

Bechtel Power Corporation

Engineers — Constructors

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Gaithersburg, Maryland 20760
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October 23, 1979

Mr. U. Potapovs, Chief
Vendor Inspection Branch
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012

Dear Mr. Potapovs:

Reference: Letter, September 24, 1979; U. Potapovs, USNRC, to
J. M. Komes, Bechtel Power Corporation
Docket No. 99900519/79-03

This letter is in response to the referenced letter which transmitted the report of your inspection of the Gaithersburg Power Division Quality Assurance Program. The inspection was conducted by Mr. R. H. Brickley and D. F. Fox of your office on August 21-24, 1979.

The attachment to this letter contains our response to your report, including a description of corrective action, steps being taken to prevent recurrence, and the dates corrective action will be completed.

Your Inspection Report No. 99900519/79-03 contains no information which we believe to be proprietary.

Very truly yours,

A handwritten signature in dark ink, appearing to read "J. M. Komes", with a long horizontal flourish extending to the right.

J. M. Komes
Vice President and Division Manager

JMK:vpw

Attachment

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NRC INSPECTION REPORT

No. 99900519/79-03

Notice of Deviation

Criterion V of Appendix B to 10 CFR 50 states:

"Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

The deviations and Bechtel's response for each noted deviation from these requirements is as follows:

- A. "Section 3.2 to Policy No. QG-5.1 (Instructions, Procedures, and Drawings) of the Gaithersburg Power Division Nuclear Quality Assurance Manual states in part, "Design, procurement and construction activities shall be defined by and conducted according to written procedures. These procedures shall outline the personnel responsibilities, sequence of activities and methods used to assure that adequate controls are employed. The instructions, procedures and drawings shall be prepared, reviewed, approved and distributed prior to the start of the activity . . . "

Contrary to the above, neither instructions nor procedures exist that prescribe Bechtel-Gaithersburg activities in the comparison and evaluation of as-built safety-related piping systems with respect to the input parameters used in the seismic analysis for Hatch Unit 2."

Response:

Corrective (Remedial) and Preventative (Nonrecurring) Action

E. I. Hatch Nuclear Plan Project Procedures for IE Bulletin #79-14 Nonconformance Determination, Evaluation and Disposition for As-Built Seismic Category I Piping System Data for Hatch Units 1 and 2, Revision 0, was prepared, approved and issued on August 24, 1979.

- B. "Section 17A.1.3 of the PSAR for the SNUPPS Project states in part ". . . design changes, including field changes, are subjected to design control measures commensurate with those applied to the original design "

Contrary to the above, Revision 8 of the SNUPPS Project implementing Instruction No. EDPI - 4.49-01, entitled "Project Specifications," does not require that designs changes, including field changes, be subjected to design control measures commensurate with those applied to the original design."

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Response

Corrective Action (Remedial)

The SNUPPS Project implementing Instruction No. EDPI - 4.49-01, Project Specifications, Section 5.7, was revised on August 24, 1979, as follows.

"5.7 Revision Subsequent to Issue for Purchase, Contract, or Construction

- 5.7.1 Review and concurrence by quality engineering of all Q-listed specification revisions subsequent to issue for purchase, contract, or construction is required prior to issue. The same procedure as outlined in 5.2 and 5.6 is followed.
- 5.7.2 Significant changes which affect the technical content of the specification will be coordinated with those disciplines which originally reviewed the specification and are affected by the change, as determined by the Group Supervisor of the discipline which originated the specification.
- 5.7.3 The Group Supervisor and the cognizant Project Engineer will review and approve all specification revisions in accordance with paragraphs 5.3 and 5.5 of this procedure. The Chief Engineer's review will be in accordance with paragraph 5.4 of this procedure."

Action to Prevent Recurrence

The revised EPDI has been distributed to the holders of the SNUPPS Project Engineering Procedures Manual and will provide the necessary project procedure requirements to ensure that design changes, including field changes, be subjected to design control measures commensurate with those applied to the original design.

- C. "Section 17A. of the PSAR for the SNUPPS Project endorses ANSI N45.2.11 which states in Section 10, ". . . design documentation and records which provide evidence that the design and review process was performed in accordance with the requirements of this standard shall be collected, stored, and maintained in accordance with the requirements of ANSI N45.2.9. The documentation shall include not only the final documents such as drawings and specifications, and revisions thereto, but also the records of the important steps, including sources of design inputs, which support the final design"

Contrary to the above, SNUPPS Project implementing instructions do not require the retention of records for Bechtel generated design documents which document the following important steps in the design and review process:

1. The identity of the interfacing design groups that reviewed each document.

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2. That design interface information resulting from such reviews was communicated to the group preparing or revising the document.
3. That such transmitted design interface information was incorporated into the document to the satisfaction of the reviewer.

Response

Corrective (Remedial) and Preventative (Nonrecurring) Action

This item had been discussed, on a generic basis, previously with the NRC I&E Region IV and NRR personnel. As a result of these discussions, Bechtel's QA Topical Report, BQ-TOP-1, was revised and accepted by the NRC in July 1977, to clarify Bechtel's position regarding retention of such documentation. Bechtel's position was once again reaffirmed by the NRC QA Branch, Division of Project Management, as indicated by the attached NRC letter (Attachment 1, Deviation 79-03C) dated September 25, 1979, (from John W. Gilray, Quality Assurance Branch, Division of Project Management to Walter P. Haass, Chief Quality Assurance Branch Division of Project Management).

In view of the above, we believe that the SNUPPS Project EDPIs comply with the requirements of ANSI N45.2.11. However, since the SNUPPS Project PSAR does not presently contain the modification to ANSI N45.2.11 requirements, included in BQ-TOP-1 (Page A-10, Item 4), Chapter 17 will be revised to be consistent with BQ-TOP-1.

Since a revision to Chapter 17 involves coordination with SNUPPS/Utilities, it is anticipated that the contents of Chapter 17 will be revised by December 31, 1979.

- D. "Revision 0 of Bechtel implementing procedure EDP-7.5, entitled "Engineering Document Signature and Initials Identification," states in part ". . . signatures and initials on engineering documents are reproducible, identifiable and unique to the individual signatory"

Contrary to the above, the signatures or initials on Revision 6 of Bechtel engineering document No. 10466-M-218A(Q) and Revision 0 of Bechtel engineering document No. 10466-M-637(Q) were not reproducible."

Response

Corrective Action (Remedial)

Revision 5 of Specification 10466-M-218A(Q) has been remicrofilmed and the approval signatures are reproducible.

Two signatures from Revision 0 of Specification 10466-M-637(Q) have been darkened by the same individuals who originally signed the specification. The specification has been remicrofilmed and the signatures previously not reproducible are now reproducible.

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Action to Prevent Recurrence

On October 8, 1979, microfiche of eleven specifications, involving 47 revisions, were reviewed by a member of the Project Quality Engineering Group to determine if the signatures on the specifications reviewed were reproducible. All 188 signatures were found to be reproducible.

- E. "Revision 6 of SNUPPS Project implementing instruction EDPI-5.16-01, entitled "Supplier Document Control Procedure", states in part ". . . SDDC (Bechtel Project Supplier Document Control Center) . . . stamps the reproducible with the SNUPPS Document Review Stamp"

Contrary to the above, Westinghouse supplied drawing No. 617 F 944 (SNUPPS Project Document No. 10466-M-705-005-02) did not exhibit the required SNUPPS Document Review Stamp."

Response

Westinghouse Drawing No. 617 F 944 was reviewed and signed off by Bechtel Engineering, as required by EDPI 5.16-01 on November 17, 1975. A copy of this drawing, with the required SNUPPS Document Review Stamp, was shown to the NRC Inspector. In 1977, SNUPPS directed Bechtel to accept Westinghouse's proposal for providing microfilmable quality acetate reproducible of all previously transmitted and all future transmittals of all Westinghouse drawings given a Code 1 or 5 approval by Bechtel. It was agreed between SNUPPS, Westinghouse, and Bechtel that Westinghouse would resubmit to Bechtel previously approved drawings with a stamp certifying that each drawing is a true and exact copy of the original Westinghouse drawing with the same drawing number and revisions which had previously been given a Code 1 or 5 approval by Bechtel. As such, Bechtel records contain two identical Westinghouse Drawing No. 617 F 944, one showing the SNUPPS Document Review Stamp and the other certifying that the drawing had previously been approved Code 1 by Bechtel. Copies of both drawings were reviewed by the NRC Inspector and the reason for the existence of two drawings was explained during the conduct of the inspection. We believe, that in this instance, the requirements of EDPI 5.16-01 were properly complied with, and, therefore, no remedial and/or preventative action is required.

- F. "Concerning Revision 8 of SNUPPS Project implementing instruction EDPI-4.49-01, entitled "Project Specifications," the following requirements and deviations from these requirements were identified:

1. Paragraph 7.0 states in part, ". . . the typed original of the technical portion of the specification and appendices will be under the control of the project editor"

Contrary to the above, the typed originals of Revision 0 thru 5 of the technical portion and/or appendices of SNUPPS Project Specification No. 10466-M-637(Q) could not be located.

2. Paragraph 5.3 states in part, ". . . the group supervisor shall provide for the registered professional engineer seal(s) on all applicable specifications"

Contrary to the above, Revision 3 of SNUPPS Project Specification No. 10466-M-074(Q) and 10466-M-081(Q) did not exhibit the required registered professional engineer's signature or initials."

Response

1. It is felt that this item has been identified as a deviation in error as a result of the misunderstanding of the EDPI requirements by the Inspector. Paragraph 7 of EDPI 4.49-01, Revision 8, requires that specification revisions be microfilmed as they are issued. Record copies of each specification revision are maintained on microforms.

The EDPI further states that "Following reproduction, the typed original of the technical portion of the specification and appendices will be under the control of the Project Editor for use in updating of future issues." The Project Editor is required to maintain a typed original of the latest revision of the specification only for use in updating for further issues, and therefore, the typed originals of Revisions 0 through 4 are not available and are not required to be retained by the Project Editor. Further, the Project Editor's files were not reviewed during the inspection. The typed original of Revision 5 of Specification 10466-M-637 is available and is being maintained by the Project Editor. In addition, please note that Revisions 0 through 5 of Specification 10466-M-637 are available on microfiche in SNUPPS record storage locations.

In view of the above, no further actions, remedial or preventative, are required.

2. It is felt the identification of the specifications cited in the NRC Report are in error. The NRC Inspector had reviewed Revision 3 of Specifications 10466-A-074(Q) and 10466-A-081(Q). These specifications are issued by the Architectural Group. The requirement for Registered Professional Engineers Seals pertains to design specifications involving ASME Code Section III items only. We are not aware of any NRC requirements related to Professional Engineers Seals other than the requirements contained in the ASME Code Section III. Since the Architectural specifications do not involve ASME Section III items, they do not require Professional Engineers Seals.

As such, no remedial and preventative actions are necessary or planned.

- G. "Revision 12 of SNUPPS Project implementing instruction EDPI-4.46-01, entitled "Project Engineering Drawings," states in part . . . controlled drawing prints will be inserted in the group supervisor's/

group leader's print file(s) by the administrative group. Superseded prints will be stamped "superseded""

Contrary to the above, superseded Revision 2 of SNUPPS Project Engineering Drawing No. 10466-E-01NG20(Q) in the Mechanical/Electrical group controlled print files was not stamped 'superseded'."

Corrective Action (Remedial)

Revision 2 of the Project Engineering Drawing No. 10466-E-01NG20(Q) has been removed from the Mechanical/Electrical Group(s) controlled print files.

Action to Prevent Recurrence

Surveillances were performed between August 28, 1979, and October 3, 1979, by Project Quality Engineering personnel at all four controlled print locations. The surveillances identified isolated cases of similar deficiencies, all of which have since been corrected.

- H. "Revision 12 of SNUPPS Project implementing instruction EDPI-4.46-01, entitled "Project Engineering Drawings," states in part, ". . . the SNUPPS Project Engineering Document Release Log (see EDPI 5.30-01) provides a record of Bechtel project engineering drawings released/ issued by the project"

Revision 8 of SNUPPS Project implementing instruction EDPI-4.49-01, entitled "Project Specifications," invokes the same requirement for project engineering specifications.

Contrary to the above, copies indicated as having been released/ issued and distributed by the SNUPPS Project Engineering Document Release Log could not be located in the designated project files. Specific examples of drawings and specifications that could not be located in the project files, designated in EDPI-5.25-01, "Bechtel Master Distribution Schedule," are as follows:

1. Drawing No. 10466-M-0H1211(Q), Revision 1, dated February 25, 1977.
2. Drawing No. 10466-M-01AE01(Q), Revision D, dated October 25, 1977.
3. Drawing No. 10466-M-00AB(Q), Revision 3, dated March 7, 1978.
4. Drawing No. 10466-M-00AE(Q), Revision 4, dated October 25, 1977.
5. Specification No. 10466-M-637(Q), Revision 5, dated March 7, 1978."

Response

It is felt that this item has been identified as a deviation in error as a result of misunderstanding of the EDPI requirements by the NRC Inspector.

The quoted sections of EDPI 4.46-01 and 4.49-01 refer to the SNUPPS Project Engineering Document Release Log and in both cases, explain that the purpose of the log is to identify and list the titles, identify the numbers, latest revision number, and dates of release of the drawings and specifications. The logs do not specify the distribution, as indicated by the NRC Audit Finding, of the drawings and specifications.

It should be noted that each revision of drawings and specifications are required to be microfilmed at the time of their release and distribution. Microfilms of all documents identified in the NRC Inspection Report are available with the exception of 10466-M-0H1211. This document does not exist and the entry in the document release log was a keypunch error. The error was corrected during the inspection, and the inspector was informed of the error and correction.

During the inspection the "controlled sets" of drawings were reviewed to determine if the latest revisions of the drawings mentioned in the NRC Inspection Report were available. The maintenance of "controlled sets" of drawings is performed per EDPI 4.46-01. EDPI 4.46-01 requires that the "controlled sets" consist of drawing prints considered necessary by the Group Supervisor to support his group's design activities. As such, not all drawings are required to be maintained in each "controlled set."

Therefore, the drawings mentioned in the NRC report were not available at the "controlled sets" reviewed during the NRC inspection.

As for Specification 10466-M-637(Q), please refer to the response to Deviation 79-03F, responded to herein as Item F1.

As such, no remedial and preventative actions are necessary or planned.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 25 1979

POOR ORIGINAL



MEMORANDUM FOR: Walter P. Haass, Chief, Quality Assurance Branch,
Division of Project Management

FROM: John W. Gilray, Quality Assurance Branch,
Division of Project Management

SUBJECT: SUMMARY REPORT OF MEETING WITH BECHTEL

On September 20, 1979, Jack Spraul and I met at the Gaithersburg Power Division of Bechtel Power Corporation with the following Bechtel personnel:

- John Amaral - Division QA Manager
- Charles Corley - Division Engineering Manager
- Bahman Kanga - SNUPPS Project Manager
- Bob Merriman* - Quality Assurance
- Joe Milos* - SNUPPS PQAE
- Lou Sirianni - Quality Assurance *Part time

The purpose of the meeting was to review Bechtel's design verification process and related documentation and to determine the need for retention of coordination prints. (Exception 4 to Revision 2 of Regulatory Guide 1.64 given in Bechtel's topical report on quality assurance, BQ-TOP-1, states that in-process documentation relating to checking and coordination of drawings (for example, check and coordination prints) or copies of marked-up specifications used to solicit comments shall be retained until the drawing or specification is approved and issued for use outside of Bechtel Engineering. Such in-process documents will be available for review/audit until the document is approved, but may be discarded once the document has been approved. Thus, while ongoing work can be audited, the only evidence of checking and interdisciplinary coordination of issued documents is the initials on the documents.)

B. Kanga described and illustrated Bechtel's design process. A question and answer period followed and several procedures were presented relating to Bechtel's policy regarding the retention of check and coordination documents. The procedures (EDP-4.46, Rev. 4, June 29, 1979 and SNUPPS EDPI-4.46-01, Rev. 12, June 28, 1979) were reviewed. The checking and interdisciplinary review processes were discussed in some detail. We again conclude that the exception to Regulatory Guide 1.64, noted above and accepted in August 1977 as part of Revision 2 of BQ-TOP-1, provides an acceptable method of meeting Appendix B to 10 CFR Part 50.

Before leaving, we were shown the 3/4 inch = 1 foot model of the SNUPPS facilities which Bechtel has made and is maintaining. It appears to be a very useful tool.

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John W. Gilray
John W. Gilray
Quality Assurance Branch
Division of Project Management

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cc: John Amaral, Bechtel
R. Brickley, Reg. IV

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