

GULF STATES UTILITIES COMP

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUIS (ANA) 70775

AREA CODE 504 635-6094 346-8651

June 10, 1985 RBG-21273 File Nos. G9.5, G9.8.6.2

Mr. Harold R. Denton, Director Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dear Mr. Denton:

River Bend Station - Unit 1 Docket No. 50-458

Our letter of May 28, 1985 (RBG-21,132) committed Gulf States Utilities to provide for inspection and maintenance of the man-made portion of West Creek during operation. This inspection and maintneance will be performed at least annually and will include:

- a) removal of vegetation and debris;
- b) inspection of accumulated silt depth; and
- c) removal of accumulated silt greater than one foot in depth.

This maintenance program will fullfill and assure applicability of the flooding analysis as discussed in Final Safety Analysis Report (FSAR) Section 2.4.3.5.2. The attached revisions will be included in a future FSAR amendment.

Sincerely,

J. F. Borky

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

JEB/ADE/WJR/je

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RBS FSAR

The starting elevation for the Grants Bayou backwater profile for both PMF and 25-yr flood + SSE conditions is conservatively assumed to be the Mississippi River PDF level, 54.5 ft msl⁽¹⁰⁾. It is highly unlikely that the river PDF would coincide with the PMF on the local basins.

Fig. 2.4-21 shows cross section locations for the PMF and 25-yr flood + SSE flooding conditions. Cross section data are presented in Tables 2.4-19, 2.4-24, and 2.4-25. Applicable channel and overbank Manning's n values are also presented in these tables. As noted in the tables, vertical walls were assumed to exist at either end of some sections to limit the spread of water and channel conveyance. Conservative water levels would result from this approach.

As discussed previously, bridges were assumed to be partially or fully clogged with debris, and overflow can be treated as for a broad-crested weir. Applicable weir widths and configurations are presented in Fig. 2.4-22 through 2.4-27.

Normal sediment accumulation in the West Creek Fabriform channel will have no significant impact on the conveyance of flood flow past the plant area. The predicted PMF water level is about 1 ft below the railroad spur bordering the east embankment of West Creek, using a channel roughness coefficient which considers sediment accumulation. Due to the comparatively larger conveyance at the top of the channel cross section, it is estimated that more than 1 ft of sediment could accumulate before the PMF water level would reach the railroad spur. The sediment debris and vegetation flocated in the Fabriform channel will be removed. prior to plant operation during plant construction has been

The computed backwater profiles for Grants Bayou and West Creek are presented in Table 2.4-26. The peak flooding condition occurs during the PMF.

The maximum water level on Grants Bayou near the plant occurs between Sections 10 and 11 (Fig. 2.4-21), where the water level varies from 95.3 to 101.8 ft msl, respectively. The adjacent cooling tower yard is at about 104 ft msl, above the flood level. Additionally, no safety-related equipment is located in this area. The maximum water level on West Creek near the plant occurs at about Section W9 (Fig. 2.4-21), where the peak water level is about 94.3 ft msl. This is below the top of the adjacent railroad spur at 95.0 ft msl, and plant area flooding would not occur.

Amendment 15

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2.4-28

November 1984

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During operation, annual inspection and maintenance will be performed to remove accumulated vegetation, silt, and debris in order to maintain the West Creek channel consistent with the assumptions of the anlaysis.