DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004
(202) 208-6400 • FTS 268-6400

May 29, 1992

The Honorable James D. Watkins
Secretary of Energy
Washington, DC 20585

Dear Mr. Secretary:

In accordance with 42 U.S.C. § 2286a(2) the Board has conducted an investigation of DOE and contractor activities at the HB-Line at the Savannah River Site. Pursuant to that investigation which is drawing to a close, the Board sent to you Recommendation 92-1 by letter dated May 21, 1992.

In furtherance of that recommendation, the Defense Nuclear Facilities Safety Board, in accordance with 42 U.S.C. § 2286a(5), unanimously approved Recommendation 92-3 which is enclosed for your consideration. Recommendation 92-3 deals with operational readiness reviews for the HB-Line at the Savannah River Site, Aiken, South Carolina.

42 U.S.C. § 2286d(a) requires the Board, after receipt by you, to promptly make this recommendation available to the public in the Department of Energy's regional public reading rooms. The Board believes the recommendation contains no information which is classified or otherwise restricted. To the extent this recommendation does not include information restricted by DOE under the Atomic Energy Act of 1954, 42 U.S.C. §§ 2161-68, as amended, please arrange to have this recommendation promptly placed on file in your regional public reading rooms.

The Board will publish this recommendation in the Federal Register.

Sincerely,

John T. Conway
Chairman

Enclosure

RECOMMENDATION 92-3 TO THE SECRETARY OF ENERGY
pursuant to 42 U.S.C. § 2286a(5)
Atomic Energy Act of 1954, as amended.

Dated: May 29, 1992

As indicated in our recent Recommendation 92-1, the Board is continuing its oversight and investigation of health and safety issues related to the proposed resumption of plutonium processing in the HB-Line at the Savannah River Site, South Carolina. Our review of Department of Energy (DOE) and contractor documents, as well as other information obtained during the investigation to date, leads the Board to conclude that the Operational Readiness Review (ORR) of the HB-Line conducted by Westinghouse Savannah River Company (WSRC) during the summer of 1991, and DOE's subsequent review called an "ORE", were premature, limited in scope, and inadequate. Moreover, some of the conclusions reached seem suspect. The Board was particularly concerned that some safety issues requiring resolution prior to resumption of operations (Category 1) were reclassified as post-resumption issues (Category 2), without the concurrence of certain DOE team members, raising a question regarding the supportability of the findings. The ORRs did not ensure adequate resolution and closure of safety and health issues associated with the HB-Line, which had not been operated since 1987. When attempts were made to resume operations in the HB-Line during the summer of 1991, following the ORRs, a series of radiological exposures to workers and other safety incidents occurred, causing operations to be suspended. In October of 1991, the HB-Line resumed operations until March of 1992, when operations were again suspended due to an unreviewed safety question. The Office of Nuclear Safety's review, as well as other assessments of HB-Line, identified safety issues which still have not been resolved.

The Department has placed a priority upon safely resuming HB-Line operations to meet commitments made to NASA. While recognizing that the HB-Line may not pose an undue risk to the off-site public, the Board remains concerned with protection of on-site personnel, since an adequate assessment of operational readiness has not been conducted, nor has an adequate assessment of an accidental ground level release been performed.

The Board has determined that the conduct of adequate and thorough ORRs by WSRC and DOE are essential for identifying and resolving remaining health and safety issues affecting workers, and at the same time promptly achieving readiness for restart.

Therefore, the Board recommends that, prior to resuming operations in the HB-Line:

1. DOE direct WSRC to reopen its ORR, and that WSRC and DOE conduct adequate ORRs in accordance with previous Board recommendations and DOE implementation plans for ORRs at other facilities.

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.

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.

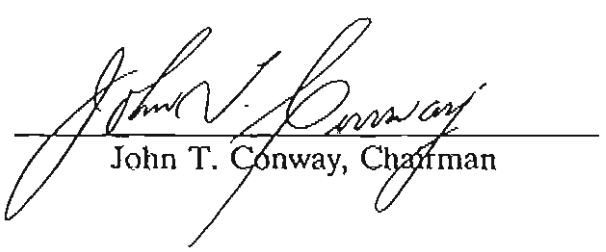
4. DOE provide whatever assistance it deems appropriate to WSRC during the contractor's conduct of its ORR, recognizing that such assistance is separate and distinct from DOE's subsequent and independent execution of its own ORR.

5. A DOE ORR team, including a Senior Advisory Group, conduct an independent and comprehensive ORR for HB-Line after (a) WSRC has conducted an adequate ORR and issued 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.

6. The DOE ORR team consist 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.

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 updated Fire Hazards Analysis is consistent with the accident analyses.

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.



John T. Conway, Chairman

[Recommendation 92-3]

Operational Readiness Reviews for the HB-Line at the Savannah River Site, Aiken, SC

AGENCY: Defense Nuclear Facilities Safety Board.

ACTION: Notice recommendation.

SUMMARY: The Defense Nuclear Facilities Safety Board has made a recommendation to the Secretary of Energy pursuant to 42 U.S.C. 2286a concerning operational readiness reviews for the HB-Line at the Savannah River Site, Aiken, South Carolina. The Board requests public comments on this recommendation.

DATES: Comments, data, views, or arguments concerning this recommendation are due on or before July 6, 1992.

ADDRESSES: Send comments, data, views, or arguments concerning this recommendation to: Defense Nuclear Facilities Safety Board, 625 Indiana Avenue NW., suite 700, Washington, DC 20004.

FOR FURTHER INFORMATION CONTACT: Kenneth M. Pusateri or Carole J. Council, at the address above or telephone (202) 208-6400.

Dated June 1, 1992.

John T. Conway,

Chairman.

[Recommendation 92-3]

Operational Readiness Reviews for the HB-Line at the Savannah River Site, Aiken, South Carolina

Dated: May 29, 1992.

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during the summer of 1991, and DOE's subsequent review called an "ORE", were premature, limited in scope, and inadequate. Moreover, some of the conclusions reached seem suspect. The Board was particularly concerned that some safety issues requiring resolution prior to resumption of operations (Category 1) were reclassified as post-resumption issues (Category 2), without the concurrence of certain DOE team members, raising a question regarding the supportability of the findings. The ORRs did not ensure adequate resolution and closure of safety and health issues associated with the HB-Line, which had not been operated since 1987. When attempts were made to resume operations in the HB-Line during the summer of 1991, following the ORRs, a series of radiological exposures to workers and other safety incidents occurred, causing operations to be suspended. In October of 1991, the HB-Line resumed operations until March of 1992, when operations were again suspended due to an unreviewed safety question. The Office of Nuclear Safety's review, as well as other assessments of HB-Line, identified safety issues which still have not been resolved.

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The Board has determined that the conduct of adequate and thorough ORRS by WSRC and DOE are essential for identifying and resolving remaining health and safety issues affecting workers, and at the same time promptly achieving readiness for restart.

Therefore, the Board recommends that, prior to resuming operations in the HB-Line:

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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.

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5. A DOE ORR team, including a Senior Advisory Group, conduct an independent and comprehensive ORR for HB-Line after (a) WSRC has conducted an adequate ORR and issued a Readiness to Proceed Memorandum requesting DOE approval for resumption of approval of 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.

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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.

John T. Conway,
Chairman.

Appendix—Transmittal Letter to the Secretary of Energy

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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John T. Conway, Chairman, A.J. Eggenberger, Vice Chairman, John W. Crawford, Jr., Herbert John Cecil Kouts

May 29, 1992

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Secretary of Energy, Washington, DC 20585

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Sincerely,

John T. Conway,
Chairman.

Enclosure

[FR Doc. 92-13061 Filed 6-3-92; 8:45 am]
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