

**[DOE LETTERHEAD]**

September 15, 1992

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

Dear Mr. Conway:

The purpose of this letter is to provide the final Department of Energy (DOE) response to the Defense Nuclear Facilities Safety Board Recommendation 92-3. The Department accepts Recommendation 92-3 to require that contractor and DOE Operational Readiness Reviews (ORR) be conducted prior to restart of HB-Line. The Implementation plan Is enclosed.

My interim response to Board Recommendation 92-3 was provided July 14, 1992. You subsequently granted the Department a 45-day extension: In your letter granting the extension, you also requested specific restart planning documents and lists of ORR participants. These documents are In the final review and approval process and will be formally transmitted to you in the next several weeks.

Sincerely,

***James D. Watkins***  
***Admiral, U.S. Navy (Retired)***

Enclosure

Enclosure  
Implementation Plan for Recommendation 92-3

The numbers in the discussion below correspond to the individual elements in Recommendation 92-3.

1. The Department of Energy DOE direct Westinghouse Savannah River Company (WSRC) to reopen its Operational Readness Review (ORR) and that WSRC and DOE conduct adequate ORRs in accordance with previous Board recommendations and DOE implementation plans for ORRs at other facilities.

WSRC will reopen its ORR, and DOE will conduct another ORR before HB-Line startup. The implementation plans designed for other facilities based on Board recommendations will be used as a guide in the preparation of the HB-Line ORR plan. The approach will be tailored to address the history, current safety posture, and relative risk of HB-Line. The planned conduct of the DOE ORR was discussed with the Board and its staff. The plan for the WSRC ORR has been provided to the Board. - The DOE ORR plan with the Criteria Review and Approach Document (CRAD) will be provided to the Board no later than September 30, 1992.

2. Comprehensive criteria documents be established for judging and measuring readiness to restart. The criteria documents should include the bases for judging which safety issues must be resolved prior to resumption, and which issues may be deferred for resolution subsequent to restart.

The DOE ORR plan provides a basis for making a judgement for the individual areas being assessed which will provide a measure of the readiness of the facility for restart. The WSRC and DOE ORR plans will require identification of restart and postrestart issues and the basis for their classification.

An important function of the ORR will be to classify issues into those that require corrective actions prior to restart and those which can have corrective actions scheduled for completion after restart. These decisions will be made as a consensus judgement of the ORR team comparing the areas observed to the CRADs and considering the extent of the deficiencies, any compensatory measures, and relative risk. Another important aspect of a successful ORR is to assure closure of issues following completion of the ORR. The DOE ORR plan establishes criteria and contains an approach to achieve closure of ORR findings. This approach will assign responsibility for issue closure to the DOE Field Office, the DOE Field Office with technical assistance, or DOE Headquarters as deemed appropriate by the team.

3. WSRC issue a Readiness to Proceed Memorandum requesting DOE approval for resumption of operations after WSRC has completed its ORR and has determined that safety issues appropriate for closure prior to resumption have been adequately resolved. This will be required by the DOE and WSRC ORR plans.

4. DOE provide whatever assistance it deems appropriate to WSRC during the contractor's conduct of its ORR, recognizing that such assistance is separate and distinct from DOE's subsequent and independent execution of its own ORR.

The Department of Energy will provide assistance.

5. A DOE ORR team including a Senior Advisor Group conduct an independent and comprehensive ORR for HB-Line after (a) WSRC has conducted an adequate ORR and issue a Readiness to Proceed Memorandum requesting DOE approval for resumption of operations, and (b) DOE has sufficient reason to believe that significant deficiencies affecting the resumption and safe operation of HB-Line have been corrected by the contractor.

The Department of Energy ORR team will be a very senior group. Five of the nine members have been group leaders on previous ORRs or are senior safety experts. In addition, two of the remaining four team members have extensive experience. One was on the staff of the Advisory Committee for Nuclear Facility Safety, and the other has considerable engineering and operations experience on two major ORRs. The remaining two individuals were selected for the team based on their expertise in the respective fields of health physics and plutonium processing. An experienced team leader has been chosen and will use selected team members as an advisory group. WSRC will submit a Readiness to Proceed Memorandum to DOE/Savannah River Site (SRS). This memorandum will identify all deferred items, discrepancies, and open issues related to resumption. This memorandum will be submitted at the completion of the WSRC ORR. Inherent in this item is the completion of the WSRC ORR, starting the processing of the deficiencies through the issue management process, and completion of or, at a minimum, scheduling the corrective actions from the WSRC ORR. The Readiness to Proceed Memorandum recognizes that, while minor resumption activities may still be incomplete, they are scheduled for completion with progress against established milestones clearly illustrated.

6. The DOE ORR team consists of experienced individuals whose backgrounds collectively include all important facets of the operations involved; that the majority of the team members be independent of HB-Line direct line management responsibilities to ensure an independent and unbiased assessment.

The team that has been assembled meets these requirements. Additions to the team have been made at the suggestion of the Board and staff to ensure that we have included the correct complement of expertise.

7. In preparing for the Operational Readiness Reviews for the HB-Line DOE and WSRC should reexamine the HB-Line Safety Analysis Report (SAR) to ensure that: (a) the accident analyses adequately consider all credible scenarios (b) all appropriate engineered safety systems which are necessary to prevent accidents or mitigate the on-site and off-site consequences of those accidents are identified, and (c) the information obtained from the update Fire Hazards Analysis is consistent with the accident analyses.

WSRC has prepared a Justification for Continued Operation (JCO) for HB-Line. When approved, its purpose will be to augment existing safety documentation to demonstrate an adequate basis to continue operations while completing scheduled safety documentation upgrades. The JCO will contain descriptions and analyses of the bounding consequences of any identified credible scenarios not analyzed in the SAR, including the on-site bounding analysis. The JCO will also identify the engineered safety systems (ESS) necessary to prevent accidents or mitigate their on- and off-site consequences. Because the JCO, combined with the SAR and updated Operational Safety Requirements (OSRs), provide an adequate safety envelope including limiting conditions for operation type controls on items that function as barriers for release of radionuclides, the list of ESS derived will reinforce protection of workers and the public. The JCO is in the approval process and will be provided to the Board by October 2, 1992. Regarding item (c) above, DOE has committed to a thorough review and update of the Fire Hazards Analysis (FHA). Until this new FHA is completed and prior to restart, compensatory procedural measures have been implemented to reduce the probability of fire, reduce fire hazards, and ensure early control of fires. The information obtained from the FHA will be reviewed to ensure it is consistent with the accident analysis and safety envelope defined by the JCO, SAR and OSRs. Procedures are in place to: control and limit ignition sources, control and limit combustibles, require regular facility inspections, ensure rapid fire department response, and control personnel access. Some of these procedures will be evaluated during the WSRC and DOE ORRs to evaluate the effectiveness of their implementation. The compensatory measures will be documented in Compliance Schedule Agreement (CSA) 30 for DOE Order 5480.7 which will be approved by DOE and provided to the Board 10 days prior to restart.

8. WSRC and DOE should complete their assessment of compliance with DOE safety orders at HB-Line and finish their review, approval, and implementation of any compensatory measures that are necessary and appropriate to achieve the objectives of order compliance and safe resumption of operations at HB-Line.

Reviews have been completed for level 1 Orders for all Savannah River Site separations facilities, which include HB-Line. CSAs have been generated for any noncompliance identified and are in various stages of the review and approval process. A list of CSAs with estimated completion, approval, and implementation dates is being developed and will be provided to the Board by September 25, 1992. DOE will evaluate all CSAs that affect HB-Line and implement, prior to restart, those compensatory measures identified as necessary to assure safe operation. In addition, the WSRC and DOE ORRs will validate these measures and review the CSAs to assure all safety related compensatory measures have been adequately addressed.

The comprehensive criteria for judging and measuring readiness to restart, contained in the DOE ORR plan being developed, will be based, in part, on evaluating compliance with DOE Orders. The ORR will examine, on a performance basis, whether HB-Line has achieved a level of order compliance sufficient to permit safe operation of the facility by evaluating the implementation of selected DOE Orders.

The development of Requirements Identification Documents (RIDs) is addressed in DOE Recommendation 90-2 Implementation Plan. The specific HB-Line RID will be developed in accordance with the completion schedule contained in the Recommendation 90-2 Implementation Plan. It should be noted that facility specific RIDs will be developed subsequent to the development of generic RIDs.