GULF STATES UTILITIES COMPANY

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70775

AREA CODE 504 635-6094 346-8651

July 29, 1991
RBG-35381
File No. G9.5

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Gentlemen:

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

Please find enclosed responses to the requests for information contained in your letter of April 30, 1991.

If you have any questions or need further clarification, please contact Mr. J.W. Cook of my staff at (504) 381-4151.

Sincerely,

J.C. Deddens
Sr. Vice President
River Bend Nuclear Group

WHO/LAE/DNL/JWC/kvm

Enclosures

C001 1/1

ENCLOSURE 1

REQUEST FOR INFORMATION:

The Final Environmental Statement (FES), dated 1985, Section 5.5.1.2, states that transmission line right-of-way will be maintained by periodic removal of tall growing trees and that pesticides or herbicides will not be used. Section I.A.2.b.(2) of the draft report prepared by the Louisiana Public Service Commission Task Force on Utility Line Clearance states that Gulf States Utilities (GSU), as part of its agreement with the NRC , is prohibited from using herbicides on the River Bend Station (RBS) transmission lines. The reference for this statement is the FES. In a letter dated December 4, 1990, GSU, in response to the draft report, states that it is no longer prohibited from using herbicides on RBS lines. The concern is that GSU is using herbicides for transmission line right-of-way clearance. Use of herbicides is not in accordance with the commitment in the FES.

GSU RESPONSE:

According to Section 3.1 of Appendix B (Environmental Protection Plan (EPP)) to River Bend Station Operating License, GSU may make changes in station operation affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP.

This section further requires that before engaging in additional operational activities which may significantly affect the environment, GSU shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity involves an unreviewed environmental question, GSU shall provide a written evaluation of such activity and obtain prior NRC approval.

In March, 1988, GSU evaluated a change concerning the use of herbicides for controlling vegetation on transmission line rights-of-way associated with RBS. As required, prior to implementation an environmental evaluation (copy attached) of this activity was performed which determined that use of herbicides under proper conditions would have less adverse environmental impact than mechanical methods for vegetation control. GSU determined that this change does not fit the criteria for an unreviewed environmental question, and therefore, did not require NRC approval prior to implementation. Also in GSU's determination, this change does not involve a change in the Environmental Protection Plan; therefore, a license amendment is not required.

The commitment was formally revised in GSU's November 23, 1988 submittal to the NRC in its Annual Environmental Operating Report (Nonradiological).

USE BLACK BALL POINT PEN ONLY, AND ANY CHANGE CROSS OUT, INITIAL AND DATE.

USE ONLY IF UEQD REQUIRED

PAGE 1

MR –	REV –
OTHER DOC.	REV –

RIVER BEND UNIT #1
UNREVIEWED ENVIROMENTAL QUESTION DETERMINATION

REV NO.	TOT PP	PREPARED (NAME)	DATE	REVIEWED & APPROVED (NAME)	DATE APPD.
0	6	James W. Cook	1-23-88	RJK / D N Hoffman	3/14/88
1					
2					
3					
4					
5					

ENV. PROT PLAN CHANGE ☐ YES ☑ NO
ENV REPORT–OPLIC CHANGE ☑ YES ☐ NO
FSAR CHANGE ☐ YES ☑ NO
TECH SPEC CHANGE ☐ YES ☑ NO
FES (NUREG 1073) CHANGE ☑ YES ☐ NO

RELATED:
FCN/NR/MWR _____ DATE _____

REFERENCES (DRAWING, ETC.) Memo J.D. Watkins to J.E. Booker dated July 7, 1987
ER-OLS Sections 5.1.2, 5.6.1, 5.6.2, FES-OLS Section 5.5.12

BRIEF DESCRIPTION OF CHANGE Use of herbicides to control tall-growing vegetation on RBS transmission line rights-of-way

UNREVIEWED ENVIRONMENTAL QUESTION:

1. Does the proposed change, test or experiment result in a significant increase in any adverse environmental impact previously evaluated or any matter not previously reviewed and evaluated in the Final Environmental Statement (NUREG–1073) Stage? ☐ YES ☑ NO

DISCUSSION: If applied properly, the use of herbicides to control vegetation growth on rights-of-way will not result in a 'significant' adverse environmental impact. In fact, vegetation control in this

2. Does the proposed change, test or experiment result in a significant change in effluents or power level? ☐ YES ☑ NO

DISCUSSION: No liquid, gaseous, or solid effluents will be generated as a result of this activity, nor is the rated power level of the plant affected.

3. Does the proposed change, test or experiment result in any activity not confined to onsite areas previously disturbed during site preparation and plant construction? ☐ YES ☑ NO

DISCUSSION Since RBS transmission lines are licensed with the plant for NEPA purposes, within the boundaries of the right-of-way

4. Does the proposed change, test or experiment constitute a decrease in the effectiveness of the Environmental Protec Plan (EEP)? ☐ YES ☑ NO

DISCUSSION The use of herbicides does not decrease the effectiveness of the EPP to 1) verify that the facility is operated in an environ-

ADDITIONAL ATTACHMENTS MUST BE IDENTIFIED BY TITLE AND TOTAL NUMBER OF PAGES (TO UEQD) _____
Environmental Evaluation – "Use of Herbicides on River Bend Station Transmission Line Rights-of-Way"

ALL RELATED ATTACHMENTS SUBSEQUENT TO PAGE 2 MUST BE IDENTIFIED AS PAGE ____ OF ____ PAGES

F000128

UNREVIEWED ENVIROMENTAL QUESTION DETERMINATION

MR –	REV –
OTHER DOC.	REV –

CONTINUATION:

1. cont'd.
manner should result in a decreased adverse impact over mannual cutting since herbicides will reduce erosion and disturbance to wildlife nests and dens due to mechanical equipment, and allows for selection of plant communities beneficial to wildlife.

3. cont'd.
should be considered "onsite". Herbicide application will be confined to the transmission lines rights-of-way.

4. cont'd.
mentally acceptable manner, as established by the FES-OCS and other NRC environmental assessments, 2) to keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects, or 3) to coordinate NRC requirements and maintain consistency with other Federal, State, and local requirements for environmental protection. Procedural requirements of the EPP are unaffected by this activity. State and Federal requirements of herbicide use do not conflict with NRC or NEPA requirements.

USE OF HERBICIDES ON RIVER BEND STATION TRANSMISSION LINE RIGHTS-OF-WAY

LICENSING DOCUMENTS INVOLVED:

Facility Operating License No. NPF-47, Appendix B "Environmental Protection Plan (Nonradiological)" [EPP], Section 3.1.

"Final Environmental Statement related to the operation of River Bend Station" [FES], NUREG-1073, Section 5.5.1.2.

"River Bend Station Environmental Report - Operating License Stage" [ER-OLS], Sections 5.1.2, 5.6.1, and 5.10.7.

REASON FOR PROPOSAL:

In June 1973, when Gulf States Utilities (GSU) tendered its Construction Permit application for River Bend Station (RBS), GSU was not using herbicides for its system-wide transmission line right-of-way vegetation control and therefore committed in its Environmental Report - Construction Permit Stage to not use any herbicides on RBS rights-of-way. The commitment was included in the ER-OLS and was noted by the NRC Staff in its FES. The commitment remains in effect for RBS rights-of-way. However, in 1980, GSU began a carefully planned herbicide program for its transmission line rights-of-way not associated with RBS. Technology and herbicide safety have improved since GSU's original decision regarding RBS corridors to where GSU now has concluded that their careful and planned use are justified for use on RBS rights-of-way. GSU, therefore, proposes to use herbicides as described herein.

OBJECTIVE:

Some form of vegetation management on rights-of-way is essential. Trees on unmanaged corridors eventually grow into the conductors creating a potential hazard to the safe and uninterrupted operation of these lines. In order to operate the RBS transmission lines free of tree-caused interruptions, the objective of GSU's vegetation control program is to promote the growth of low-growing, relatively stable plant communities that are 1) compatible with electrical system reliability requirements, 2) beneficial to wildlife, and 3) need relatively little maintenance over the life of the right-of-way.

The proper and controlled use of herbicides is GSU's proposed method of choice for accomplishing this objective. Herbicides have become a standard tool for utility right-of-way vegetation management. Reliance entirely on other methods results in less effective management programs and is prohibitively expensive.

DESCRIPTION:

GSU presently proposes to use four (4) methods of application on RBS corridors. The methods and formulations below represent those currently planned for use. Other application methods and formulations may be used in

the future if determined by GSU to be safe, economical, effective and appropriate.

1) Aerial Application

Mix - one (1) gallon of Garlon 4 and two (2) gallons of Tordon 101 in twenty (20) gallons of water per acre.

or

One (1) gallon of Rodeo in thirty (30) gallons of water per acre.

Prescription - Aerial application will be used on medium to dense brush in non-sensitive areas with poor access for ground equipment and/or areas with a high erosion potential. The Garlon-Tordon mix will be the basic mix used on the right-of-way with the Rodeo mix to be used near streams, swamps, or any other body of water. This mix, although a broadcast application, is selective only to broad leaf weeds and will not harm grasses.

2) Ground Foliage Application

Mix - one (1) gallon of Garlon 4 in one-hundred (100) gallons of water per acre.

Prescription - ground foliage application will be used in areas of scattered, medium to dense brush with good access where there is a low erosion potential. Although this is also a broadcast application, the use of a hand-held dispenser gives good selectivity around desirable trees and shrubs.

3) Basal Application

Mix - one (1) gallon of Garlon 4 in three (3) gallons of Ultra-low-volume (ULV) Basal Oil (Backpack application).

Prescription - Basal application will be used in sensitive areas or areas with a low brush density. This is a very selective treatment for control of individual trees only.

4) Banding Application

Mix - four (4) pounds of Spike 85 DF or 80W in four (4) gallons of water (backpack application applied at 7.5 pounds per acre).

Prescription - Banding application will be used around poles, fencerows, and rights-of-way where cropland is the adjacent land use. It is soil applied and can be applied safely in areas near crops.

To progress toward a low cost, sustained, cyclical maintenance program, GSU expects a lengthening of the maintenance cycle and increasing use of selective techniques with each successive application until a relatively stable vegetative community is established. The exact interval between successive treatments depends largely on the density, type, and height of

the plant community occupying the right-of-way and the aggressiveness of the invading species.

BASES FOR HERBICIDE USE PROPOSAL:

1) Erosion Control

There are many places on RBS corridors that are subject to erosion, especially when disturbed. Mechanical equipment not only causes disturbance such as ruts and gulleys, it also necessitates more frequent maintenance. The use of herbicides will also preserve the native grasses which provide some of the best erosion control available.

2) Improved Wildlife Habitat

By using herbicides, GSU can be more selective in leaving desirable wildlife plants. Mechanical methods are non-selective and also disturb nests and dens of many wildlife species found on rights-of-way.

3) Aid in Preserving and Beautifying Historical Breastworks in the Port Hudson National Historic Landmark

Ref. letter NRC to GSU, August 16, 1979, RBC-10630

Ref. letter GSU to NRC, August 21, 1980, RBG-8366

Ref. letter GSU to NRC, November 2, 1982, RBG-13676

Many of the Civil War breastworks are difficult to see and could easily be damaged by mechanical equipment. Handcutting of these breastworks is possible, but the brush quickly resprouts again, hiding the breastworks to where they are again indistinguishable. The use of selective herbicides on the breastworks would prevent physical damage and allow the breastworks to be more visible since grass and vines would be the primary cover after the herbicide application.

4) Economics

The use of herbicides has proven to be more cost-effective than mechanical and hand methods, both in initial application and in frequency of maintenance cycles. This is economical for both GSU and our customers.

PRECAUTIONS:

All applications will be made by experienced, licensed applicators. Procedures and specifications will be developed and buffer zones will be established to protect sensitive areas and insure that non-target resources will not be contaminated. Applicator training and proper supervision and monitoring will assure that the work is carried out according to these procedures and specifications. Regular right-of-way inspections and periodic program review will identify necessary adjustments and evaluate effectiveness.

Only EPA approved formulations will be used and all applications will be made according to label instructions to assure minimal adverse effects to the environment. Many years of research and GSU experience on other right-of-ways indicates that herbicides, when prescribed properly and used according to label instructions, do not harm the environment. The resulting vegetation control can be beneficial to many forms of wildlife and aid in erosion control.

ENVIRONMENTAL EVALUATION:

Pursuant to Section 3.1 of the EPP for RBS, GSU may make changes in station operation affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP. This Section further requires that before engaging in additional operational activities which may significantly affect the environment, GSU shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity involves an unreviewed environmental question, GSU shall provide a written evaluation of such activity and obtain prior NRC approval.

GSU's evaluation of this operational change indicates that if regulations, procedures, and specifications are adhered to, the potential for significant adverse environmental effect is minimal. GSU has determined that the use of herbicides for controlling vegetation on transmission line rights-of-way associated with RBS does not fit the EPP criteria for an unreviewed environmental question, and therefore, does not require NRC approval prior to implementing this change. Also in GSU's determination, this change does not involve a change in the EPP, therefore, a license amendment is not appropriate.

REFERENCES:

Carvell, K.L. and P.A. Johnston. 1978. Environmental Effects of Rights-of-Way Management on Forested Ecosystems. Electric Power Research Institute, Pala Alto, CA, Final Report.

ENCLOSURE 2

REQUEST FOR INFORMATION:

Recently, GSU applied for an emergency permit to shore up a transmission tower on a 500 kV line, which was experiencing erosion. (We understand that, over the past 26 years, the river has shifted 200 feet to the west and is now affecting the base of the tower.) Section 8.2.1.3 of the Updated Safety Analysis Report (USAR) states that transmission lines of GSU are inspected aerially on a monthly basis. The concern is that GSU has not been performing the monthly aerial inspections. Your response should include a copy of the results of the monthly aerial inspection activity for the past 24 months.

GSU RESPONSE:

The transmission line tower alluded to (structure 276) is located where 500 kV line designated 742 is in close proximity to the Amite River north of GSU's McKnight substation. For NRC safety and environmental licensing purposes, the new transmission lines constructed with River Bend Station terminate where they connected with the existing transmission system grid. As described in USAR Section 8.2.1.1.2 and shown in Figure 8.2-3 (attached), 500 kV line 752 (Route III) terminates at McKnight substation. This tower therefore is located on a non-RBS associated transmission line.

At the time of RBS licensing, GSU flew aerial inspections of the transmission system monthly. The monthly flying schedule did not allow adequate time for the identification and subsequent inspection and correction of findings by field crews before the next aerial patrol was flown. Since that time GSU has reduced the flying schedule to approximately three times per year. If serious problems are found, prompt corrective actions are undertaken and increased patrols may be utilized.

The current frequency is adequate for detecting and correcting the types of discrepancies for which aerial patrols are used. These include trees growing into conductors, broken insulators, most soil erosion problems, activities in the right-of-way, etc. During the next revision cycle, the USAR will be revised to reflect this reduced frequency of inspection.

It is true that the Amite River has for years been migrating to the west at this location. GSU has been aware of this development and has been monitoring by field inspection the progress of the river and its effects on this transmission tower since its construction in 1967. When the river began undercutting the forty foot deep steel sheet pile cell placed around the base of the tower in 1973 to protect the tower from the erosional effects of the river, an emergency permit from the U.S. Army Corps of Engineers was sought and received in 1990 to repair and stabilize a small sinkhole formed in the pile cell. Regardless of the frequency of aerial patrols, the subsurface undercutting of the base of this tower could not have been observed by aerial inspection early enough to take corrective action. GSU believes that the corrective and preventive measures taken will assure the stability of the tower. Inspection after major floods and sounding the riverbed depth annually will continue for as long as the pile cell remains in the main river channel.

It is possible, also, that additional measures may be required in the future to assure the continued reliability of this transmission time.

Since this tower is not located on an RBS-associated transmission line and since the erosional damage to the pile cell was not observable by aerial patrol, the aerial inspection reports for the last 24 months are not included.

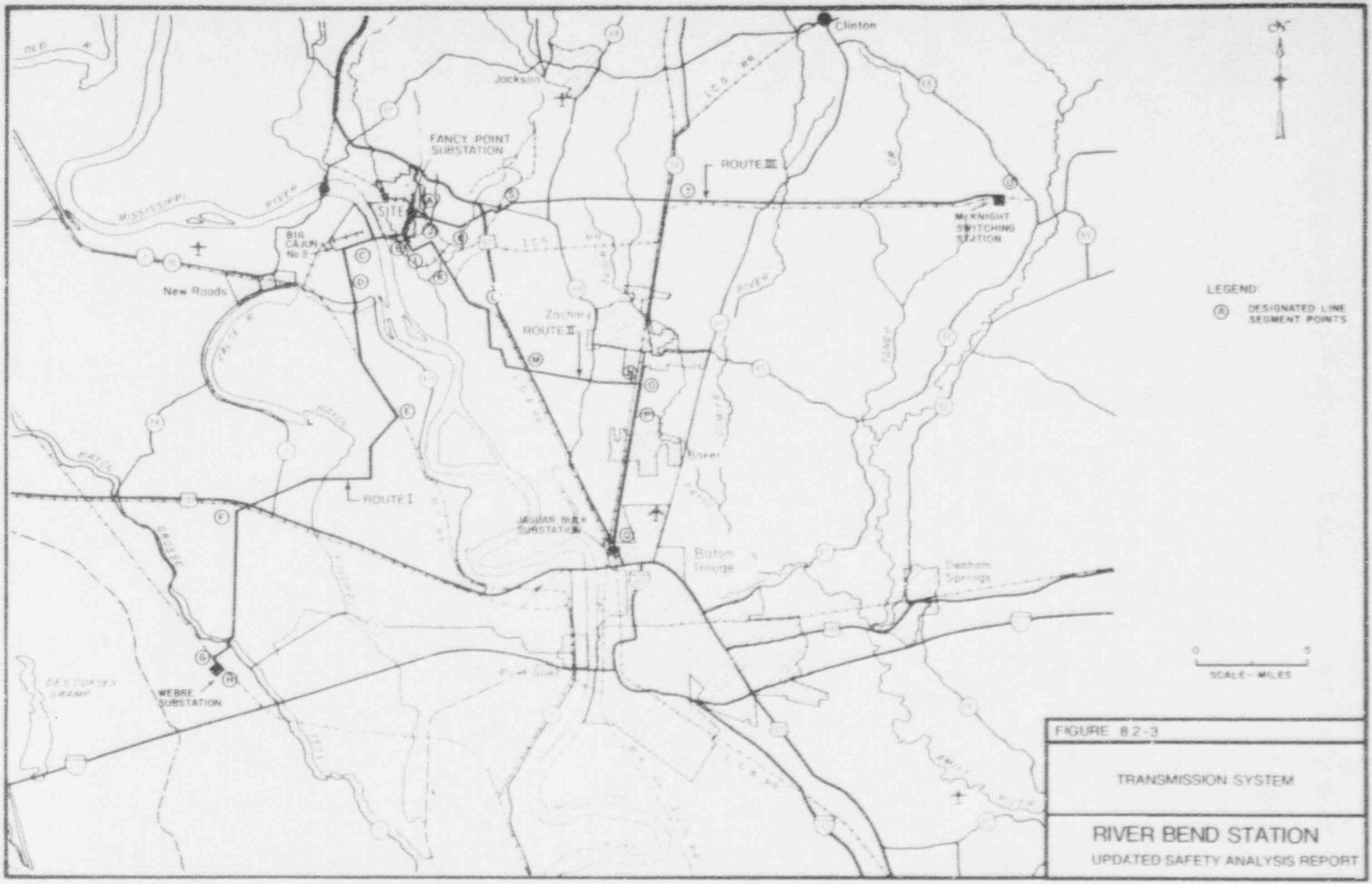

FIGURE 8.2-3

TRANSMISSION SYSTEM

RIVER BEND STATION

UPDATED SAFETY ANALYSIS REPORT

ENCLOSURE 3

REQUEST FOR INFORMATION:

Section 2.4.3.5.2 of the USAR states that during operation annual inspection and maintenance will be performed to remove accumulated vegetation, silt and debris. Section 5.3.3.1 of the FES states that the deposited sediment in the man-made channel of West Creek will have to be periodically removed from the channel bottom. Section 2.4.3.3 of the Safety Evaluation Report (SER) states that the applicant will be expected to provide for inspection and maintenance of the man-made portion of West Creek during operation. In Section 2.4.3.3 of Supplemental Safety Evaluation Report (SSER) 2, the NRC staff discusses GSU's commitments to perform an inspection and maintenance program for the fabriform-lined section of the West Creek channel, including an annual inspection of the creek. In addition, if the sediment buildup is greater than one foot deep, the channel will be cleaned. The concern is that the sediment in the channel will impede the flow of water through the channel and that GSU is not maintaining the West Creek channel properly. Your response should include documentation concerning inspection and maintenance efforts performed in accordance with the above references.

GSU RESPONSE:

Before plant operation began in 1985, the temporary road crossing West Creek at the paint shop was removed along with the sediment and vegetation buildup in the lined section of the creek channel. These events were documented in a letter (RBG-20959, May 13, 1985) from J.E. Booker to NRC's H.R. Denton, Office of Nuclear Reactor Regulation. Station Support Manual Procedure ESP-8-048 "West Creek Inspections", was established in December, 1985 to implement the maintenance and inspection program. Since the removal of sediment in 1985, the buildup, as documented by the West Creek inspections, has not yet warranted subsequent sediment removal (i.e., the accumulated sediment has not exceeded an overall depth of 1 foot). The documentation of West Creek inspections to date is attached.

GSUNO688-11-85(11/85)

RIVER BEND STATION
WEST CREEK INSPECTION LOGSHEET

Performed By: S. K. Stoma and M. Reed Date: 11/20/90

TRANSECT LOCATION (feet downstream from drop structure)	SEDIMENT DEPTH (INCHES)				COMMENTS
	Distance from Plant-Side Edge (Fraction of Channel Breadth)			Transect Average	
	3/4	1/2	1/4		
150	5	14	7	8.7	
300	8	13	13	11.3	
450	13	15	0	9.3	
600	10	15	7	10.7	
750	11	14	5	10.0	
900	13	17	0	10.0	
1050	11	19	12	14.0	
1200	14	18	13	15.0	
1350	22	17	11	16.7	
1500	11	18	11	13.3	
1650	2	17	16	11.7	N. of Culvert
1800	24	0	0	8.0	S. of Culvert
1950	9	0	0	3.0	
2100	1	0	14	5.0	
2250	0	0	10	3.3	
2400	6	0	11	5.7	
2550	0	10	0	3.3	
2700					

Overall Average: 9.4 inches

Reviewed By: [signature] 12/12/90 Date
Supervisor - Environmental Services

0688-11 (5(11/85)

RIVER BEND STATION
WEST CREEK INSPECTION LOGSHEET

Performed By: R. GILBERT / V. CONNER Date: 11/30/89

TRANSECT LOCATION (feet downstream from drop structure)	SEDIMENT DEPTH (INCHES)				COMMENTS
	Distance from Plant-Side Edge (Fraction of Channel Breadth)				
	3/4	1/2	1/4	Transect Average	
150	4	17	4	10.0	
300	16	14	5	11.6	
450	14	4	11	9.6	
600	7	11	2	5.3	
750	7	2	2	3.6	
900	2	2	11	6.0	
1050	16	13	11	11.3	
1200	11	17	14	13.0	
1350	14	14	13	17.6	
1500	3	4	12	14.6	
1650	6	10	17	9.0	
1800	0	0	0	0.0	
1950	6	4	4	2.6	
2100	4	0	3	2.3	
2250	3	0	0	2.6	
2400	5	0	0	2.6	
2550	3	0	0	2.6	
2700	0	0	0	0.0	

Overall Average: 6.8 inches

Reviewed By: John J. Conner Date: 12-5-89
Supervisor - Environmental Services

GSUNO688-11-85(11/85)

RIVER BEND STATION
WEST CREEK INSPECTION LOGSHEET

Performed By: R. D. Field + G W Cates Date: 11-25-88

TRANSECT LOCATION (feet downstream from drop structure)	SEDIMENT DEPTH (INCHES)				COMMENTS
	Distance from Plant-Side Edge (Fraction of Channel Breadth)			Transect Average	
	3/4	1/2	1/4		
150	9.5	8	12	9.8	
300	8	15.5	3.5	9	
450	14	6	4	8	
600	7	21	13	13.6	
750	4	11.5	4	6.5	
900	2	8	11	7	
1050	3	13	10	8.6	
1200	10	10	11	10.3	
1350	5	9.5	5	9.8	
1500	.5	11.5	13	8.6	
1650	10	14	8	10.6	
1800	16	13	7	12	
1950	10.0	0	0	3.3	
2100	0	0	0	0	
2250	0	5	1	2	
2400	7	0	0	2.3	
2550	0	11	0	3.6	
2700	0	0	0	0	

Overall Average: 6.9 inches

Reviewed By: [signature] Date: 11-28-88
Supervisor - Environmental Services

GSUNO688-11-85(11/85)

RIVER BEND STATION
WEST CREEK INSPECTION LOGSHEET

Performed By: B. BOYER + M. Reed Date: 11-25-87

TRANSECT LOCATION (feet downstream from drop structure)	SEDIMENT DEPTH (INCHES)				COMMENTS
	Distance from Plant-Side Edge (Fraction of Channel Breadth)			Transect Average	
	3/4	1/2	1/4		
150	9	10	2	7	
300	8	8	5	7	
450	13	16	16	15	
600	9	8	2	6.3	
750	10	7	5	7.3	
900	10	2	10	7.3	
1050	3	10	6	6.3	
1200	8	10	6	8	
1350	11	8	13	10.7	
1500	12	14	10	12	
1650	9	10	11	10	
1800	N/A	N/A	N/A	N/A	AT RIVER Access Road
1950	0	0	8	2.7	South side of culverts
2100	0	0	6	2	
2250	11	0	0	3.7	
2400	10	0	0	3.3	
2550	10	0	0	3.3	
2700	N/A	N/A	N/A	N/A	

Overall Average: 7.0 inches

Reviewed By: _____ Date 11-25-87
Supervisor - Environmental Services

GSUNO688-11-85(11/85)

RIVER BEND STATION
WEST CREEK INSPECTION LOGSHEET

Performed By: Brian Boyer Date: 11/29/85

TRANSECT LOCATION (feet downstream from drop structure)	SEDIMENT DEPTH (INCHES)				COMMENTS
	Distance from Plant-Side Edge (Fraction of Channel Breadth)			Transect Average	
	3/4	1/2	1/4		
150	10	11	9	10	
300	12	5	6	7.7	
450	9	9	6	8	
600	8	7	6	7	
750	6	2	7	5	
900	2	5	7	4.7	
1050	3	6	5	4.7	
1200	9	11	6	8.7	
1350	8	9	16	11	
1500	12	10	9	10.3	
1650	5	9	8	7.3	
1800	0	0	14	4.7	RAR @ 1725
1950	0	2	7	3	
2100	7	0	0	2.3	
2250	10	0	0	3.3	
2400	9	0	3	4	
2550					
2700					
1425	8	13	15	12	Not used in overall average

Overall Average: 6.3 inches

Reviewed By: John J. Conner Date 12-1-85
Supervisor - Environmental Services

ENCLOSURE 4

REQUEST FOR INFORMATION:

Emergency Implementing Procedure (EIP) 2-026 was revised to reflect the new evacuation route to the Alternate Evacuation Point as a result of resolution of previously raised issues. The concern is that the EIP and other documents concerning evacuation incorrectly reference Louisiana Highway 965, Powell Station Road and Police Jury Road and this could cause some problems during evacuation. Additionally, there is a concern that erosion due to flooding at the base of the transmission line tower and sections of the Police Jury Road near the alternate assembly point sign may hamper evacuation. Your response should address efforts to resolve these issues.

GSU RESPONSE:

Louisiana Highway 965 traverses south into the center of RBS property from U.S. Highway 61. From where the now-abandoned Illinois Central Gulf Railroad traversed this road west of the reactor, this state highway becomes a Police Jury road and continues south and then east and north, connecting back into U.S. Highway 61 east of the reactor. This Police Jury road is also referred to as Powell Station Road and West Feliciana Parish 7.

Procedure EIP-2-026, "Evacuation" will be revised to distinguish between Louisiana Highway 965 and West Feliciana Parish 7 (Powell Station) Road to avoid any confusion. In the event of an evacuation, RBS Security personnel will be used to direct evacuees to the assembly area. It should be noted that the evacuations addressed by this procedure are only for plant personnel and that the general public does not use these evacuation routes. It should also be noted that this assembly area is merely an alternate to one of the two preferred assembly areas, and therefore would not normally be used even in the unlikely event of an emergency requiring evacuation of plant personnel.

Although there has been flooding and some minor erosion in and near Grants Bayou in the vicinity of the Alternate Evacuation Point Assembly Area, neither the assembly area nor West Feliciana Parish 7 (Powell Station) Road to or from the assembly area are affected. GSU feels that the concerns expressed would not prevent the effective use of this location as an evacuation assembly area.

ENCLOSURE 5

REQUEST FOR INFORMATION

Section 5.3.3.1 of the FES states that GSU has performed erosion repair work on the River Access Road to maintain the existing road profile and prevent extension of gullies into Alligator Bayou as a result of flood waters overtopping the road. The FES also states that the Corps of Engineers is expected to install a revetment along the levee to stabilize the Mississippi River bank and minimize the impact of levee overtopping. The concern is that the culverts installed under the River Access Road, across Alligator Bayou increase erosion problems. Your response should address any recent erosion repair work performed on the River Access Road and the status of the revetment installation.

GSU RESPONSE

The hydrology of Alligator Bayou/Mississippi River floodplain in the vicinity of PBS is described in Sections 4.2.1, 4.3.2.1, and Appendix 2B of the Environmental Report - Operating License Stage and in Section 5.3.3.1 of the FES. These documents recognize the flow restriction posed by the River Access Road across the floodplain and its resulting contribution to erosion/overtopping at the low point along the river bank/River Road. The flow restriction occurs only during certain hydrological conditions and is considered not to be significant.

Overtopping of this road occurred naturally in the past, both from high river stages and from rainfall-induced floods. Alligator Bayou is located in a shallow depression or trough in the Mississippi River floodplain on GSU property. As the river channel migrated eastward along this reach of the river before the Corp of Engineers installed a bank stabilizing revetment, the lip of the trough (bank) was gradually lowered. This effectively reduced the storage capacity of the floodplain. Loss of storage capacity and flow restrictions encountered from fallen trees/forest litter and beaver dams more directly affect the frequency and duration of River Road overtopping than the effect of the culverts.

The Corps of Engineers installed its bank stabilizing revetment along this stretch of the river in 1988. GSU had discussed with the Corps the possibility of filling in the gully at the low point prior to the installation of the revetment. This would have provided for the revetment being continuous from GSU's intake embayment to beyond GSU's northern property boundary. However, the Corps stated that it was their policy to wrap the revetment into the mouth of such drainages, and constructed the revetment in just such a manner.

The erosional gully has been greatly stabilized by the Corp's placement of riprap within the gully and by the construction of its revetment. GSU occasionally makes minor erosion repairs after severe bank overtopping events to prevent extension of the erosion gully and to maintain the River Road passable at this low point. If the River Road is impassable on GSU property because of inundation, erosional damage, or other reasons, local landowners are allowed access to their property via our River Access Road.