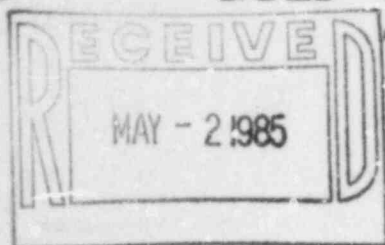




GULF STATES UTILITIES COMPANY



RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70775
AREA CODE 504 635-6094 346-8651

April 26, 1985
RBG- 20818
File Nos. G9.5, G9.25.1.1

Mr. Robert D. Martin, Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Dear Mr. Martin:

River Bend Station - Unit 1
Docket No. 50-458
Final Report/DR-281

On April 12, 1985, Gulf States Utilities Company (GSU) notified Region IV by telephone that it had determined DR-281 concerning the nonuniform bearing of the charcoal filter housings steel channels against the surface of their concrete mounting and/or resting pads 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)(3) with regard to this deficiency.

Sincerely,

J. E. Booker

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

PJD
JEB/PJD/amg

Attachment

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

NRC Resident Inspector-Site

INPO

85-265

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Safety Implication

The seismic report for all the charcoal filters is based on the following:

1. Full bearing of the support channel at anchor bolt location.
2. Full bearing between the concrete surface and mounting channel throughout the length.

The subassemblies of the housing are fabricated and welded by the manufacturer in the shop. The joining of the subassemblies is done in the field after the sections are in place.

It will require extensive analysis to determine whether the welds between the subassemblies would have sustained the additional stress caused by this condition if the gaps between the mounting surface were to have remained uncorrected. Therefore, it can be conservatively assumed that the welds would fail under the design conditions and would not maintain the pressure boundary integrity, therefore releasing iodine in the area causing a hazard to public safety.

Corrective Action

Uneven bearing was discussed and evaluated with the equipment manufacturer, and it was recommended that the gap between the steel channel and the concrete pad be packed with steel shims as specified in E&DCR No. C-14,553A.

The extent of the problem has been determined to be limited to equipment listed on E&DCR No. C-14,553A.

The corrective action has been completed.

ATTACHMENT

April 26, 1985
RBG-20818

DR-281/NONUNIFORM BEARING OF IODINE REMOVAL CHARCOAL FILTER HOUSING TO THEIR CONCRETE PADS

Background and Description of the Problem

The deficiency concerns the nonuniform bearing of the charcoal filter housings steel channels against the surface of their concrete mounting/resting pads, as identified in Engineering and Design Coordination Report (E&DCR) No. C-14,553A. The six rectangular concrete pads (average size 9 ft wide by 37 ft long by 6 in. high) that provide mounting surfaces for the six charcoal filter housings were placed to their finished elevation. The multiple steel channels which are fastened to the undersides of the filter housings by the manufacturer did not accomplish the complete bearing against concrete throughout the entire length of the channels, as intended, due to the uneven surface of the concrete pads as a result of single placement.

The seismic qualification report submitted by the equipment manufacturer is based on full, continuous support throughout the mounting channels. Additionally, the manufacturer's Installation Instructions Manual No. 3.225.220.115.001 clearly shows the filter housing channels resting at full bearing contact at the anchor bolt locations. Reference Detail A and Section B-B on the drawings within Section E of the manual.

E&DCR No. C-3987B deleted the requirement of 5 in. of concrete and 1 in. of finishing grout (from Drawing No. EC-66G) and allowed for 6-in. monolithic pour for four concrete pads in the auxiliary building, creating a design which eventually did not meet the bearing requirement imposed by the equipment manufacturer.

The remaining two pads were inadvertently placed in a single pour even though the engineering drawings indicated that the pads should be placed in two steps (5-in. concrete and 1-in. finishing grout).

The placement of the pads in a single pour of 6-in. concrete created an uneven surface approximately up to $3/8$ in. between the filter's channels and the concrete surface of the pads at the anchor bolt locations. The anchor bolts are located at the ends of the channels. The amount of gap (if any) inboard of the ends of the channels could not be measured due to inaccessibility.