revising the remaining standards is developed, these changes could be tracked through the DOE standards system.
5. The revised directive providing requirements and guidance for annual environment, safety and health assessments should be provided.
6. The revision to the Nuclear Air Cleaning Handbook needs to be completed and issued.