GULF STATES UTILITIES COMPANY
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June 1, 1984
RBG-17969
File Nos. G9.5, G9.25.1.1

Mr. John T. Collins, Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV, Office of Inspection and Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Dear Mr. Collins:

River Bend Station Unit 1
Docket No. 50-458
Final Report/DR-149

On May 3, 1984, GSU notified Region IV by telephone it had determined DR-149 concerning postweld heat treatment for fabricated pipe supports supplied by Bergen-Paterson to be reportable under 10CFR50.55(e). The attachment to this letter is GSU's final 30-day written report pursuant to 10CFR50.55(e) with regard to this deficiency.

Sincerely,

J. E. Booker

J. E. Booker
Manager-Engineering,
Nuclear Fuels & Licensing
River Bend Nuclear Group

JEB/LAE/je

cc: Director of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

NRC Resident Inspector - Site

INPO

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ATTACHMENT

DR/149/Postweld Heat Treatment
for Fabricated Pipe Supports Supplied
by Bergen - Paterson

Background and Description of the Problem

This deficiency concerns a lack of postweld heat treatment (PWHT) that was not in accordance with the requirements of NF-4622.3-1 of ASME-III. This deficiency was identified in Nonconformance and Disposition Report (N&D) Nos. 4577, 3744, 4671, and 4693. These PWHT requirements were not met by Bergen Paterson, B.F. Shaw, and Stone & Webster Engineering Corporation/(SWEC) Construction.

The underlying cause of the problem was that SWEC engineers' weld data sheets and vendor work order sheets inadvertently excluded instructions for PWHT.

Safety Implication

PWHT is essential for reducing residual stresses in the weldments. A lack of PWHT may have developed significant residual stresses, especially in the thicker base metal, because of its characteristic at a greater heat sink. These residual stresses could have affected the fracture behavior of materials by contributing to buckling and brittle fracture. This could have resulted in the failure of safety-related pipe supports and, hence, piping systems, had the deficiency remained uncorrected.

Corrective Action

The deficiency was corrected by the approved repair or rework procedures outlined in the disposition details of the above- mentioned N&Ds. Also, to preclude recurrence of this problem, appropriate weld data sheets have been corrected for proper PWHT requirements. In addition, FQC had discovered these problem during a 100-percent review of all Category I pipe support drawings, and since then, all the new or modified pipe supports, excluding component standard supports, are fabricated at the site. Therefore, onsite fabrication of these types of supports will preclude recurrence of these problems from Bergen-Paterson or Shaw.