

[DOE LETTERHEAD]

August 2, 1991

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:

In my letter to you of May 14, 1991, I accepted the Defense Nuclear Facilities Safety Board Recommendation 91-2, dated March 27, 1991. This recommendation suggested a modification to the process used to resolve issues contained in the Westinghouse Savannah River Company Reactor Operations Management Plan for restart of the K-Reactor. Enclosed is the Department of Energy's plan for implementing this recommendation.

Sincerely,

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

Enclosure

IMPLEMENTATION PLAN FOR SAVANNAH RIVER SITE K-REACTOR RESTART ISSUE CLOSURE PROCESS

1.0 INTRODUCTION

1.1 Purpose

On March 27, 1991, the Defense Nuclear Facilities Safety Board (DNFSB) recommended to the Secretary of Energy that the Department of Energy (DOE) modify the process for resolving safety issues in the Reactor Operations Management Plan (ROMP) for the K-Reactor at the Savannah River Site. Specifically, the DNFSB recommended in Recommendation 91-2:

1. That each closure package of an issue in the ROMP be provided with a brief narrative discussion that clarifies the meaning of the issue, describes the steps that were taken to resolve it, states the reason for concluding that closure has been achieved, and shows how the referenced documents support the claim of closure,
2. That the DOE revert to its earlier plan to fully review and concur with the determinations of each issue closure."

The Secretary of Energy accepted the Board's Recommendation 91-2 on May 14, 1991. This plan describes how this recommendation will be implemented.

1.2 Background

The operating contractor in June 1989 assembled the principal safety issues required to be resolved prior to restart in the Westinghouse Savannah River Company (WSRC) ROMP, WSRC-RP-89-368. The current version of the ROMP (Revision 5, issued November 5, 1990) contains the principal safety issues identified through numerous past reviews by a number of organizations, including in-house groups of the DOE, a committee of the National Research Council of the National Academies of Science and Engineering, the Operating Contractor, the Restart Issues Management Program (RIMP) process and the ongoing emerging issue process.

The following paragraphs describe the process by which the ROMP issues were being closed out at the time of the DNFSB recommendation.

Charlotte Criteria and Westinghouse Independent Safety Review (WISR) restart work items contained in the ROMP were to be closed by WSRC line management, followed by review of WSRC internal oversight organizations. Final approval was to be given by the WSRC Reactor Restart Division (RRD) Vice President and General Manager. This process is defined in Special Procedure SP-399-4, "Reactor Restart Closure Process" (Enclosure 1). Copies of these closure packages were provided to DOE for review.

The 41 Quality Assurance (QA)-related restart work items that are identified in the ROMP were to undergo closure via the following method. Personnel from the WSRC Reactor Restart QA

organization were to prepare closure packages in accordance with the requirements of RQPT-I-003, "Control of RQPT Closure Packages" (Enclosure 2). As part of this process, personnel from the WSRC RRD organization were to conduct surveillances to ensure that the acceptance criteria identified in the ROMP were satisfied and that required deliverables were complete. Completed closure packages were to be approved by the Reactor QA (RQA) Manager. DOE was to be notified that the packages were available for review and closeout. W E personnel from the Savannah River Restart Special Projects Office (SRSPPO) Safety Oversight Division (SOD) were to review the closure packages. Final DOE approval of closure of the QA ROMP packages was to be documented in the SOD Monthly Report and section 3.0 of the Safety Evaluation Report (SER), as appropriate.

Other major components of the ROMP, including implementation of Outage Work, relevant items from the DOE SER, other DOE requests, and relevant Issue Management Committee decisions, were to be closed by the WSRC RQA and Assessment Department's Operational Readiness Review (ORR) group in accordance with the requirements of the ORR Plan (OPS-SAM-890008) and the ORR Procedure (OPS-SAM-890009). Copies of these documents are provided in Enclosures 3 and 4.

The WSRC Operational Readiness Evaluation Program provide an independent evaluation of restart readiness. This team was to sample Charlotte Criteria, WISR and other ROMP deliverables, and evaluate the effectiveness of the WSRC ORR process.

As a final check of the adequacy of the closure process, the DOE ORR was to review reactor restart closure programs. This was to include, on a sampling basis, assessment of the implementation of programs and closure of issues within the SER and ROMP.

This was the process as it existed prior to the DNFSB recommendation. The Department and WSRC will modify this in order to provide standardized closure narratives and facilitate independent review as described in the W E response to the individual DNFSB recommendations. This augmentation is described in sections 2 and 3, below.

2.0 PROGRAM DESCRIPTION

2.1 Scope

The scope of the ROMP Closure Process involves all restart-required work items contained in Revision 5 of the WSRC ROMP issued November 5, 1990, as shown in the contents section of Volume 2, pages 1 through 11. This includes 142 items originated from Charlotte Criteria and WISR, 41 QA related items, 55 Issues Management originated items and 51 SER (SE) items. This listing is provided as Enclosure S. Closure packages typically consolidate a number of ROMP work items into a single closure package. The total number of packages to be submitted will be approximately 250.

2.2 ROMP Closure Process Objectives

The objective of the ROMP closure process is to document the technical rationale for concluding that the actions taken by WSRC and DOE regarding the principal safety issues required to be resolved in connection with restart of K-Reactor have been effectively implemented and have produced the desired objective. The process is to be carried out in a manner that facilitates independent review and clearly documents DOE review and concurrence on each safety issue.

2.3 Detailed Technical Approach

This section describes the operating contractor's process for developing ROMP closure packages and the DOE process for review and concurrence of those closure packages.

2.3.1 ROMP Closure Package Preparation

The process by which WSRC prepares closure packages, as described in section 1.2 of this implementation plan, will remain the same; however, each closure package will be augmented with a closure narrative. A dedicated group has been established within WSRC RRD to accomplish this goal. A closure narrative manager has been assigned within the WSRC Reactor Restart Technical Department who will be responsible for developing the closure narratives, consistent with the established closure processes and schedules. Engineers and support personnel are assigned to this manager to gather the necessary information, to author the closure narratives, to obtain approval from cognizant engineers and managers, and to assist in resolution of comments from DOE or DNFSB. In addition, support is being provided by the WSRC Closure Group, the Readiness Assessments Section, the Reactor QA Section, and the Nuclear Safety Section.

Additional engineers, part of a task team within RRD to assist various closure activities, are supporting the closure narrative manager in the effort to develop closure narratives for ROMP issues which are already closed per WSRC procedures.

Line organizations throughout RRD, Savannah River Laboratory, Engineering and Projects Division, and elsewhere in WSRC will be called upon, as necessary, to obtain information not available in closure files, and to review and approve the closure narratives prepared by the closure narrative group.

Closure packages have already been prepared by WSRC for some ROMP issues. A closure narrative is being prepared for each of the closed issues and submitted for DOE review and concurrence. For ROMP issues not yet closed, WSRC will proceed with closure using the established closure processes and schedules. A closure narrative will be prepared and submitted with each closure package for DOE review and approval. Certain ROMP issues have been combined into single closure narratives because they are related. Examples are (1) SE-5.2 and MS-19, each of which address implementation of WSRC's Unreviewed Safety Question process; and (2) QA items in ROMP which combine to establish a QA program consistent with the intent of national standards for such programs. When a single closure narrative is prepared for multiple issues not yet submitted to W E, a separate copy of the combined narrative will be provided with each of the closure packages covered by the narrative.

2.3.2 DOE Review and Concurrence of ROMP Closure Packages

The procedure for W E review and concurrence of ROMP closure packages is specified in SRSPO Administrative Instruction AI-1, Reactor Restart Program Management Plan, Revision 2, dated April 1, 1991 (Enclosure 6). This process is summarized as follows:

The Director, SRSPO, identifies divisions which are responsible for the oversight of the activities identified by the ROMP and the SER. Each SRSPO Division Director then assigns cognizant engineers to oversee each of the specific areas of responsibilities which fall under the purview of his/her respective division. It is the cognizant engineer's responsibility to staff the ROMP closure and to prepare the appropriate correspondence when satisfied the package is adequate for approval.

At the request of the Director, SRSPO, some ROMP closure packages may be sent to the Office of Processing and Reactor Facilities (OPRF) for DOE review and concurrence. These packages will follow the same closure process as those closed by SRSPO cognizant engineers.

ROMP items will be considered closed when the following actions are verified by the SRSPO Cognizant Engineer:

1. A ROMP closure package and closure narrative will be approved when it demonstrates that the work scope required by the restart item has been completed satisfactorily. Requirements affecting closure are listed below:
 - All deliverables are consistent with the SER criteria, or other applicable requirements.
 - The ROMP closure narrative provides a brief narrative discussion that clarifies the meaning of the issue, describes the steps that were taken to resolve it, states the technical reasons for concluding that closure has been achieved, and shows how the referenced documents support the claim of closure. If the closure document has been superseded by later revisions due to disapproval by DOE, the closure narrative documents the issues and changes that were involved.
 - If implementation reviews are appropriate to the item, the approval should assure that the implementation review is coordinated within the framework of an existing restart program such as the ORR or SER implementation review.
 - If circumstances have changed so that the restart item is no longer appropriate, or if significant and substantive changes were made to the restart item, the approval action should verify that the basis for the change is included in the contractor's closure narrative, and is acceptable to DOE.
2. The concurrence action will take the form of a letter to the contractor for the Director's signature which provides the basis for the W E approval. Where an SER section or a

monthly report provides sufficient documentation, it can be attached to a short letter as the approval action. The Deputy Director is delegated approval authority for ROMP closure package approvals.

Final action by the SRSPO Cognizant Engineer will be the completion of a RAIL closure form which is to be sent to the appropriate SRSPO organization (Attachment 7.4 of SRSPO Administration Guideline AG-157, Action Item Tracking System and Closure Process, Revision 1, dated April 1, 1991), along with a copy of the approval letter.

3.0 ADMINISTRATION OF THE PROGRAM

3.1 Responsibilities

The principal operating contractor responsibility for ROMP closure is assigned to the Vice President and General Manager, RRD, WSRC. Day to day management, reporting, tracking, and accuracy of technical content of the program is delegated to the Reactor Restart Technical Director. The Director, SRSPO is responsible for establishing the W E process for review and concurrence of the ROMP closure package and closure narrative. The Deputy Director, SRSPO, is delegated authority for approval of the closure packages and closure narratives.

3.2 Project Management Plan

This implementation plan serves as the Project Management Plan in accordance with W E Order 4700.1, Project Management System.

3.3 Quality Assurance Plan

This implementation plan will be carried out in accordance with SRSPO Administrative Instruction AI-110, QA and WSRC-IQ, WSRC QA Manual.

Four specific provisions will assure that the closure narratives provided by WSRC are quality products.

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- a. The ROMP "deliverables" are prepared as part of WSRC's established workscope which is controlled by the established management control and QA procedures. These include the site-wide Management Procedures and Requirements (MPRs), the RD-1 Manual, individual department QA procedures, and RRD QA procedures. This control assures that the basic products of the restart program, upon which the narratives are based, are of the desired high level of quality.
- b. The closure of each ROMP Issue requires independent verification that the "deliverables" specified in ROMP are complete. For Charlotte/WISR items, the closure process is

defined in Special Procedures SP-399-4 "Reactor Restart Closure Process" (Enclosure 1). For QA items, the closure process is defined in RQPT-I-003, "Control of RQPT Closure Packages" (Enclosure 2). For other ROMP items, (OW, DO, IM, and SE) the closure process is defined in ORR Procedure, OPS-SAM-890009 (Enclosure 4). These closure processes further assure that the ROMP requirements have been met for each deliverable.

- c. The closure narrative prepared pursuant to Recommendation 91-02 will be prepared to reflect the completed, quality-assured deliverables discussed in (a) and (b) above. The approval process for each closure narrative requires sign-off by the Cognizant Engineer (if appropriate), Cognizant Manager, and responsible Department Manager. These individuals will concur and sign the closure narrative only after they are satisfied that it is accurate and properly characterizes the ROMP issue and its closure.
- d. The preparation of closure narratives has been assigned to a senior WSRC manager. He/she will review each closure narrative to assure that it contains the information identified in DNFSB's recommendation and that the technical logic of issue closure is clear. He/she will also assure consistency. When satisfied that the closure narrative is adequate, the closure narrative manager will recommend approvals/sign-off by the Vice President and General Manager of RRD. When satisfied that it is adequate, the Vice President and General Manager or his/her designee will sign the narrative.

In addition to these efforts, OPRF will sample the ROMP closure packages approved by SRSPO to provide further assurance that the closure process has been adequately performed.

These four measures, along with the OPRF review, will assure that the closure narratives are of consistent high quality, reflecting proper closure of the ROMP issue.

4.0 DOCUMENTS TO BE SUBMITTED TO DNFSB AND SCHEDULE

The DNFSB will be provided copies of closure packages, closure narratives, and documentation of the DOE review and concurrence following the DOE review process. The audit report conducted by OPRF on the effectiveness of the process will be provided to the DNFSB. The DNFSB will also be provided copies of the DOE ORR reports which shall contain documentation of the ORR's evaluation of the closure package process.

As of July 2, 1991, 52 ROMP closure packages with closure narratives have been submitted to the DNFSB. We expect to transmit approximately 17 packages to the DNFSB each week. The final transmittal of ROMP closure packages and summaries is expected to be sent to the DNFSB by September 16, 1991.

5.0 ENCLOSURES

The following documents that are associated with the overall ROMP closure process are attached as enclosures:

1. WSRC SP-399-4, Reactor Restart Closure Process (U).
2. WSRC RQPT-I-003, Control of RQPT Closure Packages.
3. WSRC OPS-SAM-890008, Reactor Restart Operational Readiness Review Plan.
4. WSRC OPS-SAM-890009, Reactor Restart Operational Readiness Review Procedure.
5. Listing of all ROMP Items.
6. SRSPO AI-1, Reactor Restart Program Management Plan.