ILLINOIS POWER COMPANY

0981-L
U-10030

CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

February 18, 1983

Docket No. 50-461

Mr. R. C. Knop
Chief Projects Branch 1
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Subject: Response to Notice of Violation dated January 18, 1983 and NRC IE Inspection Report 82-20

Dear Mr. Knop:

This letter is in response to your Notice of Violation dated January 18, 1983 and Inspection Report Number 50-461/82-20. Illinois Power Company's response to the Notice of Violation is as follows:

The Notice of Violation states in part:

"Contrary to the above, the design analysis of the emergency diesel engine exhaust piping did not include bellows expansion joint pressure thrust calculations."

1. Corrective Action Taken and the Results Achieved

As a result of Sargent & Lundy's (S&L) design re-evaluation and record check, it was confirmed that insufficient bellows expansion joint considerations were factored into the overall system stress analysis. The re-evaluation included reanalysis of the three diesel generator exhaust piping systems and associated bellows using the correct exhaust pressure in relation to the postulated plant events listed in the System Design Specification. Service Level A, B, and C loads were recalculated using a 0.2 psig exhaust pressure. Service Level D loads were recalculated using the design value of 5.0 psig. The loads from the reanalysis are still within the design capacity of the supports. The support drawings will be revised by March 31, 1983 to reflect the revised loads given in the amended stress report.

The present design calculations identify the resulting torsional effects imposed at the installed bellows. A

re-evaluation of the torsional loadings imposed on the bellows reconfirmed the adequacy of the bellows for these loads.

The overall system stability has been verified through review of the existing calculations of the total system. Tie bars are not included in the design since the bellows absorb axial movement. Lateral stability of the support arrangement has been confirmed.

II. Corrective Action to be Taken to Avoid Further Noncompliance

The Sargent & Lundy PIPSYS Training Manual, now in use, was revised in mid-1982 to include requirements for modeling expansion joint bellows and for considering the pressure thrust loads for untied expansion joints. Illinois Power believes that implementation of the revised manual will be sufficient to avoid further noncompliance.

III. Date When Full Compliance Will Be Achieved

Illinois Power will be in full compliance by March 31, 1983.

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Inspection Report Number 82-20 identified five open items for which a written response is required. Illinois Power Company's response to these items is as follows:

A. 82-20-02 Baldwin Weld Procedure Specification booklets are not subject to the necessary controls. This problem has been previously identified by Illinois Power QA surveillance finding C-82-049 dated October 10, 1982.

Response:

Corrective action, being taken in accordance with finding C-82-049, is to revise procedure BAP 2.0, Document Control, to control the distribution of booklets. The revised procedure and the associated training will prevent recurrence of this problem. The procedure revision was completed February 11, 1983. Issuance of controlled booklets to craft and inspection personnel will be completed March 4, 1983.

B. 82-20-03 The NRC IE inspector determined that isometric drawings and sketches used for installation do not contain system flow arrows or flow direction.

Response:

This weakness had been previously identified by Illinois Power. A review, by S&L, of the contractor's isometric piping drawings was initiated as a result of an Illinois Power identified 10CFR50.55(e) Deficiency (82-10). The review is being conducted in accordance with S&L Project Instruction PI-CP-040, S&L Review of Contractors' Isometric Piping Drawings, which includes the requirement for review for flow direction. This drawing review constitutes action to avoid recurrence. Sargent & Lundy's review of piping isometric drawings will be completed by April 1, 1983. When the design review is complete, BA will revise procedure BAP 2.14. Fabrication / Installation of Items, Systems, Components and Component Supports, and associated job instructions to clearly define that the piping isometrics, reviewed by Sargent & Lundy, are the drawings to be used for installation.

C. 82-20-04 Marking of socket welds for fit-up inspection to assure the approximate 1/16" gap, required by ASME Code, Section III, was questioned by the NRC IE inspector.

Response:

Procedure BTS-405, Procedure Specification for Visual Inspection of Weldments, requires inspection of fit-up but does not prescribe any verification of the 1/16" gap after welding. ASME Code, Section III does not require verification of the gap after welding is complete; therefore, such verification is not a project requirement. The 1/16" gap will continue to be verified at fit-up.

D. 82-20-05 The current practice of inspection of skewed fillet welds, mainly used on hanger supports (piping, electrical, and HVAC) was questioned by the NRC IE inspector due to inaccessibility and lack of means to accurately determine adequacy of weld types and sizes.

Response:

Corrective action was to suspend initial and final reviews of travelers with skewed fillet welds and to stop inspection of skewed fillet welds until resolution by the design organization. Additional corrective action will be scheduled as necessary to implement specific provisions of the resolution which is due March 2, 1983.

E. 82-20-06 Baldwin personnel were verifying wall thickness for pre-service inspection weld joints without using a controlled procedure.

Response:

Corrective action was to generate procedure BTSI-012, Instructions for the Usage of Inspection Devices, to include the manufacturer's instructions which were used to perform this test. The procedure includes those items from the training program which already certified and documented the training / certification of the persons using the digital ultrasonic device. Training on the new procedure BTSI-012 was completed and the procedure released for construction December 28, 1982. No further corrective action is necessary.

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I trust that our response is satisfactory to allow closure of the item of noncompliance and the open items identified in Inspection Report Number 82-20. I hereby affirm that the information in this letter is correct to the best of my knowledge.

Sincerely yours,

D. P. Hall
Vice President

cc: J. G. Keppler (Regional Administrator, Region III)
Director, Office of Inspection and Enforcement,
Washington, D. C.
NRC Resident Inspector
Illinois Department of Nuclear Safety
IP Manager - Quality Assurance