

Washington Public Power Supply System

P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

Docket No. 50-397

February 2, 1983

G02-83-88

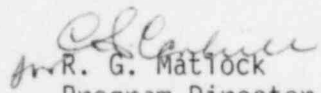
Mr. D. M. Sternberg
Chief, Reactor Projects
Branch No. 1
U.S. Nuclear Regulatory Commission
1450 Maria Lane, Suite 210
Walnut Creek, California 94596

Subject: NUCLEAR PROJECT NO. 2
NRC INSPECTION 82-27 - NOTICE OF VIOLATION

Reference: Letter D.M. Sternberg to R.G. Matlock, dated January 4, 1983

Washington Public Power Supply System hereby replies to the Notice of Violation transmitted as Appendix A via the referenced letter. Our reply pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice" Part 2 Title 10 Code of Federal Regulations, consists of this letter and Attachment 1 which contains our response to the Notice of Violation.

If you have any questions or desire further information, please contact Roger Johnson at (509) 377-2501, extension 2712.


R. G. Matlock
Program Director, WNP-2

RTJ/kd

Attachment: Response to Notice of Violation

cc: W.S. Chin, BPA - Site
A. Forrest, Burns and Roe - HAP0
N.D. Lewis, NRC
J. Plunkett, NUS Corp.
A. Toth, NRC Resident Inspector - 917Q
Document Control Desk, NRC
WNP-2 Files - 917B

STATE OF WASHINGTON)

COUNTY OF BENTON)

CHARLES S. CARLISLE, Being first duly sworn, deposes and says: That he is acting for the WNP-2 Program Director of the WASHINGTON PUBLIC POWER SUPPLY SYSTEM, the permit holder herein; that he is authorized to submit the foregoing on behalf of said permit holder; that he has read the foregoing and attachments listed therein and knows the contents thereof; and believes the same to be true to the best of his knowledge.

DATED: February 2, 1983

C. S. Carlisle
C. S. CARLISLE

On this day personally appeared before me C. S. Carlisle to me known to be the individual who executed the foregoing instrument and acknowledged that he signed the same as his free act and deed for the uses and purposes therein mentioned.

GIVEN under my hand and seal this 2 day of February, 1983.

John W. [Signature]
Notary Public in and for the State of
Washington
Residing at Kenneth WA

Attachment 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
DOCKET NO. 50-397
LICENSE NO. CPPR-93

RESPONSE TO INSPECTION REPORT 82-27 NOTICE OF VIOLATION

The following are Supply System responses to the violations identified in Appendix A of the reference letter. For purposes of clarity, each violation is repeated followed by our response.

- A. Criterion IX of 10CFR50 Appendix B states, in part, that "measures shall be established to assure that special processes, including welding ... are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes ..."

The applicable Project Specification 215B identifies the applicable Code as ASME Section III Class 2, for the standby liquid control system pump suction line. Section NB-4233 of the Code allows that piping welding maximum mis-alignment at any one point around the joint shall not exceed 3/32-inch.

Contrary to the above, completed weld joint SLC-045-13.15, Weld Number 6 was misaligned on the outside diameter by 7/64-inch at one point and 1/8-inch at a second point. This condition had been accepted by the original installation contractor prior to June 1980, identified as a discrepancy during subsequent Bechtel reverification program inspections in 1982, and improperly accepted by the Engineer and Management reviewers.

This is a Severity Level V Violation.

SUPPLY SYSTEM RESPONSE

A UT examination of the subject weld was performed on January 13, 1983, and UT indication plots were generated for the weld at 20° and 270°. The external surface of the weld required grinding to permit ultrasonic testing. These two areas were chosen as exhibiting the greatest amount of misalignment based upon visual examination of the weld exterior, an internal examination using a boroscope, and a previously performed informational UT exam. An external profile of the weld at these locations was plotted graphically and a series of UT thickness measurements was then performed and also plotted on the same graph. Once plotted, the amount of internal alignment was measured directly from the graph. An evaluation was performed by members of the Supply System Engineering staff and the Supply System NDE Level III examiner. Based on the evaluation, the amount of internal misalignment was determined to be 1/32" maximum at 20° and 3/32" maximum at 270°, which is within the tolerance of ASME Section III, NB 4233, therefore, no code violation exists.

In addition, the Architect Engineer (Burns and Roe) performed an additional technical evaluation of the weld quality and concluded that the weld is acceptable as is and had not been compromised by the preweld fitup offset. The joint area shows counter boring which is normally used to round and/or match pipe sections, and the weld root bead is discernable all the way around the joint and has no defects of the type caused by excessive misalignment.

Corrective Action Taken to Preclude Recurrence

A reevaluation program has been instituted to review the Reverification Quality Control Inspection Records which were field-dispositioned by the Burns and Roe engineer who accepted the weld mismatch condition. The engineer in question is no longer employed at Washington Nuclear Project No. 2. The program will verify that the correct discipline engineer has reviewed the Quality Control Inspection Records and that the resolution is technically correct.

This reevaluation program includes field reinspection, as required, and a final report to the Supply System Reverification Program Manager, summarizing results of the program.

A total of ninety-five inspection records are included in the review, which is scheduled to be completed no later than January 28, 1983.

Date of Full Compliance

Full compliance of weld number 6 (SLC-045-13.15) was achieved with the completion of the ultrasonic evaluation on January 13, 1983. Full compliance of the actions to preclude recurrence is scheduled to be complete March 1, 1983 with the completion of the reevaluation program report.

- B. Criterion V of 10CFR50 Appendix B states: "Activities affecting quality shall be prescribed by documented instructions, procedures or drawings, of a type appropriate to the circumstances and ... shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Contrary to the above, on November 17, 1982, the Bechtel Quality Control Inspectors had unavailable to them appropriate inspection instructions for evaluation of welds of pipe support strut end brackets to piping curved surfaces. Such a weld on Support MSRV-4A-1 was designated as a flare-bevel weld with 5/16-inch reinforcement. The bracket actually used, and not prohibited, did not have a flare configuration; nor was the pipe curvature sufficient to result in a flare bevel configuration. The weld was accepted by a Quality Control Inspector on November 9, 1982. However, the weld throat was less than specified by design, to the extent that the piping curvature resulted in weld root gap of greater than 1/8-inch.

This is a Severity Level IV Violation (Supplement II).

SUPPLY SYSTEM RESPONSE

The subject potential nonconformance was documented on Nonconformance Report (NCR) No. 250-020512 dated December 22, 1982. This condition was dispositioned as acceptable-as-is by the Architect/Engineer. In addition, a Project Engineering Directive (PED) No. 215-H-H122 was issued January 4, 1983, to provide clarification of the welding requirements for these types of installations. The engineering direction provided states, in essence, that weld leg size must be increased to compensate for gaps of up to 1/8-inch between the end bracket and the curved surface. For gaps larger than 1/8-inch the flare groove weld will provide specified strength when combined with the specified fillet weld.

Corrective Action Taken to Preclude Recurrence

The Architect Engineer has reviewed Quality Class 1 and ASME hanger detail drawings and determined that twelve (12) supports have been installed which utilize the subject end bracket weld configuration. A reinspection of the welds for these 12 brackets is scheduled to be performed by Bechtel Quality Control personnel and Burns and Roe Field Engineers. The results of these reinspections will be provided to the Architect Engineer for evaluation of acceptability. The necessity for any required rework will be determined based upon the results of this reinspection program.

Date of Full Compliance

The reinspection of the 12 supports will be complete by February 25, 1983. The results of the Engineer's evaluation will be made available to the Resident Inspector by March 11, 1983.