

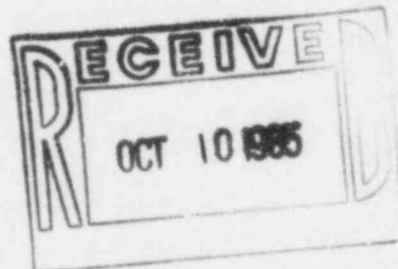


Nebraska Public Power District

GENERAL OFFICE
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NLS8500277

October 7, 1985



Mr. E. H. Johnson, Chief
Reactor Project Branch I
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Dear Mr. Johnson:

Subject: Nebraska Public Power District Response to IE Inspection Report
No. 50-298/85-21

This letter is written in response to your letter dated September 6, 1985, transmitting Inspection Report No. 50-298/85-21. Therein you indicated that one of our activities was in violation of Nuclear Regulatory Commission requirements. The following is a statement of the violation and our response in accordance with 10CFR2.201:

STATEMENT OF VIOLATION

Nebraska Public Power District (NPPD) Procedures for Preparation and Completion Closure of CNS Design Change

10CFR Part 50, Appendix B, Criterion V requires that activities affecting quality be prescribed by documented instructions or procedures which shall include appropriate quantitative or qualitative acceptance criteria.

Contrary to the above, no NPPD procedure existed to assure inclusion of engineered preload torques for ASME boiler and pressure vessel code Section III (Nuclear) CNS design changes, nor did NPPD procedures exist to verify that nonconforming material was not installed or that as-built design changes met the specified design criteria.

This is a Severity Level IV violation (Supplement ID) (50-298/8521-01).

Corrective Steps Which Have Been Taken and the Results Achieved

The corrective actions taken regarding the specific design changes addressed during the inspection are listed below:

a. Design Change 77-130 "Blind Flanges on Scram Discharge"

The existing nonconforming Grade 8 (SAE) bolts and nuts were replaced with SA 193 (bolts) and SA 194 (nuts), respectively.

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Additionally, engineering analysis was performed and documented to determine the proper bolt preload torques in accordance with ANSI B31.7.

b. Design Change 78-016 "Torus Drain Connection"

The existing nonconforming A-193 (bolts) and A-194 (nuts) were replaced with SA 193 (bolts) and SA 194 (nuts), respectively. The existing nonconforming spiral-wound, metal-asbestos gaskets were left in place pending tentative plans to drain the suppression pool during a refueling outage scheduled for the Fall of 1986, at which time they would be replaced. Following replacement of the nonconforming bolts and nuts during the 1984-85 refueling outage, the subject flanged joints showed no evidence of leakage during the primary containment Integrated Leak Rate Test (ILRT) and are thus considered adequate for operation until the Fall of 1986.

Additionally, an engineering evaluation was performed to determine the acceptability of the existing 8" elbow to 8" torus drain flanged connection. This evaluation concluded that the existing surface finish on the torus penetration flange was acceptable as is, for use with a spiral-wound metal asbestos ("flexitallic") gasket.

Engineering analysis was performed to determine the proper bolt preload torques for the torus drain flanges in accordance with ASME Section VIII as was discussed in Design Change 77-130.

c. Torus Drain Flanges

The new blind flange was intended to replace the original supplied by CBI per their Drawing 64 on Contract 68-2211. The drawing did not require a surface finish on either the flange surface or the O-ring groove surface.

Since the groove shown is a nonstandard O-ring groove and no dimensions were given, we specified the two known O-rings to be supplied with appropriate grooves leaving the manufacturer with the requirement to develop the correct groove dimensions and finish.

The nitrile O-ring provided, while certainly not as long-lived as a silicone O-ring, will give satisfactory service during its allowable life span.

The bolt design and preload were provided by EDS Nuclear as part of their Mark I work. This was transmitted to NPPD and DUCI (our installer) under EDS File Memorandum CNS/EDS138. DUCI performed the work and QC'd it per their process control sheet for NPPD Sketch No. 1, Revision 0.

Corrective Steps Which Will Be Taken To Avoid Further Violation

The District feels that this violation stems from an inadequate station design change procedure in that the existing procedure did not specifically address the shortcomings noted in the Statement of Violation.

The following steps will be taken to avoid future violations in this area:

- a. A review of all completed safety-related station design changes will be performed to verify inclusion of engineered preload torque calculations, where required:
- b. Engineering Procedure 3.4, "Station Design Changes", will be revised as follows:
 - 1) The design input checklist, Attachment D, will be revised to ensure adequate specificity in the area of code design requirements. It is anticipated that, as a result of this review, the design input checklist will be expanded to address additional specific line items such as bolt preload torque and code material verification.
 - 2) Changes will be made to address procedural adequacy regarding verification of conforming materials used and as-built conditions versus design specifications. These changes will emphasize the area of QC Implementation.

The District feels that the procedure revisions noted above will completely address the concerns raised in this violation and preclude further violations in this area.

Date When Full Compliance Will Be Achieved

Full compliance for the following items will be achieved by the indicated dates:

Item	Date
1. Revise Attachment D to Station Procedure 3.4.	December 31, 1985
2. Revise Procedure 3.4 to address procedural adequacy as described in b.2 above.	June 30, 1986
3. Review of all completed safety-related design changes to verify preload torque calculation.	June 30, 1986

As stated above, the nonconforming spiral-wound, metal-asbestos gaskets in Design Change 78-016 will be replaced if plant conditions (i.e, torus drained) permit during the Fall 1986 outage.

It was requested in the transmittal letter of Violation 50-298/8521-01 that our response address the adequacy and accuracy of completion closure of design changes. It should be noted that two of the design changes reviewed during this inspection were written in 1977 and 1978. Since then, the station design change procedure has undergone approximately ten revisions, including a major procedure rewrite in May, 1985, as a result of PAT Audit 50-298/84-21 findings. With the additional procedure changes described in this response, it is felt that the administrative controls governing the design change process are now adequate. Regarding past design change control practices, an effort to determine the adequacy of station drawings in reflecting the as-built condition of the station was performed prior to start-up from the last outage. While minor problems were noted and are being corrected, and in

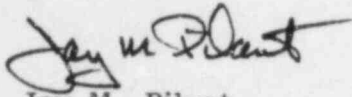
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consideration of the review of all safety-related design changes noted in the response given above, the District feels that the existing as-built configuration is sufficient such that reactor safety is not affected.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jay M. Pilant", with a stylized flourish at the end.

Jay M. Pilant
Technical Staff Manager
Nuclear Power Group

JMP/SSF/WHR:emz8/3